

Operation Manual



DORICO PRO₂

Advanced Music Notation System

Cristina Bachmann, Heiko Bischoff, Lillie Harris, Christina Kaboth, Insa Mingers, Matthias Obrecht, Sabine Pfeifer, Benjamin Schütte, Marita Sladek

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Introduction

Thank you very much for purchasing Dorico Pro.

We are delighted that you have chosen Steinberg's scoring application and hope that you will enjoy using it for years to come.

Dorico is a next-generation application for producing beautiful sheet music, whether you are a composer, arranger, music engraver, publisher, instrumentalist, teacher, or student. Whether you want to print your music or share it in a digital format, Dorico is the most sophisticated program available.

Like all of Steinberg's products, Dorico has been designed from the ground up by a team of musicians who understand your needs and who are dedicated to producing a tool that is both easy to learn and use, but also capable of results of the highest quality. Dorico also integrates with your existing workflow and can import and export files in a variety of formats.

Dorico thinks about music the same way a human musician does and has a deeper understanding of the elements of music and musical performance than other scoring applications. Its unique design allows an unprecedented degree of flexibility, in music input and editing, in score layout, in rhythmic freedom, and many other areas besides.

Most sincerely yours,

Your Steinberg Dorico Team

Platform-independent documentation

This documentation applies to the operating systems Windows and macOS.

Features and settings that are specific to one of these platforms are clearly indicated. In all other cases, the descriptions and procedures in the documentation are valid for Windows and macOS.

Some points to consider:

- The screenshots are taken from macOS.
- Some functions that are available on the **File** menu on Windows can be found in the program name menu on macOS.

Usage of musical terms

This documentation uses American terminology for musical items.

The following table lists all the notes and notations that have different names in American and British English:

American Name	British Name
Double whole note	Breve

American Name	British Name
Whole note	Semibreve
Half note	Minim
Quarter note	Crotchet
Eighth note	Quaver
Sixteenth note	Semiquaver
Thirty-second note	Demisemiquaver
Sixty-fourth note	Hemidemisemiquaver
Hundred twenty-eighth note	Semihemidemisemiquaver
Two hundred fifty-sixth note	Demisemihemidemisemiquaver
Staff	Stave
Bar/Measure	Bar

NOTE

This documentation only uses “bar”.

Conventions

In our documentation, we use typographical and markup elements to structure information.

Typographical elements

The following typographical elements mark the following purposes.

Prerequisite

Requires you to complete an action or to fulfill a condition before starting a procedure.

Procedure

Lists the steps that you must take to achieve a specific result.

Important

Informs you about issues that might affect the system, the connected hardware, or that might bring a risk of data loss.

Note

Informs you about issues that you should consider.

Tip

Adds further information or useful suggestions.

Example

Provides you with an example.

Result

Shows the result of the procedure.

After Completing This Task

Informs you about actions or tasks that you can perform after completing the procedure.

Related Links

Lists related topics that you can find in this documentation.

Markup

Elements of the user interface are highlighted throughout the documentation.

Names of menus, options, functions, dialogs, windows, and so on, are highlighted in bold.

EXAMPLE

To open the **Project Info** dialog, choose **File > Project Info**.

If bold text is separated by a greater-than symbol, this indicates a sequence of different menus to open.

EXAMPLE

Choose **Setup > Layout Options**.

File names and folder paths are shown in a different font.

EXAMPLE

`example_file.txt`

Key commands

Key commands are sets of keys that perform defined tasks when pressed together. They are also known as “keyboard shortcuts”. Many of the default key commands use modifier keys, some of which are different depending on the operating system.

When key commands with modifier keys are described in this manual, they are indicated with the Windows modifier key first, followed by the macOS modifier key and the key.

EXAMPLE

Ctrl/Cmd-Z means: press **Ctrl** on Windows or **Cmd** on macOS, then press **Z**.

Key commands in Dorico Pro

The default key commands in Dorico Pro depend on your keyboard layout.

If you move the mouse over a tool or a function, the information in brackets shows the key command that is used to activate or deactivate a tool or a function.

You can also do one of the following:

- Choose **Help > Key Commands** to open the **Dorico Key Commands** window, which provides an overview of all available key commands.
- Search for key commands of specific functions or menu items in the **Preferences** dialog. In this dialog, you can also assign new key commands or change default key commands.

RELATED LINKS

[Interactive Dorico Pro key commands map](#) on page 54

[Searching for the key commands of functions](#) on page 55

[Preferences dialog](#) on page 51

[Key Commands page in the Preferences dialog](#) on page 52

[Assigning key commands](#) on page 55

How you can reach us

On the **Help** menu you find items linking to additional information.

The menu contains links to various Steinberg web pages. Selecting one of these menu items automatically launches your web browser and opens the page. On these pages, you can find support and compatibility information, answers to frequently asked questions, information about updates and other Steinberg products, and so on.

This requires that you have a web browser installed on your computer and a working Internet connection.

First steps

This chapter helps you to get started with Dorico Pro.

When you start Dorico Pro for the first time, we recommend that you open one of the templates first to have a look at the user interface and the functions that Dorico Pro provides before you start your own projects. You are welcome to skip this part and explore the program for yourself.

The following sections inform you about the following topics:

- Overview of the most important workspaces
- Setting up a new project
- Writing your music and adding notation items to your score
- Laying out and formatting pages
- Playing back what you created
- Printing and exporting

Getting around

The following sections give you an overview of the user interface and introduce you to how Dorico Pro is structured.

Opening a template

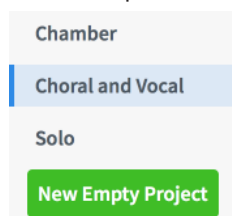
Before you start your own project, we recommend that you familiarize yourself with the user interface of Dorico Pro. To prepare for this, open one of the templates that are provided with the program.

PREREQUISITE

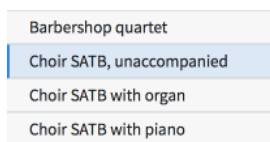
You have started Dorico Pro. The **Hub** is open.

PROCEDURE

1. In the **Hub**, select one of the listed template groups. For example, select the **Choral and Vocal** templates.



2. Select one of the listed templates.



3. Click **New from Template**.

RESULT

The template opens. The players in the template are added to the project and their staves appear in the music area.

RELATED LINKS

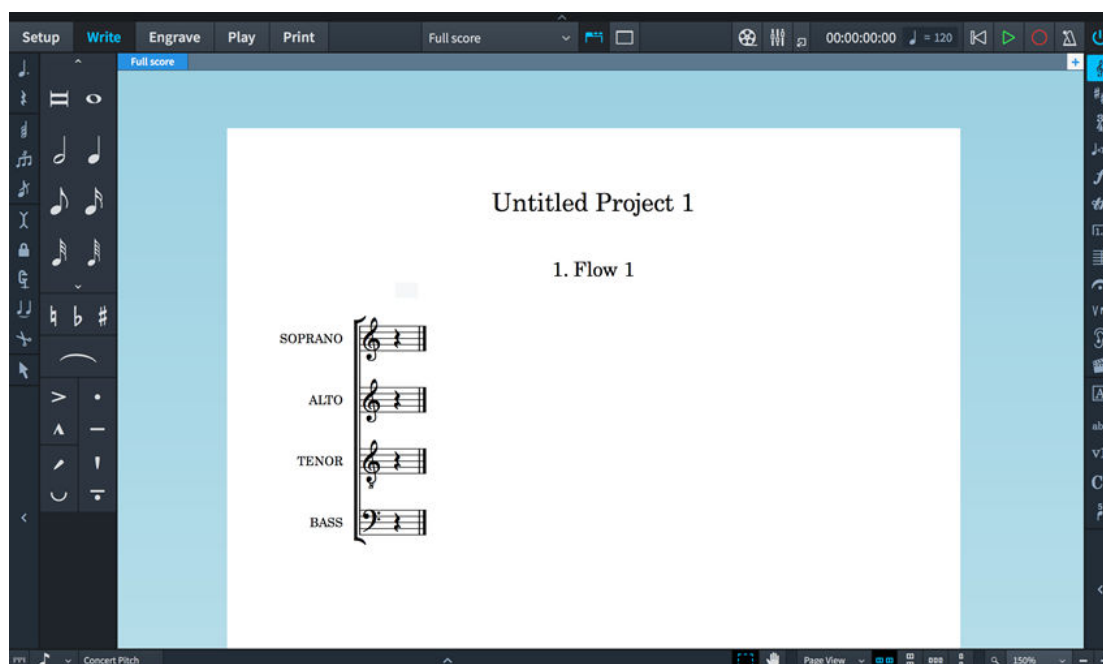
[Hub](#) on page 58

Quick tour of the user interface

The user interface of Dorico Pro consists of different modes that represent different phases in the workflow of preparing a score.

The user interface has a structure that is the same in each of the application's modes. There is always a large area for editing your music in the center of the project window. In every mode, there are collapsible panels on the left, right, and bottom of the project window, depending on which mode you are using. The contents of these panels change according to the selected mode.

When you open the template, the first view shows the project window in Write mode:



The project window when you open a template

The project window contains the following areas:

Toolbar

The toolbar is located at the top of the project window.



Toolbar

On the left side of the toolbar, the modes are displayed. By changing the mode, you change the workspace and the available panels. The current mode is highlighted in a different color. In the middle of the toolbar, layout options allow you to switch between the different layouts in your project and to show/hide panels and tabs.

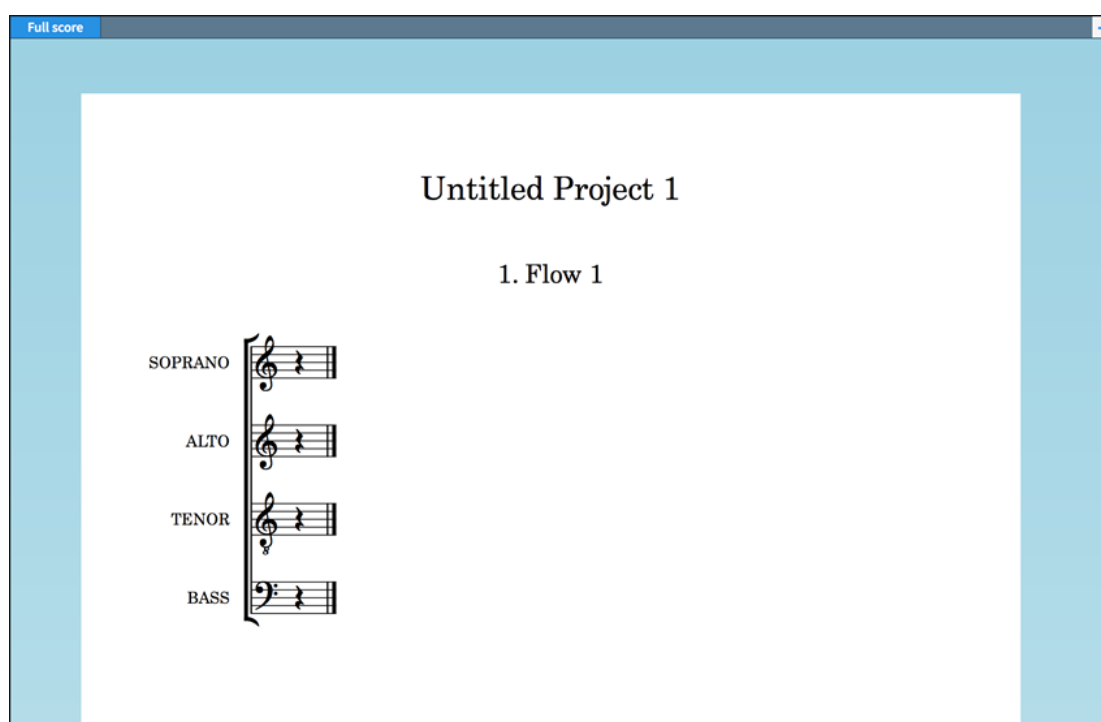
On the right side of the toolbar, you can open a **Mixer** and use basic transport controls that, among other functions, allow you to play back and record your music.



Show Mixer button

Music area

The music area is the main part of the project window in Setup, Write, and Engrave modes where you set up, input, edit and format your music. In Play mode, this area is called event display, in which every note is displayed as an event. In Print mode, this area is called print preview area, which shows a preview of what is going to be printed or exported as a graphic.

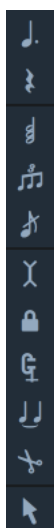


The music area in Write mode after starting a new project from a choral template

The music area displays the scores or the instrumental parts that you create. Above the music area you can activate several layouts in tabs and switch between them. Layouts in Dorico Pro allow you to show different presentations of your music. If you have a full score with different instrumental parts, such as a violin part and a bassoon part, you can switch between that full score layout and the layouts of each part. To save space on the screen or to focus on a specific layout, you can hide the tabs.

Toolboxes

Toolboxes are the columns on the left and right edges of the project window. They contain different tools and options according to the current mode, but in general they allow you to input and modify notes, notation items, and frames, and to determine which options are shown in their corresponding panels.



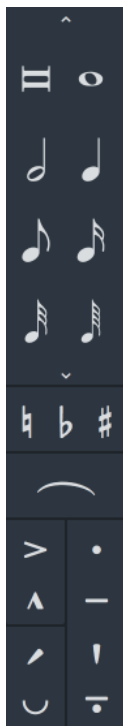
Notes toolbox in Write mode



Notations toolbox in Write mode

Panels

Dorico Pro provides panels with various functions in all modes. When you open the template, there is a panel on the left of the music area. This is the Notes panel in Write mode. It contains all the durations, accidentals, slurs, and articulations that are most commonly used when inputting notes.



Notes panel in Write mode

Status Bar

At the bottom of the project window, a status bar allows you to select different views and page arrangements for the music area. It contains different options in different modes.



Status bar

RELATED LINKS

[User interface](#) on page 33

[Mixer](#) on page 443

[Transport window](#) on page 446

Functions of the modes

Each mode represents a different phase in the workflow of preparing scores and parts, so contain different toolboxes, panels, and functionality from each other.

Setup mode

In Setup mode, you can create players and groups of players, and assign instruments to them. You can define different layouts for your project that you can print or export independently. For example, you can print or export a layout for the full score and separate layouts for each instrumental part.

You can view music in the music area and switch between viewing other tabs and layouts, but you cannot select or interact with anything in the music area.

You can switch to Setup mode in any of the following ways:

- Press **Ctrl/Cmd-1**.
- Click **Setup** in the toolbar.
- Choose **Window > Setup**.

Write mode

In Write mode, you can input and edit your music, including changing the rhythmic positions of items, changing the pitch of notes, and deleting notes and items. The available toolboxes and panels allow you to input all the notes and notation items that are most commonly used.

You can switch to Write mode in any of the following ways:

- Press **Ctrl/Cmd-2**.
- Click **Write** in the toolbar.
- Choose **Window > Write**.

Engrave mode

In Engrave mode, you can make fine adjustments to the music that you input in Write mode and determine how the pages of your project are laid out.

Because Engrave mode is focused on the formatting and appearance of layouts, you cannot delete any notes or items, change their rhythmic positions, or change the pitch of notes in Engrave mode.

You can switch to Engrave mode in any of the following ways:

- Press **Ctrl/Cmd-3**.
- Click **Engrave** in the toolbar.
- Choose **Window > Engrave**.

Play mode

In Play mode, you can assign virtual instruments and effects for playback to instruments and playing techniques. You can make adjustments to how individual notes are played back in order to produce a more realistic performance.

You can switch to Play mode in any of the following ways:

- Press **Ctrl/Cmd-4**.
- Click **Play** in the toolbar.
- Choose **Window > Play**.

Print mode

In Print mode, you can print your layouts or export them as graphics files. You can also set the information you want to include in their exported file names.

You can switch to Print mode in any of the following ways:

- Press **Ctrl/Cmd-5**.
- Click **Print** in the toolbar.
- Choose **Window > Print**.

RELATED LINKS

[Setup mode](#) on page 82

[Write mode](#) on page 131

[Engrave mode](#) on page 290

[Print mode](#) on page 468

[Play mode](#) on page 400

Hiding/Showing panels

You can hide/show individual or multiple panels. This is useful if you want to see more of the music area, for example.

PROCEDURE

- Hide individual panels or all panels in the following ways:
 - To hide/show the left panel:
Press **Ctrl/Cmd-7**.
Click the disclosure arrow on the left edge of the main window.
Choose **Window > Show Left Panel**.
 - To hide/show the right panel:
Press **Ctrl/Cmd-9**.
Click the disclosure arrow on the right edge of the main window.
Choose **Window > Show Right Panel**.
 - To hide/show the bottom panel:
Press **Ctrl/Cmd-8**.
Click the disclosure arrow at the bottom of the main window.
Choose **Window > Show Bottom Panel**.
 - To hide/show all panels:
Press **Ctrl/Cmd-0**.
Click **Hide/Restore Panels**.



Choose **Window > Hide/Restore Panels**.

RESULT

The corresponding panels are hidden/shown. Panels are hidden when no tick is shown beside the corresponding panel in the menu, and shown when a tick is shown in the menu.

If you hide all active panels, the **Hide/Restore Panels** button in the toolbar changes its look and indicates which panels were active but are now hidden.

EXAMPLE



Appearance when panels are shown



Appearance when all panels were previously shown but are now all hidden

Working with tabs and windows

Dorico Pro enables you to set up your workspace according to your working style.

Dorico Pro allows you to open multiple tabs to display multiple layouts in the same project within the same window. You can also open the same project in several windows.

RELATED LINKS

[Workspace setup](#) on page 45

Opening a new tab


You can open a new tab to display a different view or layout within the same project window.

Each tab can contain a separate layout or a different view of a layout already open in another tab or window. Whenever you open a new tab, you are prompted to select a layout that you want to display in the tab.

You can find tabs in the tab bar, located at the top of the music area, below the toolbar. If you do not see any tabs, click **Show Tabs** in the toolbar.

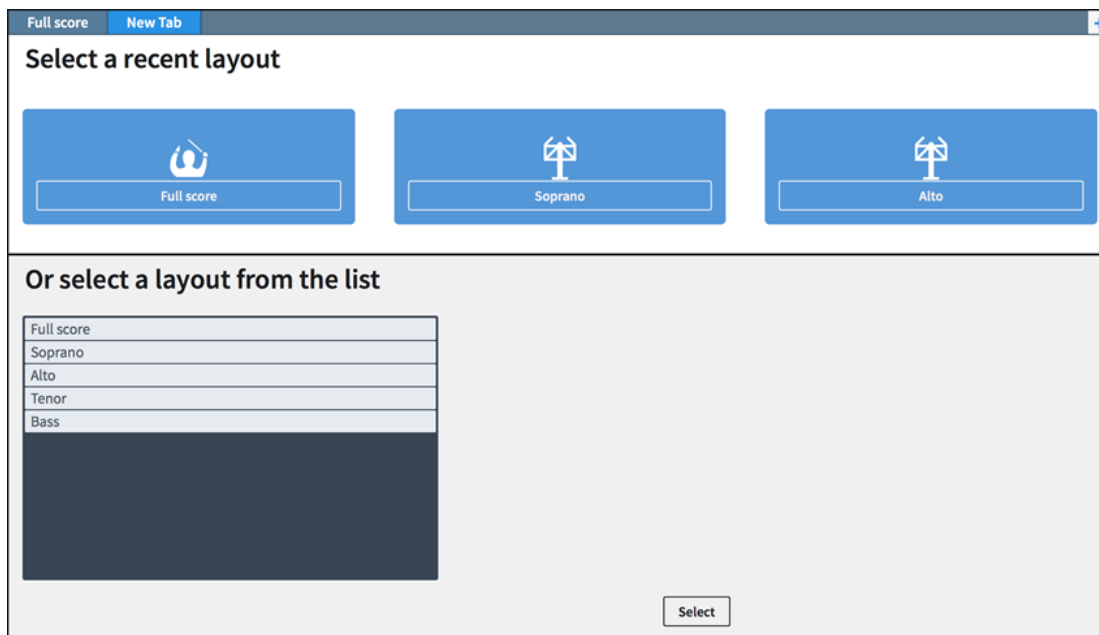


PROCEDURE

- To open a new tab, do one of the following:
 - Press **Ctrl/Cmd-T**.
 - At the right end of the tab bar, click **New Tab**.

 - Choose **Window > New Tab**.
-

RESULT

A new tab opens that shows several icons at the top and a list of layouts at the bottom.



Options available in the music area when you open a new tab

AFTER COMPLETING THIS TASK

You can click one of the icons or select a layout from the list at the bottom. Alternatively, you can select a layout from the layout selector in the toolbar. The layout that you choose opens in the active tab.

RELATED LINKS

[Tab bar](#) on page 37

[Toolbar](#) on page 34

Opening a new window

You can open another window for the same project, for example, if you want to work on multiple layouts at the same time. You can also show a different mode of the same project in each window, such as having one window show Write mode and another show Play mode.

PROCEDURE

- Open a new project window in any of the following ways:
 - Press **Ctrl/Cmd-Shift-T**.
 - Choose **Window > New Window**.

RESULT

A duplicate of the window opens. It contains the same tabs and the same view options as the original window.

RELATED LINKS

[Opening multiple project windows](#) on page 49

Starting a new project

After getting a first impression of the Dorico Pro user interface, you can get started with inputting your own music. In this section, you learn how to set up a new project.

PREREQUISITE

NOTE

All inputs that are made and the images that are used to accompany the steps in this chapter are intended merely to be helpful examples. Therefore, there is no need to make the same entries in order to get the depicted results.

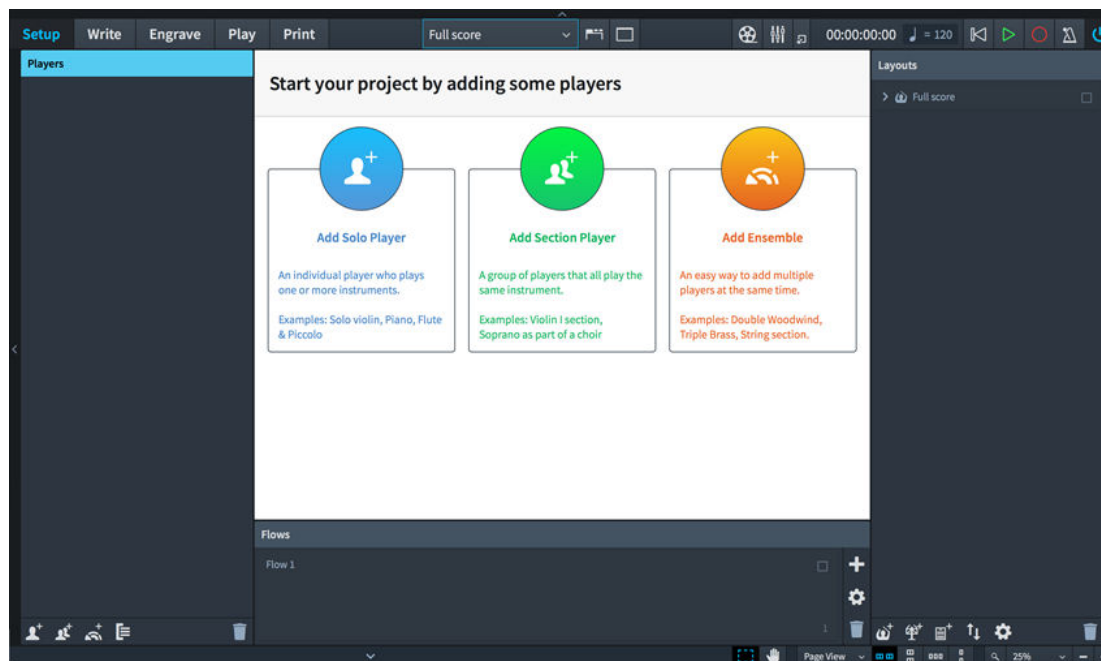
Close the template without saving to reopen the **Hub**.

PROCEDURE

- Start a new project in any of the following ways:
 - Press **Ctrl/Cmd-N**.
 - Click **New Empty Project**.

RESULT

A new project window opens.



By default, new projects start in Setup mode. This allows you to specify players and assign instruments straight away. The area in the middle, known as the project start area, allows you to start your project with different types of players. Once you have added at least one player, this area becomes the music area.

On the right, the **Layouts** panel shows a **Full score** layout card. This layout is automatically created in every new project.

At the bottom of the window is the **Flows** panel, where you can specify separate spans of music for your project.

AFTER COMPLETING THIS TASK

Start your project by adding a player and assigning an instrument to them. You are free to assign any kind of instrument. The following examples use a single piano player.

RELATED LINKS

[Windows](#) on page 33

Adding a solo player

In this section, you learn how to add a player and assign an instrument.

PREREQUISITE

You have started a new project. You are in Setup mode.

PROCEDURE

1. Click **Add Solo Player** to open the instrument picker.



2. Enter **piano** into the instrument picker search box.
3. Click **Add**.

RESULT

You have added your first player. In the music area, the required piano staves including their respective clefs are displayed.

AFTER COMPLETING THIS TASK

Save your project. You can do this at any time.

Optionally, you can now edit the project title or add more players.

The following sections help you to create flows and layouts. If you want to start composing, you can skip those sections.

RELATED LINKS

[Writing music](#) on page 23

Creating a flow

Flows are separate spans of music within your project, for example, movements or songs. In this section, you learn how to create a flow.

PREREQUISITE

You have added at least one player. You are in Setup mode.

PROCEDURE

- In Setup mode, click **Add Flow** in the Flows panel at the bottom of the window.



RESULT

A new flow is added to your project each time you click **Add Flow**. All existing players are assigned to new flows, and new flows are automatically added to all existing full score and part layouts.

AFTER COMPLETING THIS TASK

You can double-click the flow card to rename the flow.

You can also remove players from the flow by deactivating their checkboxes in the **Players** panel, and remove the flow from layouts by deactivating their checkboxes in the **Layouts** panel.

RELATED LINKS

[Flows](#) on page 117

[Renaming flows in Setup mode](#) on page 119

Creating a layout

Layouts define how music for one or more players in one or more flows is presented, including page size, margins, staff size, and so on. In this section, you learn how to create a new layout.

PREREQUISITE

You have added at least one player and one flow. You are in Setup mode.

Several layouts are often used in ensembles with multiple players, where each player may require a layout of the individual instrumental part. Dorico Pro automatically creates a full score layout that contains all players and all flows as well as individual part layouts that each contain one player and all flows. If you require a different combination of players and flows, for example, a part containing the music for two players, you can create your own layouts, as follows:

PROCEDURE

- In the **Layouts** panel, click **Add Instrumental Part Layout**.



RESULT

An empty part is created on the **Layouts** panel.

AFTER COMPLETING THIS TASK

You can double-click the empty part card to rename it.

You can also assign flows to the layout by activating their checkboxes in the **Flows** panel, and assign players to the layout by activating their checkboxes in the **Players** panel.

Writing music

Once you have set up your project, you can start writing music.

In Write mode, you can input notes and insert other notations into your score.

TIP

Throughout Dorico Pro, most tasks can be accomplished using only your computer's keyboard. You do not need to use the mouse or touchpad. Learning key commands allows you to use Dorico Pro most efficiently. The fastest way to input music is using a MIDI keyboard. If you do not have a MIDI keyboard, you can use your computer's keyboard. Of course, you can still use the mouse or touchpad if you want.

In the following sections, you learn how to input notes and notation items.

Inputting your first notes

In this section, you learn how to input notes. You can start inputting notes without having to first add a time signature or key signature.

PREREQUISITE

- You have set up your MIDI keyboard.

NOTE

If you have not set up a MIDI keyboard yet, you can start inputting notes with the computer keyboard.

- You have added a piano player in Setup mode.
 - You are in Write mode.
-

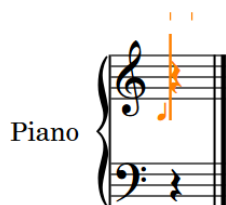
PROCEDURE

1. Select the rest that was automatically inserted next to the clef when you added a solo player.



2. Start note input in any of the following ways:
 - Press **Shift-N** or **Return**.
 - Double-click the rest.

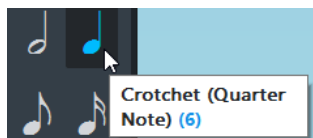
The caret is activated and appears on the staff.



3. In the Notes panel, click a duration.

NOTE

By default, Dorico Pro selects a quarter note (crotchet) for you.



4. Start playing notes on the MIDI keyboard, or press **A, B, C, D, E, F, G** on the computer keyboard to input the corresponding pitches.

If you want higher or lower pitch for the note that Dorico Pro inputs for you, you can force a different register.

- To input a note above the previously input note, press **Shift-Alt** as well as the letter for the note.

- To input a note below the previously input note, press **Ctrl** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note.

NOTE

You must press **Ctrl** on Mac, not **Cmd**.

RESULT

The pitches you enter or play in are input as notes.

EXAMPLE



Input notes with the caret still active after the final note

RELATED LINKS

[Write mode](#) on page 131

[Register selection during step input](#) on page 151

Adding a time signature

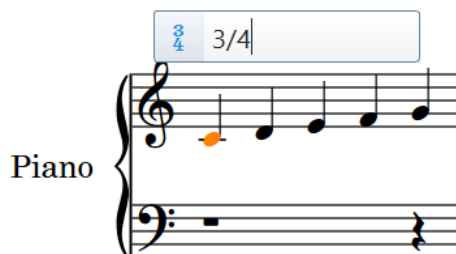
In this section, you learn how to add a time signature at the beginning of the staff. You can add a time signature before or after inputting a melody.

PREREQUISITE

Press **Esc** to deactivate the caret.

PROCEDURE

1. Select the first note on the staff.
2. Press **Shift-M**.
The time signatures popover opens above the staff.
3. Enter a typical time signature into the popover, such as $3/4$.



4. Press **Return** to close the popover.
-

RESULT



The time signature is automatically input to the left of the note, and the required bar lines are automatically inserted at the correct positions. If you want to insert a key signature, proceed to the next section.

Adding a key signature

In this section, you learn how to add a key signature. You can add a key signature at any rhythmic position on the staff.

When you start a new project from scratch, by default, there is no key signature shown. Depending on the kind of music you are writing, the key signature might be taken to mean C major or an open key with no specific tonal center.

You can change the key anywhere on the staff. To add a different key signature at the beginning of the staff, for example, D major, proceed as follows:

PROCEDURE

1. Select the first note on the staff.
2. Press **Shift-K**.
This opens the key signatures popover on top of the staff.
3. Enter a key signature into the popover. If you want to enter D major, enter an uppercase D.
For D minor, enter a lowercase d.



4. Press **Return**.

RESULT



The key signature is inserted between the clef and the time signature. Dorico Pro automatically adds accidentals where necessary.

Inputting your first chord

In this section, you learn how to input a chord with the computer keyboard, using chord mode. If you want to use a MIDI keyboard instead, you can input the chord with your keyboard, and you do not need to use chord mode. Dorico Pro automatically inputs the correct notes.

PREREQUISITE

Select the last note or rest on the staff, and press **Return**. This shows the caret.

PROCEDURE

1. Start chord input in any of the following ways:

- Press **Q**.
- In the Notes toolbox, click **Chords**.



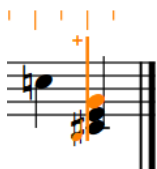
The caret shows a plus sign at the top.



2. Optional: In the Notes panel, select a duration.
3. Input the notes that you want in your chord by pressing keys from **A** to **G**, one after the other. For example, for a C major chord, press **C**, **E**, and **G**.

By default, Dorico Pro adds each new note above the previous note. You can select the register of notes manually.

The example shows a possible result.



4. Press **Space** to advance the caret to the next note position and continue with the next chord.
Dorico Pro expects further chord input until you deactivate it.
5. Optional: To stop chord input, press **Q** or click **Chords** again in the Notes toolbox.
-

RELATED LINKS

[Register selection during step input](#) on page 151

Dorico Pro concepts

The following sections give you an overview of the design philosophy as well as the concepts on which Dorico Pro is based.

We recommend that you familiarize yourself with these concepts as these are often returned to throughout the documentation.

Design philosophy and higher-level concepts

Deep design considerations are required to create a notation software like Dorico Pro, which might be of particular interest to users familiar with scoring applications. Dorico Pro has a forward-thinking design that is led by musical concepts rather than computational convenience, and this provides many benefits.

In most other graphically-orientated scoring applications, the highest-level concept is the staff or the instrument definition that creates a staff or staves. When setting up your full score in such programs, you start by adding the correct number of staves, and you are immediately forced into making decisions about the layout. This means that you must know in advance whether two flutes share a staff or have their own individual staves, or whether there should be two trumpets or three. Many of these decisions have significant effects throughout the process of inputting, editing, and producing individual instrumental parts.

Typically, every system of a score must contain the same number of staves, even if some are hidden on particular systems. This requires the user to manage common conventions for themselves, such as multiple players of the same instrument sharing staves. This can be time-consuming and is naturally error-prone.

By contrast, Dorico Pro is designed to conform more closely to how music is performed in the real world and to make the score a flexible expression of the practical choices that go into a musical performance, rather than to make the musical performance subservient to the way the score was initially prepared.

To that end, the highest-level concept of Dorico Pro is the group of human musicians that performs a score. A score can be written for one or more groups, for example, a double choir or an orchestra plus off-stage chamber ensemble, and so on. Each group includes one or more players which correspond to the humans who play one or more instruments. Players may either be individuals who play more than one instrument, such as an oboist doubling cor anglais, or groups in which everyone plays only one instrument, such as eight desks of violinists.

One crucial difference between Dorico Pro and other scoring applications is that the musical content exists independently of the score layout in which it is viewed.

The actual music played by the group in your score belongs to one or more flows. A flow is any span of music that stands alone, for example, a whole song, a movement of a sonata or symphony, a number in a musical show, or even a short scale or exercise. Players might or might not have any music to play in a given flow. For example, all the brass players might be omitted from the slow movement of a classical symphony, or certain players might have nothing to play in some cues in a movie score. This is no problem as you can combine players in flows in any combination.

Dorico Pro's design philosophy provides several benefits. Chief among them is its ability to produce different score layouts that share the same musical content. For example, in the same project you can create a full score with each player's music on separate staves, a custom score layout containing just the piano and vocal staves, and an instrumental part for each player that only contains the music belonging to them.

Key musical concepts

In order to work efficiently with Dorico Pro, it is important to understand the conceptual model of the program.

The model is closely based on the practical considerations of how music is written and performed by real humans.

Projects in Dorico Pro

A project is an individual file that you create within Dorico Pro. It can contain multiple pieces of music of any duration, written for any combination of instruments, and using different layouts.

For example, you can create a single project that contains all the preludes and fugues in Bach's "The Well-Tempered Clavier" as separate flows.

Modes in Dorico Pro

Modes in Dorico Pro represent a logical sequence of the workflow phases of preparing music, but you can switch between them at any time as required for your own workflow.

Dorico Pro contains the following modes:

Setup

In this mode, you can set up the players and instruments for the project. You can create and manage flows and set up layouts.

Write

In this mode, you can write your music. You can insert notes and rests, key signatures, time signatures, and idiomatic notations.

Engrave

In this mode, you have access to fine-grain controls that allow you to manipulate and modify every item in the project. You can also manage pages, master pages, layouts, and formats.

Play

In this mode, you can set up your project for playback. You can assign VST instruments, adjust the mix, and change the sounding duration of notes in playback without affecting their notated duration.

Print

In this mode, you can define different print jobs, such as printing full scores, study scores, individual parts, and so on. For every print job, you can specify options for page size and duplex printing. You can also manage other output, such as exports to various file types, such as PNG.

RELATED LINKS

[Functions of the modes](#) on page 17

Options dialogs in Dorico Pro

Options to control the default appearance of music and functionality of Dorico Pro are divided into different dialogs according to their type and purpose.

Dorico Pro contains the following dialogs for global settings:

Layout Options

Contains options that are likely to vary from layout to layout, such as page size, staff size, and the appearance and position of bar numbers. Options in **Layout Options** affect only the selected layouts but apply to all flows in those layouts.

Notation Options

Contains options that are likely to vary from flow to flow, such as beam grouping and accidental duration rules. Options in **Notation Options** affect only the selected flows but apply to all layouts in which those flows appear.

Note Input Options

Contains options relating to how you want Dorico Pro to interpret what you input, such as creating chord symbols from a MIDI keyboard. Options in **Note Input Options** affect the whole project but do not affect any other projects unless you save your settings as default.

Engraving Options

Contains options that control the appearance and position of notes and items to a high level of precision. For example, you can set whether crescendos appear as hairpins or text and set the slant of beams according to the interval distance within the beam. **Engraving Options** contains the largest number of options, which affect the whole project. However, this does not affect any other projects unless you save your settings as default.

Playback Options

Contains options that control what you hear in playback and how notation items affect playback, including setting a dynamic curve for how much different dynamics affect the volume, whether repeats are included in playback, and whether you want a gap between flows. Options in **Playback Options** affect the whole project but do not affect any other projects unless you save your settings as default.

RELATED LINKS

[Layout Options dialog](#) on page 90

[Notation Options dialog](#) on page 139

[Note Input Options dialog](#) on page 141

[Engraving Options dialog](#) on page 299

[Playback Options dialog](#) on page 405

Instruments in Dorico Pro

In Dorico Pro, an instrument is an individual musical instrument, such as a piano, a flute, or a violin. Human voices, such as soprano or tenor, are also considered instruments.

Dorico Pro has a database of information about properties of each instrument. These include the playable range, common and uncommon playing techniques, notational conventions, transposition properties, tunings, clef, number of staves, type of staff, and so on.

RELATED LINKS

[Instruments](#) on page 103

Players in Dorico Pro

In Dorico Pro, a player can represent an individual musician or several musicians.

- Solo players are individual musicians who can play one or more instruments, for example, a clarinetist who doubles on alto saxophone or a percussionist who plays bass drum, clash cymbals, and triangle.
- Section players represent multiple musicians who all play the same instrument, for example, a violin section player can represent eight desks of musicians, or a soprano section player can represent the whole soprano section in a mixed voice choir.

NOTE

Section players cannot double instruments, but they can play divisi. This means that they can be divided into smaller units, which is commonly required for strings.

RELATED LINKS

[Players](#) on page 94

[Divisi](#) on page 929

Groups in Dorico Pro

A group represents a collection of musicians that are considered together, such as a choir, orchestra, or chamber ensemble.

In a typical project, there might be only one group that contains all of the defined players, but you can define as many groups as required to allow easy separation of forces in larger-scale works. It might also be necessary to assign players to these groups for the purposes of, among other things, properly bracketing and labelling their staves in the conductor's score.

EXAMPLE

A work for double choir and organ can define the two choirs as separate groups. This allows each choir to have its own label in addition to the labels for each sectional player (soprano, alto, tenor, bass) within the choir.

In a complex work, such as Elliott Carter's "A Symphony of Three Orchestras", each of the orchestras can be defined as a separate group.

RELATED LINKS

[Player groups](#) on page 115

Flows in Dorico Pro

Flows are separate spans of music that are completely independent in musical content, for example, a single song in an album, a movement in a sonata or symphony, a number in a stage musical, or a short scale or sight-reading exercise of only a few bars in length. A single project can contain one or more flows.

Each flow can contain music for any combination of players. For example, brass players are often tacet in the second movements of Classical-period symphonies, so you can simply remove brass players from the flow for the second movement. In a set of cues for a movie, for example, specific players might not be required in some cues, so the corresponding flows can contain only those players who have anything to play.

The correct assignment of players to flows allows Dorico Pro, for example, to generate tacet sheets automatically for individual instrumental parts.

RELATED LINKS

[Flows](#) on page 117

Layouts in Dorico Pro

Layouts combine musical content, as represented by flows, with rules for page layout and music engraving. As well as part layouts for individual players, you can have layouts for multiple players drawn from multiple different flows. You can use layouts to produce paginated music notation that can be printed or exported in various formats.

A typical project for an ensemble of multiple players contains several layouts. For example, a work for string quartet in three movements contains four solo players – two violins, one viola, and one cello – and three flows, one for each movement. Such a project might require five layouts:

- Four layouts each containing the music from all three flows for one of the solo players, that is, the individual instrumental parts
- One layout containing the music from all three flows and all four players, that is, the full score

Each layout provides independent control over practically every aspect of the visual appearance of the music, including independent staff size, note spacing, and system formatting. Each layout can also have independent page layout settings, such as page size, margins, running headers, and footers.

The default formatting of pages in layouts is determined by master frames.

RELATED LINKS

[Layouts](#) on page 120

[Page layouts](#) on page 342

[Master pages](#) on page 301

User interface

The user interface of Dorico Pro is designed to be as unobtrusive as possible while keeping all of the important tools at your fingertips.

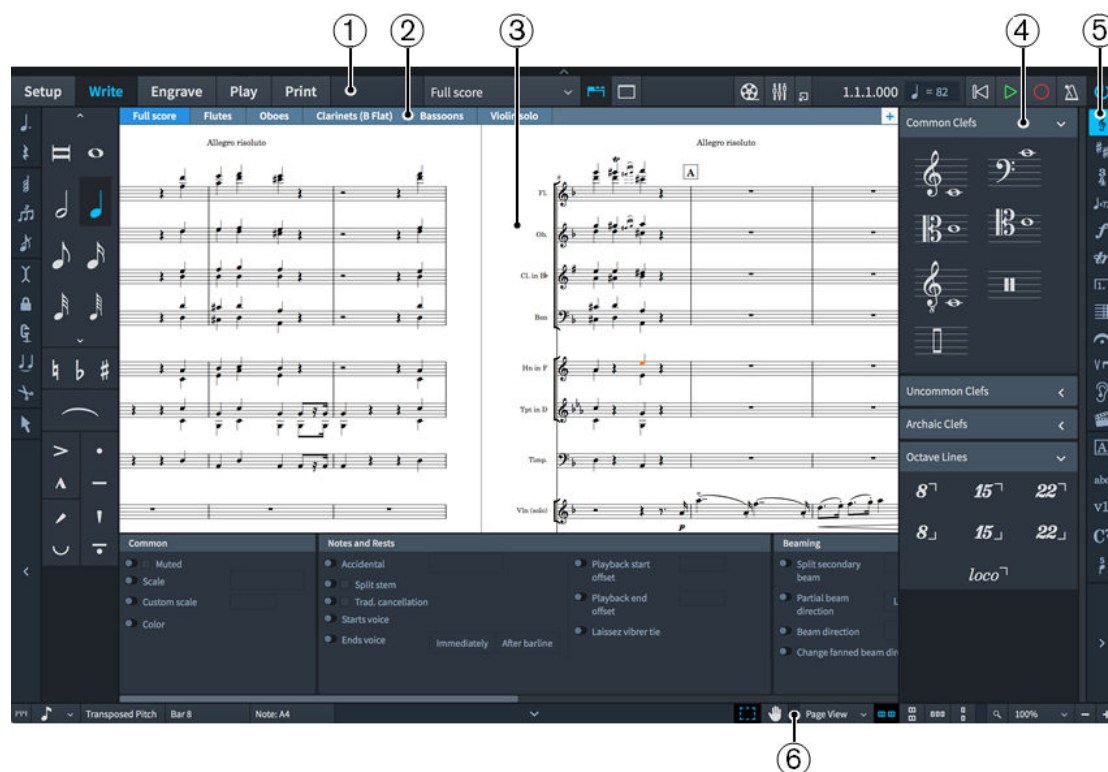
You can explore the interface without doing any damage to your project. You can always undo any inadvertent edits or close your project without saving it.

Windows

Dorico Pro provides a project window and floating windows.

Project window

You can open multiple project windows for the same or for different projects. The project window consists of several areas.



Project window

1 Toolbar

Allows you to access the modes, the workspace options, the **Mixer**, the **Video** window, and the main transport options.

2 Tab bar

In Setup, Write, and Engrave modes, the tab bar shows the tabs that are currently open. If you split the music area and open several tabs, tab groups are shown.

3 Project start area/Music area/Event display/Print preview area

When you set up a new empty project, this area in Setup, Write, and Engrave modes shows the project start area that allows you to add your first players. Once you have added a player or an ensemble, this area becomes the music area that shows the score or parts of the score that you set up, write, edit, and format. In Play mode, this area contains an event display that shows the effects of manipulating the playback of your score. In Print mode, the print preview area shows a preview of how your project is going to be printed onto paper or exported into a graphics file format.

4 Panel

Provides notes and notations that you need to create and edit your music. Different panels contain different items and functions according to the mode.

5 Toolbox

Provides access to items and tools that you can use to input and edit your music. Different toolboxes contain different items and tools according to the mode.

6 Status bar

Allows you to choose a different view and page arrangement of the music area. It also contains zoom options and a summary of your current selection in the music area.

Floating windows

Dorico Pro allows you to open floating windows, such as the **Mixer** and the **Transport** windows. These can be hidden and shown independently of the mode that is selected in the main window. The following options hide/show floating windows:

Show Mixer



Hides/Shows the **Mixer** window.

Show Transport Bar



Hides/Shows the **Transport** window.

Show Video



Hides/Shows the **Video** window.

RELATED LINKS

[Opening multiple project windows](#) on page 49

Toolbar

The toolbar allows you to access the modes and workspace options as well as the **Mixer** and main transport options.

The toolbar is available in all modes and regardless of the tool that you are using. If you must hide the toolbar for a specific reason, click the disclosure arrow above the toolbar.



The toolbar contains the following items:

- 1 Modes**
Selectable workspaces in the project window that represent different phases in the workflow of preparing a score. If the width of the main project window becomes sufficiently small, the mode buttons become a menu.
- 2 Workspace options**
Provide options that allow you to select different layouts to open in the music area and to change the working environment.
- 3 Show Video**
Hides/Shows the **Video** window.
- 4 Show Mixer**
Hides/Shows the **Mixer** window.
- 5 Mini transport**
Allow to you quick access to the main transport functions, including **Play**, **Record**, and **Click**.
- 6 Activate Project**
Shows which project is activated for playback when you have multiple projects open.

Workspace options

The workspace options in the middle of the toolbar provide options that allow you to select different layouts and to change the working environment.

Layout selector



Allows you to select other layouts to show in the current tab.

Show Tabs

Shows/Hides the tab bar above the music area.



Appearance when the tab bar is hidden



Appearance when the tab bar is shown

Hide/Restore Panels

Shows/Hides all open panels.



Appearance when panels are shown



Appearance when all panels were previously shown but are now all hidden

Mini transport

The mini transport on the right of the toolbar provides quick access to the main transport functions of Dorico Pro.

Show Transport Bar



Opens the **Transport** window.

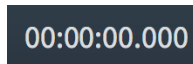
Time display

Shows the position of the playhead in one of the following formats:

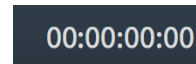
- Bars, beats, and ticks
- Elapsed time in the following order of units: hours, minutes, seconds, milliseconds
- Timecode in the following order of units: hours, minutes, seconds, frames



Time display showing bars and beats



Time display showing elapsed time



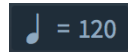
Time display showing the timecode

You can change the content shown in the time display by clicking it.

Tempo

Displays the tempo used for both playback and recording. The value changes according to the current position of the playhead and its appearance changes according to its current mode.

You can change the tempo mode by clicking the **Tempo** beat unit.



How **Tempo** appears when fixed tempo mode is active



How **Tempo** appears when follow tempo is active

Rewind to Beginning of Flow



Moves the playhead back to the beginning of the flow.

Play

Starts/Stops playback from the previous playhead position.



Play when playback is stopped



Play during playback

Record



Starts/Stops MIDI recording.

Click



Plays/Mutes the metronome click during playback and recording.

Activate Project



Shows which project is activated for playback when you have multiple projects open.

TIP

The **Transport** window contains additional transport functions.

RELATED LINKS

[Transport window](#) on page 446

[Playing back music](#) on page 431

[Moving the playhead](#) on page 431

[Changing the tempo mode](#) on page 435

Tab bar

The tab bar in Dorico Pro allows you to display different layouts within the same project window. It is located between the toolbar and the music area.

TIP

If you cannot see the tab bar, click **Show Tabs** in the toolbar. If **Show Tabs** is activated, the tab bar is always displayed, even if only a single tab is open.



The tab bar contains the following:

1 Tabs

All tabs currently open are displayed, with their position from left to right reflecting the order in which you opened them. Each tab is labeled with the name of the selected layout. The tab currently in view in the music area is highlighted.

When you hover over an individual tab, an **x** appears that allows you to close the tab.



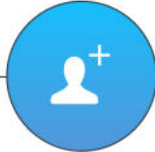


2 New Tab

Allows you to open a new tab. Tabs can contain a different layout, or an additional view of a layout that is already open in another tab or window.

Project start area

The project start area is displayed in the middle of the project window in Setup, Write, and Engrave modes when you set up a new empty project. When you add at least one player, the view changes into the music area.

Start your project by adding some players

 <p>Add Solo Player</p> <p>An individual player who plays one or more instruments.</p> <p>Examples: Solo violin, Piano, Flute & Piccolo</p>	 <p>Add Section Player</p> <p>A group of players that all play the same instrument.</p> <p>Examples: Violin I section, Soprano as part of a choir</p>	 <p>Add Ensemble</p> <p>An easy way to add multiple players at the same time.</p> <p>Examples: Double Woodwind, Triple Brass, String section.</p>
---	---	---

Project start area

The project start area shows cards that allow you to add your first players. To add players, click one of the cards:

Add Solo Player

Adds an individual player to whom you can assign one or more instruments.

Add Section Player

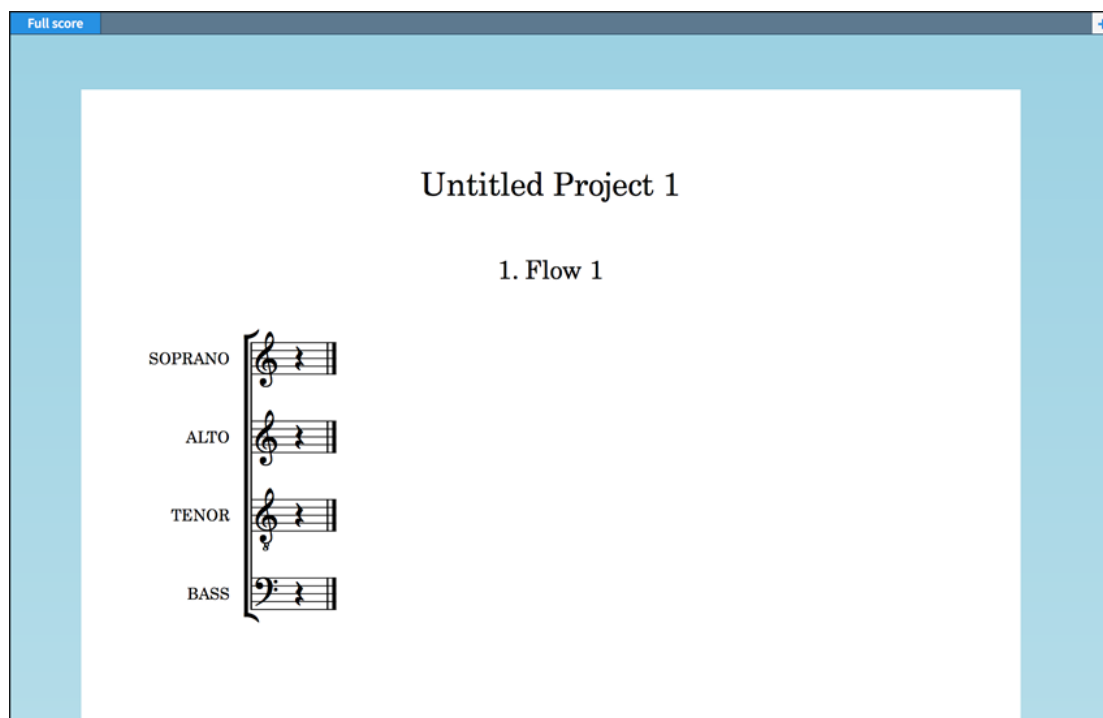
Adds a player that represents multiple players who all play the same instrument.

Add Ensemble

Adds multiple players who play different instruments. The ensembles that you can add represent standard combinations of musicians.

Music area

In Setup, Write, and Engrave modes, the music area shows the editable score.



Music area showing a sample of a score

The music area can be displayed in several views. The music area tab bar allows you to open several layouts from your project and switch between them. The scroll bars to the right and to the bottom of the music area allow you to scroll within the layout.

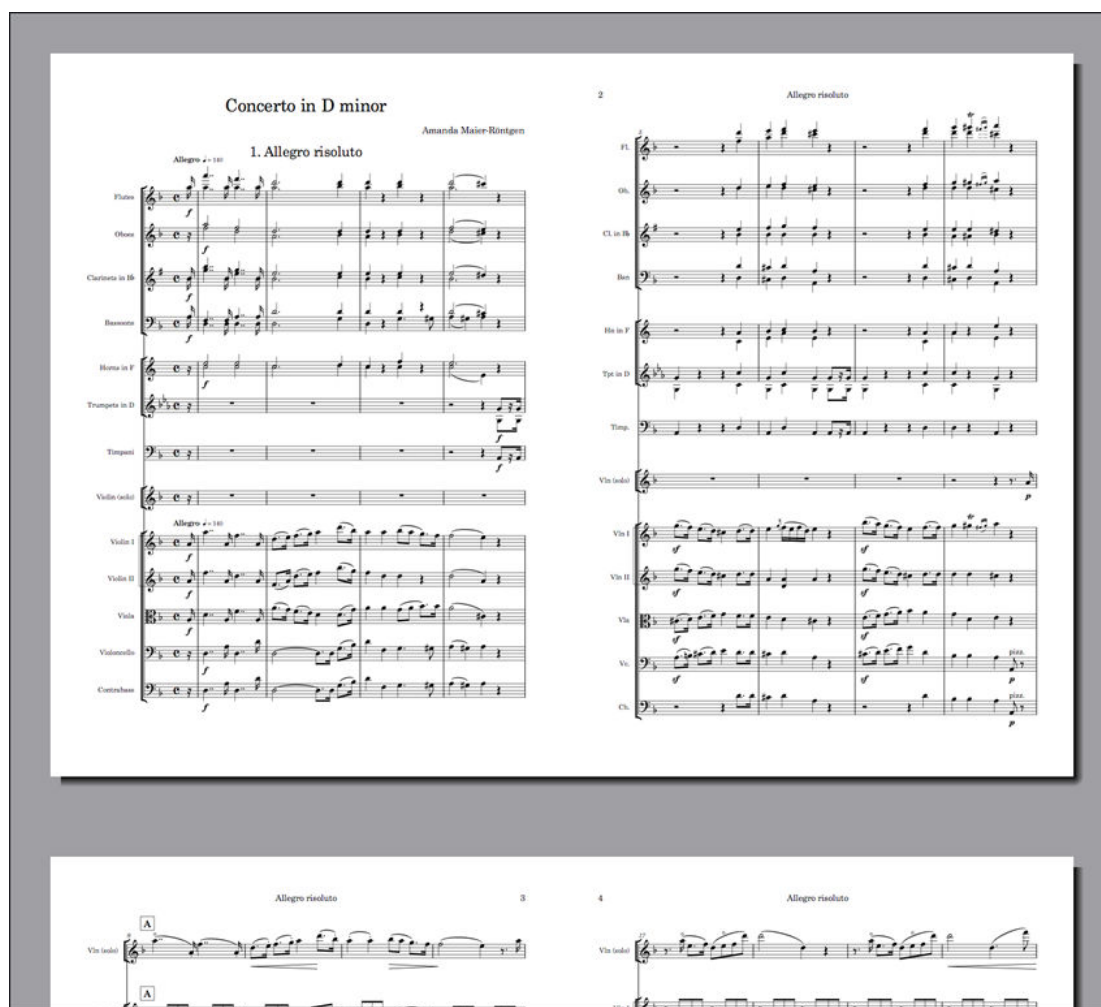
When panels are open on the right, left, and at the bottom of the window, the size of the music area can be reduced. You can hide/show panels when necessary.

RELATED LINKS

[Hiding/Showing panels](#) on page 18

Print preview area

The print preview area in Print mode shows a preview of what is going to be printed or exported as a graphic.



Print preview area displaying a score set to print 2-up

In the print preview area, you can scroll through the pages that are shown, but you cannot edit your layouts. If you want to make changes, you must switch to Setup, Write, or Engrave mode.

NOTE

You can jump to the first page in the layout by pressing **Home**, and to the last page by pressing **End**.

If you select multiple layouts to be printed as part of the same print job, the print preview area only displays the first layout. If you want to show the expected page arrangement for each layout in the print preview, you must check each layout individually before you start printing.

RELATED LINKS

[Project window in Print mode](#) on page 468

Panels

The panels in the project window provide the notes, notations, and functions that you need to set up, write, edit, and format your music.



Panels in Write mode

- 1 Left panel. In Write mode, this is the Notes panel.
- 2 Right panel. In Write mode, this is the Notations panel.
- 3 Bottom panel. In Write mode and Engrave mode, this is the Properties panel.

The panels have different names and functions in each mode in Dorico Pro.

Modes and their panels

Mode	Left Panel	Right Panel	Bottom Panel
Setup	Players	Layouts	Flows
Write	Notes	Notations	Properties
Engrave	Formatting	Pages	Properties
Play	n/a	VST and MIDI Instruments	n/a
Print	Layouts	Print Options	n/a

Some panels are displayed by default. You can hide/show each panel individually or all of them at the same time.

RELATED LINKS

- [Modes in Dorico Pro](#) on page 29
- [Hiding/Showing panels](#) on page 18
- [Project window in Setup mode](#) on page 82
- [Project window in Write mode](#) on page 131
- [Project window in Engrave mode](#) on page 290
- [Project window in Play mode](#) on page 400
- [Project window in Print mode](#) on page 468

Disclosure arrows

Disclosure arrows indicate that objects and menus can be expanded/contracted, either vertically or horizontally.

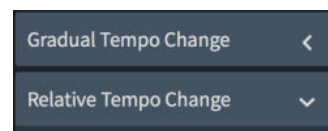
In Dorico Pro, disclosure arrows are commonly used to hide/show panels, sections, and advanced options, and to expand/contract cards, such as player cards in the Players panel in Setup mode.



Disclosure arrow for the bottom panel



Disclosure arrows for both the player card and the instrument within it



Disclosure arrows for sections in the Tempo panel

RELATED LINKS

- [Hiding/Showing panels](#) on page 18
- [Players panel](#) on page 83
- [Instruments](#) on page 103

Toolboxes

Toolboxes are available in Write, Engrave, and Play modes. They contain different tools and options according to the current mode, but in general they allow you to input and modify notes, notation items, and frames, and to determine which options are shown in their corresponding panels.

The following toolboxes are available in the different modes:

Write mode

- Notes toolbox on the left of the window
- Notations toolbox on the right of the window

Engrave mode

- Engrave toolbox on the left of the window

Play mode

- Play toolbox on the left of the window

RELATED LINKS

- [Notes toolbox](#) on page 132
- [Notations toolbox](#) on page 137
- [Engrave toolbox](#) on page 291
- [Play toolbox](#) on page 401

Status bar

The status bar at the bottom of the project window allows you to choose a different view and page arrangement in the music area.

NOTE

Not all options in the status bar are available in all modes.



Status bar in Write mode

1 Rhythmic Grid selector

Allows you to change the rhythmic grid value, which affects certain aspects of inputting and editing, such as the amount by which items move.

2 Status display

Displays information about the current layout and selection, divided in up to three sections, which are, from left to right:

- Transposition of the current layout
- The bar/range of bars of the current selection.
- Summary of the selection, for example, the pitch of a single selected note or the implied chord of multiple selected notes.

3 Disclosure arrow

Allows you to show/hide the bottom panel in Setup, Write, and Engrave modes.

4 Selection tools

Allow you to switch between using the **Marquee Tool** and the **Hand Tool** in Write mode and Engrave mode.

5 View type selector

Allows you to select one of the provided view types for the music area in Setup and Write mode.

6 Page arrangement options

Allow you to choose between different horizontal and vertical arrangements of either individual pages or pairs of pages, which are called spreads.

7 Zoom options

Allow you to change the zoom factor of the music area and its musical contents. There are preset zoom levels but you can also use a custom zoom level.

RELATED LINKS

[Rhythmic grid](#) on page 144

[View types](#) on page 43

[Page arrangements for page view](#) on page 44

[Zoom options](#) on page 45

Selection tools

Dorico Pro allows you to choose selection tools from the status bar that you can use to select or move items within the music area.

You can use the following tools:

Marquee Tool

Allows you to drag a rectangle to select multiple notes and notations.



Hand Tool

Allows you to move the view within the music area.



TIP

To use the other tool briefly without selecting it, you can press **Shift** in addition to using the mouse.

Selecting multiple items using marquee selections

You can use a marquee selection to select multiple notes and notations at the same time within a specific area in Write, Engrave, and Play modes.

PROCEDURE

1. In the status bar, click **Marquee Tool**.



2. In the music area, click and drag across the area where you want to select everything. A gray rectangle is shown to indicate which notes and notations will be selected. We recommend that you click in one corner of the area you want to select and drag diagonally across to the other corner.
-

RESULT

All notes and notations in the area within the gray rectangle are selected.

NOTE

Only items completely within the area are selected. However, if any part of a note/tie chain is within the area, the whole note/tie chain is selected.

Moving the view

You can move the view within the music area in Write mode and Engrave mode, for example, to bring other parts of pages into view when zoomed in.

PROCEDURE

1. In the status bar, click **Hand Tool**.



2. Click and drag in any empty space in the music area. The mouse pointer changes into a hand symbol during the move.
-

View types

In Dorico Pro there are different ways to view your layouts. Dorico Pro saves your chosen view type for each layout, so you only need to set it once.

The following view types are available:

Galley View

Lays out your music on a single continuous system. It also shows all the instrument staves in the current layout and flow.

This view type is most useful during the process of inputting the music as it allows you to focus on the musical content of your project.

By default, bar numbers are shown every bar above every staff. Staff labels are also shown above every staff, and follow the view as you scroll so they are always visible.

NOTE

Note spacing in galley view is unjustified, meaning it neither expands nor contracts to fit the width of a page or a music frame. However, changes made to note spacing in galley view also apply to page view.

Additionally, there is no automatic vertical collision avoidance in galley view, so notes and items might overlap.

Page View

Displays your layout paginated exactly as it appears when you print or export it.

This view type is useful if you want to view spreads or single pages. Spreads allow you to work out page turns, because the performer only needs to turn the page at the end of the right-hand page of a pair. Viewing single pages can be helpful if you want to print the layout as a series of single pages. This might be necessary if you are using, for example, a fan-fold or concertina approach, in which case the distinction between left- and right-hand pages is insignificant.

TIP

You can change the default view type used for all future projects on the **General** page in **Preferences**.

RELATED LINKS

[Preferences dialog](#) on page 51

[Switching to galley/page view](#) on page 50

Page arrangements for page view

You can change the way pages are arranged for display in the music area.

Spreads Horizontally



Displays pages in pairs as two-page spreads, with each pair laid out from left to right in a row.

Spreads Vertically



Displays pages in pairs as two-page spreads, with each pair laid out from top to bottom in a column.

Single Pages Horizontally



Displays individual pages laid out from left to right.

Single Pages Vertically



Displays individual pages laid out from top to bottom.

RELATED LINKS

[Switching to galley/page view](#) on page 50

Zoom options

Zoom options in the status bar allow you to change the displayed size of pages in the music area.

Custom Zoom

Opens a dialog that allows you to set a custom zoom percentage.

Set Zoom

Allows you to select one of the preset zoom scaling factors. You can set a permanent zoom factor for all future projects on the **General** page in **Preferences**.

Zoom Out

Decreases the size of notes and notations in the music area.

Zoom In

Increases the size of notes and notations in the music area.

RELATED LINKS

[Preferences dialog](#) on page 51

Zooming in/out of the music area

You can change the zoom level in the music area, for example, if you want a larger overview when inputting notes but to see notes and notations more closely when making detailed graphical amendments.

PROCEDURE

1. Zoom in in any of the following ways:
 - Press **Ctrl/Cmd++**.
 - Spread two fingers outwards on a touchpad.
 - Scroll upwards on a mouse wheel.
 - Use the zoom options in the status bar.
2. Zoom out in any of the following ways:
 - Press **Ctrl/Cmd--**.
 - Pinch two fingers together on a touchpad.
 - Scroll downwards on a mouse wheel.
 - Use the zoom options in the status bar.

RESULT

The zoom level in the music area is changed. If you had anything selected, Dorico Pro uses your selection as the focal point of the zoom. If you had nothing selected, Dorico Pro focuses on the area previously in the center of the view.

RELATED LINKS

[Zooming in/out of tracks in the event display](#) on page 413

Workspace setup

Dorico Pro enables you to set up your workspace according to your working style.

Dorico Pro allows you to open multiple tabs to display multiple layouts in the same project within the same window. You can also open the same project in several windows.

RELATED LINKS

[Hiding/Showing panels](#) on page 18

Switching between layouts

If you have created several layouts in your project, you can switch between which is displayed in the music area in every mode. In Setup, Write, and Engrave modes, this changes the layout displayed in the current tab only.

NOTE

You can only switch between layouts to which players are assigned.

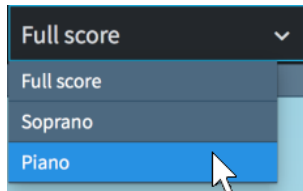
PROCEDURE

- Switch to another layout in any of the following ways:
 - Press **Shift-Alt-]** to switch to the next layout.
 - Press **Shift-Alt-[** to switch to the previous layout.
 - Select an item on a staff or in the piano roll of the player whose layout you want to open and press **W**.

NOTE

Implicit rests are not items.

- Select a layout from the layout selector in the toolbar.



RESULT

The selected layout is opened in the music area. It replaces the layout previously open in the tab.

Opening new tabs

You can open multiple tabs in the same project window, which you can use to display multiple layouts or different views of the same layout. For example, you can show your full score layout in page view in one tab and in galley view in another tab.


Each tab can contain a separate layout or a different view of a layout already open in another tab or window. Whenever you open a new tab, you are prompted to select a layout that you want to display in the tab.

You can find tabs in the tab bar, located at the top of the music area, below the toolbar. If you do not see any tabs, click **Show Tabs** in the toolbar.

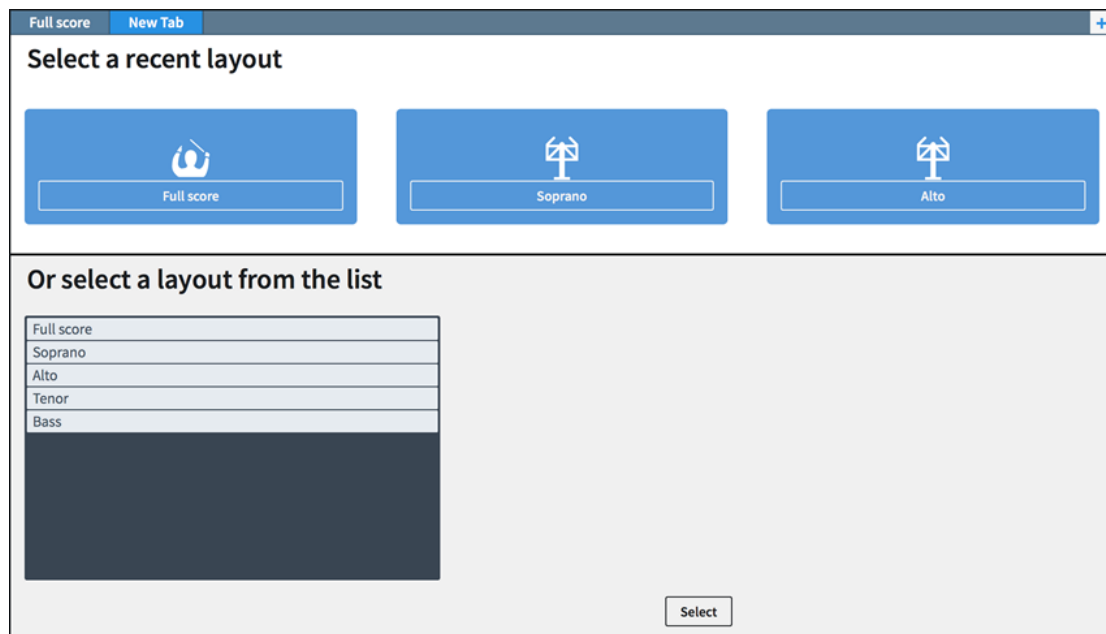


PROCEDURE

1. Open a new tab in any of the following ways:

- Press **Ctrl/Cmd-T**.
- At the right end of the tab bar, click **New Tab**.

- Choose **Window > New Tab**.

A new tab opens that shows recent layouts at the top and a list of other layouts in the project at the bottom.



2. Select a layout to open in the new tab in any of the following ways:
 - Click one of the icons.
 - Select a layout from the list at the bottom.
 - Select a layout from the layout selector in the toolbar.

RESULT

The layout that you choose opens in the active tab.

TIP

You can also switch between different layouts within the same tab.

RELATED LINKS

[Tab bar](#) on page 37

[Toolbar](#) on page 34

Closing tabs

You can close individual tabs of layouts that you no longer need, and you can close multiple tabs at the same time.

PROCEDURE

- Close tabs in any of the following ways:
 - Select the tab you want to close and press **Ctrl/Cmd-W**.
 - Hover over the tab you want to close and click **x**.

- Right-click the single tab you want to close and choose **Close Tab** from the context menu.
- Right-click the tab you do not want to close and choose **Close Other Tabs** from the context menu.

NOTE

You cannot close the last tab in a window. If only one tab is open and you no longer want to see the tabs, deactivate **Show Tabs** in the main toolbar. The tab is no longer displayed, but the corresponding layout is still shown.

RESULT

If you selected a single tab and closed it, the selected tab and its corresponding layout are closed.

If you selected a single tab and closed other tabs, all open tabs except for the selected tab are closed.

Switching between tabs

You can switch between different open tabs to show different layouts in the music area.

PROCEDURE

- Switch tabs in any of the following ways:
 - Press **Ctrl/Cmd-Tab** to cycle through all open tabs.
 - Press **Ctrl/Cmd-Shift-Tab** to cycle through all open tabs in reverse order.
 - Click the tab to which you want to switch.
-

Changing the order of tabs

You can move tabs to a different position on the tab bar.

PROCEDURE

- Click and drag a tab to the new position.
The other tabs move to show where the dragged tab will be positioned.
-

Showing multiple tabs in the same project window

You can split your project window to display two tabs at the same time. The split can be either vertical or horizontal, allowing you to display different layouts either side by side or above one another.

Splitting your project window divides your currently open tabs into two groups. You can move tabs between the groups at any time, for example, to compare different layouts or to compare two views of the same layout.

PROCEDURE

1. Select the tab of the layout that you want to move to a new tab group.
 2. Split the view in one of the following ways:
 - To show layouts side by side, choose **Window > Vertical Split**.
 - To show layouts above one another, choose **Window > Horizontal Split**.
-

RESULT

The project window is split to show two tabs at the same time. The selected tab is moved to the new tab group.

Moving tabs to another tab group

You can move tabs to other tab groups.

PREREQUISITE

You have opened at least two tabs and they are both shown in the same project window.

PROCEDURE

- Click and drag the tab into the target tab group.
-

RELATED LINKS

[Opening new tabs](#) on page 46

Moving tabs to other windows

You can move tabs to another open window of the same project to show the corresponding layouts in a new window.

NOTE

- The layouts must belong to the same project. If you attempt to move a tab to a window of a different project, a new window is created for the project to which the layout belongs.
 - You can only move tabs to other windows if you have opened at least two tabs.
-

PROCEDURE

- Do one of the following:
 - To create a new window of the same project with the tab inserted, click and drag a tab horizontally to the right/left, away from the tab bar and release it.
 - To insert the tab into the tab bar of another window of the same project, click and drag a tab onto the tab bar.
 - Select a tab, right-click it, and choose **Move Tab To New Window** from the context menu.
 - Select a tab and choose **Window > Move Tab To New Window**.
-

Opening multiple project windows

You can open multiple project windows for the same project, for example, if you want to work on multiple layouts at the same time. You can also show a different mode of the same project in each window, such as having one window show Write mode and another show Play mode.

During playback, all windows that belong to the same project show the playhead and move the view to follow the music during playback.

PROCEDURE

- Open a new project window in any of the following ways:
 - Press **Ctrl/Cmd-Shift-T**.

- Choose **Window > New Window**.
-

RESULT

A duplicate of the window opens. It contains the same tabs and the same view options as the original window.

RELATED LINKS

[Playhead](#) on page 430

Changing to full screen mode

You can maximize the amount of screen space available for your music by making any project window cover the whole screen.

You can also hide the desktop elements provided by your operating system, for example, the task bar in Windows or the system menu bar and Dock in macOS.

Within Dorico Pro, you can also hide/show the panels on the right, left, and at the bottom of the window.

PROCEDURE

- Choose **View > Full Screen**.
-

AFTER COMPLETING THIS TASK

To return to the default view, choose **View > Full Screen** again.

RELATED LINKS

[Hiding/Showing panels](#) on page 18

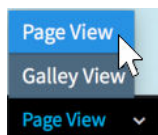
Switching to galley/page view

You can switch between different view types in the music area, for example, if a flute player in your project is doubling piccolo, you can switch to galley view to see the piccolo staff in addition to the flute staff.

PROCEDURE

1. Switch to galley or page view in any of the following ways:

- Press **Ctrl/Cmd-Alt-2** to switch to galley view.
- Press **Ctrl/Cmd-Alt-1** to switch to page view.
- In the status bar, select **Galley View** or **Page View** from the view selector.



2. Optional: If you selected **Page View**, choose one of the available page arrangements in the status bar.

**Spreads
Horizontally**



Spreads Vertically



**Single Pages
Horizontally**



**Single Pages
Vertically**



RESULT

The view type in the music area is changed. In page view, only staves containing notes or items are shown by default. For players holding multiple empty instruments, only the top instrument is shown in full scores.

In galley view, all staves in the project are shown. However, note spacing is unjustified and there is no automatic vertical collision avoidance, so notes and items might overlap.

TIP

- You can change the default gaps between staves in galley view on the **Vertical Spacing** page in **Setup > Layout Options**.
- You can change the default view type used for all projects in the **View** section of the **General** page in **Preferences**.

RELATED LINKS

[View types](#) on page 43

[Page arrangements for page view](#) on page 44

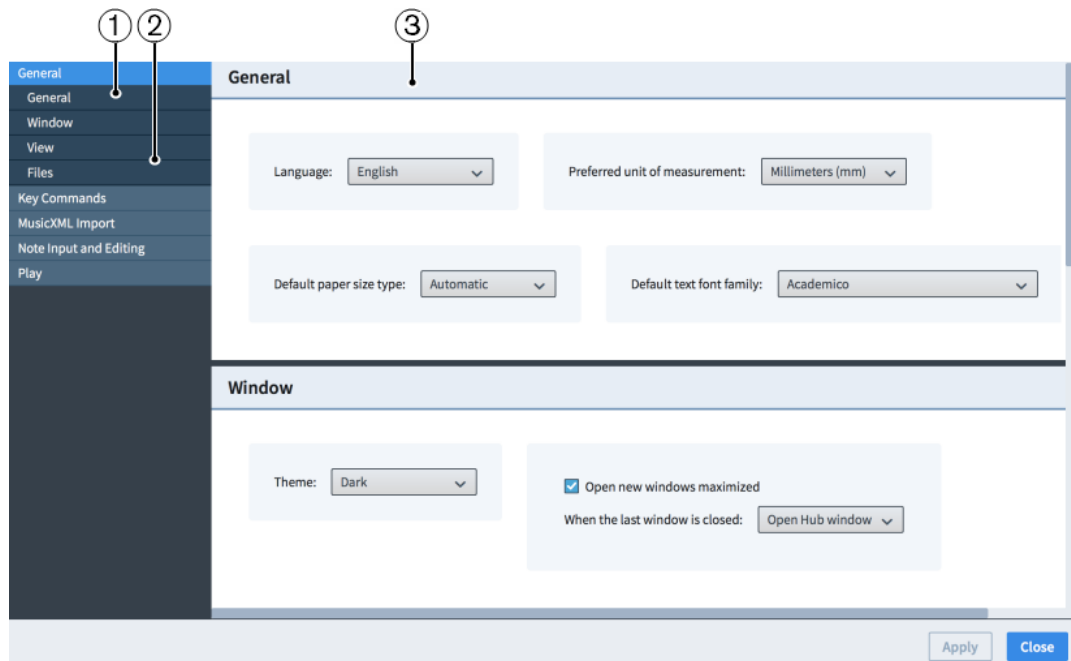
[Changing the staff spacing in galley view](#) on page 395

Preferences dialog

In the **Preferences** dialog, you can make permanent settings for your workspace and define key commands.

You can open **Preferences** in any of the following ways:

- Press **Ctrl/Cmd-**, (comma).
- Choose **Dorico > Preferences** (macOS).
- Choose **Edit > Preferences** (Windows).



Preferences

The **Preferences** dialog contains the following:

1 Page list

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 Section titles

Shows the titles of any sections on the selected page. You can click these section titles to navigate directly to that section of the page.

3 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the current setting is highlighted.

NOTE

The arrangement of options on the **Key Commands** page is significantly different to other pages in the **Preferences** dialog. This page is described separately in further detail.

RELATED LINKS

[View types](#) on page 43

[Zoom options](#) on page 45

[Selection tools](#) on page 42

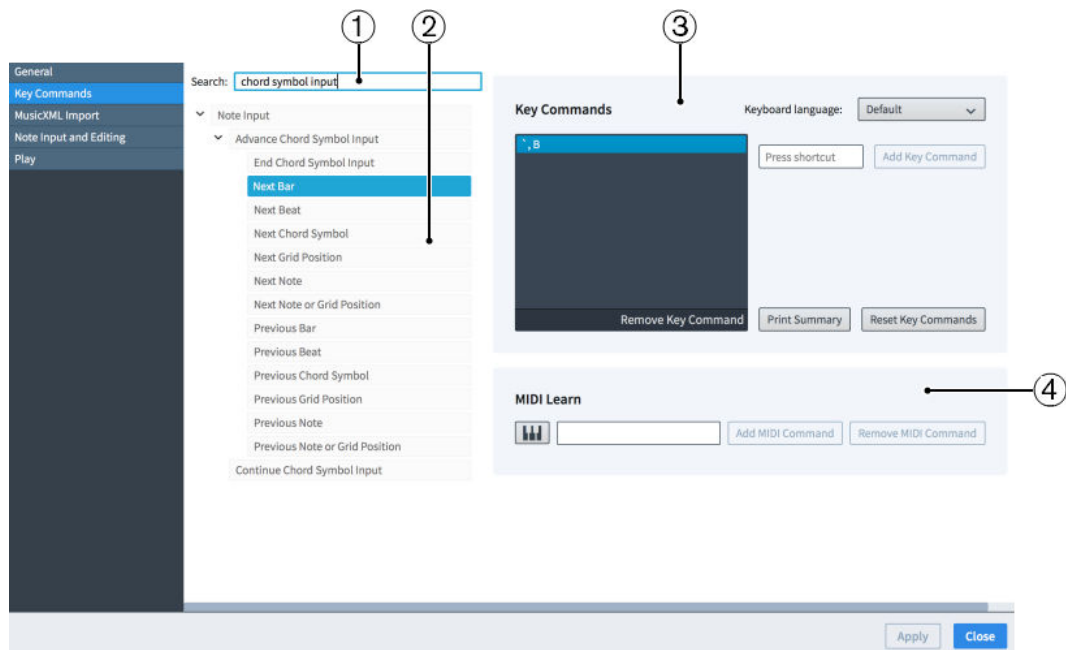
[Layout Options dialog](#) on page 90

Key Commands page in the Preferences dialog

The **Key Commands** page in the **Preferences** dialog allows you to view all the items and functions that can be assigned key commands, change existing key commands, and assign new key commands to items and functions that have no key command assigned by default.

Most of the main menus in Dorico Pro have key commands for certain menu items. In addition, there are other Dorico Pro functions that can be assigned key commands. This can be helpful for items or actions that you find yourself performing regularly, such as changing the rhythmic grid value.

- You can find the **Key Commands** page by opening the **Preferences** dialog and clicking **Key Commands** in the page list.



Key Commands page in **Preferences**

The **Key Commands** page comprises the following:

1 Search field

Allows you to search for menu items and functions to view, change, or add key commands. Because there are multiple levels of disclosure arrows before you reach many menu items and functions, this is often the quickest way to find what you are looking for.

2 Menu items and functions

Displays the menu items and functions that can be assigned key commands. The list can be filtered using the **Search** field. Disclosure arrows beside options indicate that further options are available when the option is expanded.

Hovering over menu items and functions shows a tool tip, which is helpful for some functions with particularly long names.

3 Key Commands section

Allows you to see any existing key commands set for the selected menu item or function in the list of assigned key commands and to set new ones. If you enter a key command that has already been assigned to another menu item or function, a warning tells you that you cannot use that key command.

You can assign multiple key commands to the same menu item or function, and the **Keyboard language** menu allows you to assign different key commands for each of the available languages.

- **Add Key Command**

Adds the key command you pressed to the selected menu item or function.

- **Remove Key Command**

Removes the currently selected key command from the selected menu item or function.

- **Print Summary**

Directs you to an offline page in a web browser that displays your key commands on an interactive keyboard.

- **Reset Key Commands**

Resets all of your key commands to their defaults.

4 MIDI Learn section

Allows you to assign MIDI controllers, notes, and combinations of notes to control menu items and functions.

- **MIDI Learn**



Prepares Dorico Pro to receive the MIDI input data that you want to save as a command.

- **Add MIDI Command**

Adds the MIDI controllers or notes you changed or pressed to the selected menu item or function.

- **Remove MIDI Command**

Removes the MIDI command from the selected menu item or function.

RELATED LINKS

[Assigning key commands](#) on page 55

[Assigning MIDI commands](#) on page 56

Interactive Dorico Pro key commands map

The interactive **Dorico Key Commands** map shows a virtual computer keyboard, with keys that have been assigned key commands highlighted in different colors according to the modifier keys they contain. All key commands for the selected keyboard language layout are listed below, divided into global and mode-specific groups.

You can open the **Dorico Key Commands** map in any of the following ways:

- Choose **Help > Key Commands**.
- Choose **Edit > Preferences**, and click **Print Summary** in the **Key Commands** section of the **Preferences** dialog.



The interactive key commands map as it appears when US English is selected

The **Dorico Key Commands** map opens in a web browser. It allows you to do any of the following:

- To see the available key commands, select a context. The context of a key command is the mode in which it can be used. Key commands that have a global context work in all modes.
- To highlight the keys that you can press in combination with the modifier key to form a key command, press a modifier key on your computer keyboard, such as **Shift**, or click a modifier key on the virtual keyboard. You can also press more than one modifier key. The virtual computer keyboard shows the highlighted keys and displays on each key to which functions it is assigned.
- To search for a specific key command, enter one or multiple words in the search field.
- To get an overview of all available key commands, browse the key commands that are listed below the virtual keyboard. The key commands are listed according to the context in which they can be used.

RELATED LINKS

[Changing the keyboard layout](#) on page 56

Searching for the key commands of functions

You can search for key commands that are assigned to functions or menu items in Dorico Pro.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Enter the name of a function in the **Search** field.
The entries that are listed below are filtered according to the words that you enter.
4. Expand an entry and select the function for which you want to see the key command.
For particularly long names, you can hover over them to see a tool tip.

RESULT

If the function has a key command, it is shown in the list of assigned key commands.

TIP

You can also search for functions in the interactive key commands map.

Assigning key commands

You can assign key commands to many menu items and functions, for example, if you use a menu item frequently and want to be able to access it quickly but it does not have a key command assigned by default. You can also change existing key commands.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
2. Click **Key Commands** in the page list.
3. Search for the name of a function and select it.
For particularly long names, you can hover over them to see a tool tip.
4. Optional: Press **Remove Key Command** if the function already has an assigned key command.
If you assign a new key command without removing an existing one, you can use either key command.
5. Click the **Press shortcut** input field.
6. Press the key command that you want to assign on your computer keyboard.
7. Click **Add Key Command**.
The key command is added to the list of assigned key commands.
8. Click **Apply**, then **Close**.

RESULT

The key command you pressed is assigned to the selected menu item or function. You can use it immediately.


RELATED LINKS

[Resetting key commands](#) on page 57

Assigning MIDI commands

You can assign specific keys or buttons on your MIDI keyboard to perform functions and access menu items. For example, if you want to navigate using MIDI keys during chord symbol input.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Key Commands** in the page list.
 3. Select the menu item or function to which you want to assign MIDI commands. For particularly long names, you can hover over them to see a tool tip.
 4. Click **MIDI Learn**.

 5. Press the key or button on your MIDI keyboard that you want to assign to the selected parameter.
 6. Click **Add MIDI Command**.
 7. Click **Apply**, then **Close**.
-

Changing the keyboard layout

You can change the keyboard layout in Dorico Pro to that of another language. This allows you to use the predefined key commands for the selected language.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Key Commands** in the page list.
 3. Select a different keyboard layout from the **Keyboard language** menu.
 4. Click **Apply**, then **Close**.
-

RESULT

You can immediately use the available key commands for the selected language.

Removing key commands

You can remove individual key commands from a function.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Key Commands** in the page list.
 3. Search for the name of a function and select it.
 4. Click **Remove Key Command**.
 5. Click **Apply**, then **Close**.
-

RESULT

The key command is removed from the selected function.

RELATED LINKS

[Searching for the key commands of functions](#) on page 55

Resetting key commands

You can reset all the key commands in your project to their defaults.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Key Commands** in the page list.
 3. Click **Reset Key Commands**.
 4. Click **Apply**, then **Close**.
-

RESULT

All custom key commands are deleted and the default key commands are reinstated.

Changing your preferred unit of measurement

You can change your default preferred unit of measurement to be used throughout Dorico Pro for options that use absolute measurements, such as the size of page margins in **Layout Options**. It does not affect options that are relative to the size of staves, such as options in **Engraving Options** or **Notation Options**.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **General** in the page list.
 3. In the **General** section, select one of the following options from the **Preferred unit of measurement** menu:
 - **Points (pt)**
 - **Millimeters (mm)**
 - **Inches (in)**
 - **Centimeters (cm)**
 4. Click **Apply**, then **Close**.
-

Project and file handling

In addition to opening and importing/exporting projects and other file formats, project and file handling also includes auto-save and project backups.

RELATED LINKS

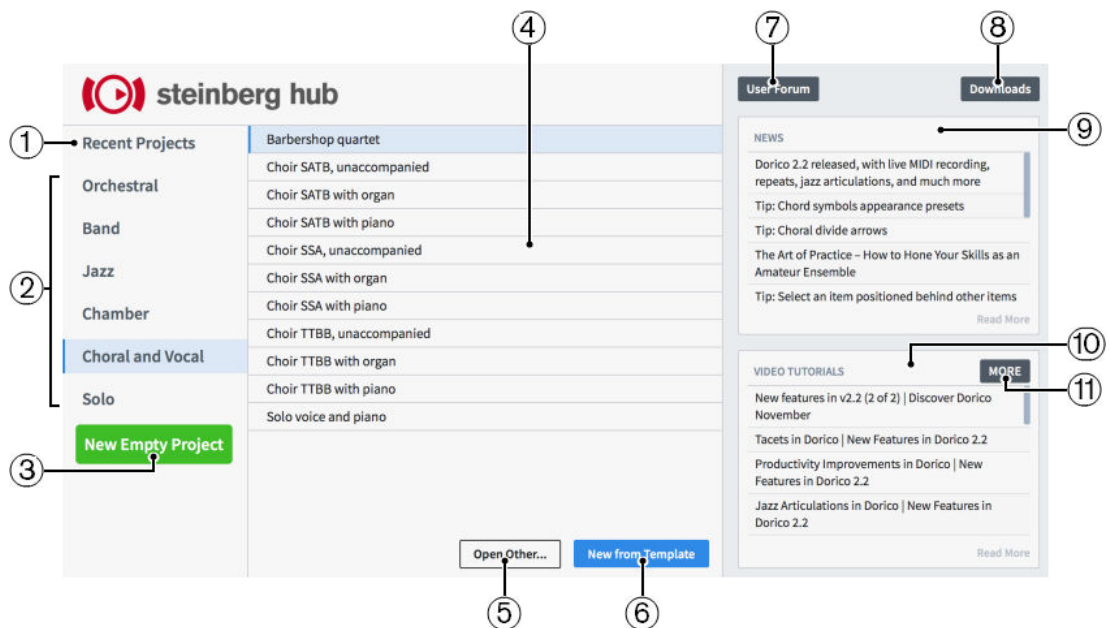
[File import and export](#) on page 63

[Auto-save](#) on page 78

[Project backups](#) on page 80

Hub

When you start Dorico Pro, the Hub opens. The Hub keeps you up-to-date with the latest Dorico information and tutorials, and assists you with organizing your projects.



The Hub contains the following:

1 Recent Projects

Allows you quick access to the projects that you worked on last. Selecting **Recent Projects** shows them in the list. You can scroll through the list using either a mouse/touchpad or the **Up Arrow/Down Arrow** keys.

2 Project template categories

Allows you quick access to a suitable project template in the available categories. Selecting a category shows the possible templates in that category in the list.

3 New Empty Project

Starts a new project with no players or flows.

- 4 List**
Displays either recent projects or project templates, depending on your selection on the left of the dialog.
- 5 Open Other**
Allows you to search for and open any other project file in the File Explorer/macOS Finder.
- 6 New from Template** (project template selected)
Creates a new project using the selected project template. This option is only available if you have selected a project template.
Open Selected Project (recent project selected)
Opens the recent project file that you selected in the list.
- 7 User Forum**
Links you to the user forum on the Steinberg website.
- 8 Downloads**
Links you to the downloads page on the Steinberg website, where you can find relevant update installers and a link to the documentation.
- 9 News**
Displays recent Dorico news from the Dorico blog. Double-clicking a news item, or selecting it and clicking **Read More**, opens it in a web browser.
- 10 Video Tutorials**
Displays recent Dorico tutorials. Double-clicking a video tutorial, or selecting it and clicking **Read More**, opens it in a web browser.
- 11 More**
Links you directly to the Dorico YouTube channel.

RELATED LINKS

[Brackets according to project template categories](#) on page 60

Starting new projects

Dorico Pro provides several ways to start new projects.

PROCEDURE

- Start a new project in any of the following ways:
 - Press **Ctrl/Cmd-N** at any time.
 - Choose **File > New** at any time.
 - In the Hub, click **New Empty Project**.

RESULT

A new project window opens.

Starting new projects from project templates

Dorico Pro provides multiple project templates that you can use to start a new project, for example, multiple types of orchestras and vocal ensembles.

PROCEDURE

1. In the Hub, select one of the following project template categories:
 - **Orchestral**
 - **Band**

- **Jazz**
 - **Chamber**
 - **Choral and Vocal**
 - **Solo**
2. Select a project template in the list.
 3. Click **New from Template**.

RESULT

The project template opens in a new project window.

TIP

You can also start a new project from a template at any time by choosing **File > New From Template > [Template category] > [Project template]**.

AFTER COMPLETING THIS TASK

You can add additional players/instruments and delete players/instruments that were included in the template to customize your project.

RELATED LINKS

- [Adding solo/section players](#) on page 95
- [Adding instruments to players](#) on page 104
- [Deleting players](#) on page 102
- [Deleting instruments](#) on page 107

Brackets according to project template categories

Staves are bracketed differently depending on the category of project template you use to start a new project, even if you later change the players in the project. For example, all staves are bracketed together when you start a project using one of the chamber templates.

The following categories of templates are available in Dorico Pro, which bracket staves automatically in different ways by automatically selecting the appropriate ensemble type for the template on the **Brackets and Braces** page in **Engrave > Engraving Options**.

NOTE

- Grand staff instruments, such as piano, are always excluded from brackets. They also split brackets if they are placed within a bracketed group.
 - There must be at least two adjacent instruments for a bracket to be shown.
-

Orchestral

Large ensembles containing most Western instruments, including strings, woodwinds, brass, and percussion.

In orchestral templates, staves are bracketed according to their instrument family. For example, adjacent string instruments are bracketed together separately from adjacent woodwind instruments.

Band

Large ensembles containing primarily wind instruments, including woodwind and brass instruments, and optionally percussion and other instruments, such as strings and guitars.

Different band templates bracket instruments differently, for example, the concert band template brackets woodwind and brass instruments separately, whereas the brass band template brackets brass instruments according to their instrument type,

except for horns and trumpets, which are bracketed together. Any other instruments in the score are bracketed according to their instrument family, and percussion and timpani are bracketed separately.

Jazz

Popular ensembles commonly used to perform jazz.

In small jazz templates, no staves are bracketed together. Grand staff instruments are still shown with braces. The big band template uses the **Big band** ensemble type for brackets.

Chamber

Typically small ensembles containing only a few players.

In chamber templates, all staves in the project are bracketed together with a single bracket, regardless of their instrument family.

Choral and Vocal

Ensembles containing voices, including popular choir arrangements.

In choral and vocal templates, staves are bracketed according to their instrument family. For example, adjacent vocal staves are bracketed together separately from accompanying instruments. However, vocal staves are not joined by barlines.

Solo

Ensembles containing only a single player/instrument.

In solo templates, no staves are bracketed together. Grand staff instruments are still shown with braces.

RELATED LINKS

[Brackets according to ensemble type](#) on page 558

Opening projects/files

You can open Dorico Pro projects at any time, for example, if the project you want to open is not listed as a recent project in the list in the Hub. You can also open MusicXML and MIDI files.

PROCEDURE

1. Open the File Explorer/macOS Finder in any of the following ways:
 - In the Hub, click **Open Other**.
 - Choose **File > Open**.
 - Choose **File > Open Recent > [Project file name]**.
2. In the File Explorer/macOS Finder, locate and select the files you want to open.
3. Click **Open**.

RESULT

The selected Dorico projects are opened.

If you opened MusicXML or MIDI files, Dorico Pro creates new project files from the MusicXML or MIDI content, which you can save as default Dorico Pro projects.

If MusicXML files include page size, margin, and staff size settings, Dorico Pro imports those values. If they are not included, Dorico Pro creates suitable settings according to the number of instruments in the file.

TIP

You can also import MusicXML and MIDI files as new flows in existing projects rather than opening them as separate projects.

RELATED LINKS

- [Hub](#) on page 58
- [Importing MusicXML files](#) on page 66
- [Importing MIDI](#) on page 69

Opening recent projects from the Hub

You can open a project on which you have recently worked from the Steinberg Hub.

PROCEDURE

1. In the Hub, click **Recent Projects**.
 2. In the list, select a recent project in any the following ways:
 - Press **Up Arrow/Down Arrow** to navigate to the project file name, then press **Return** to open it.
 - Double-click a project file name.
 - Select a project file name and click **Open Selected Project**.
-

RESULT

The selected Dorico projects are opened.

RELATED LINKS

- [Hub](#) on page 58

Projects from different versions of Dorico

You can open projects that were last saved in other versions of Dorico than the one you have. In such cases, Dorico Pro shows a warning message to make you aware of any implications.

The contents of the warning message vary according to the version of Dorico in which the project was last saved:

- When opening a project last saved in an older version, it shows the version number the project was last saved in and informs you that the project will be updated to your current version.
- When opening a project last saved in a newer version, it shows only that the project is from a newer version. It also informs you that items and notations from that version might not appear and will be deleted if you save the project in your current version.

In both cases, opening the project is non-destructive. This means that its contents and formatting are unaffected if you do not save it.

You can prevent Dorico Pro from showing you warnings about projects from different versions in the **Files** section of the **General** page in **Preferences**. In the same section, you can also tell Dorico Pro to prompt you to choose a new location for projects from different versions when you save them. This reduces the risk of you overwriting them by mistake.

RELATED LINKS

- [Preferences dialog](#) on page 51

File import and export

External files are files in different formats than Dorico projects, such as MIDI, MusicXML, or tempo tracks. It is possible in Dorico Pro both to import and export different types of files.

This can be useful if, for example, you want to share your project with others who use a different notation software, or to convert the notes, audio, or time signatures and tempo information in your project into other formats.

Importing flows

You can import individual flows into existing projects, for example, if you want to bring together multiple existing pieces into one project for publishing, or if you have an empty project file with your preferred settings saved and want to reuse those settings.

PROCEDURE

1. Choose **File > Import > Flows** to open the File Explorer/macOS Finder.
2. In the File Explorer/macOS Finder, locate and select the project files of the flows you want to import.
3. Click **Open** to open the **Flow Import Options** dialog for the first selected project.
4. In the **Flow Import Options** dialog, choose one of the following options for **Player handling**:
 - **Create All New Players**
 - **Merge with Existing Players Where Possible**
5. In the **Import flows** list, activate the checkbox for each flow you want to import.
6. Click **OK** to import the selected flows and close the dialog.
7. Optional: If you selected multiple projects from which to import flows, repeat steps 4 to 6 for each project. The **Flow Import Options** dialog reopens automatically for each project.

RESULT

The selected flows are imported into the project.

- If you chose **Create All New Players**, new players are added as required for each flow.
- If you chose **Merge with Existing Players Where Possible**, any players that the imported flows and existing project have in common are merged, for example, if you imported a flow containing a solo piano into a project containing a piano and viola, the imported flow is added to the existing piano player.

NOTE

- Players are not automatically added to flows that you imported into the project.
- You can also open flows directly if you want them to be separate projects rather than new flows in existing projects.

RELATED LINKS

[Opening projects/files](#) on page 61

Flow Import Options dialog

The **Flow Import Options** dialog allows you to determine whether players in imported flows are merged with existing players in the project and which flows from within other projects you want to import.

- You can open the **Flow Import Options** dialog by choosing **File > Import > Flows** and opening a Dorico project from the File Explorer/macOS Finder.



Flow Import Options dialog

The **Flow Import Options** dialog comprises the following:

1 Player handling

Allows you to determine how imported flows are assigned to players.

- **Create All New Players** adds separate players for each imported flow.
- **Merge with Existing Players Where Possible** merges players from imported flows with any existing compatible players in the project.

2 Import flows

Contains a list of all the flows in the selected project. Flows are included in the import when their checkbox is activated.

Exporting flows

You can export individual flows from projects, for example, to save small excerpts of large projects separately.

NOTE

These steps export flows as separate Dorico projects. If you want to export flows as other file formats, such as MusicXML or MP3, there are different methods.

PROCEDURE

1. Choose **File > Export > Flows** to open the **Export Flows** dialog.
2. In the **Export Flows** dialog, activate/deactivate **Export each selected flow as a separate file**.
3. In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
4. Activate/Deactivate **Export layouts as separate files**.
5. Optional: If you activated **Export layouts as separate files**, activate the checkbox for each layout you want to export in the **Select layouts to export** list. You can also click **Select All** or **Select None** at the bottom of the list.
6. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.



7. In the File Explorer/macOS Finder, locate and select the destination folder you want.
8. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Export to** field.
9. Activate/Deactivate **Create folder for exported files**.
10. Click **OK** to export the selected flows and layouts and close the dialog.

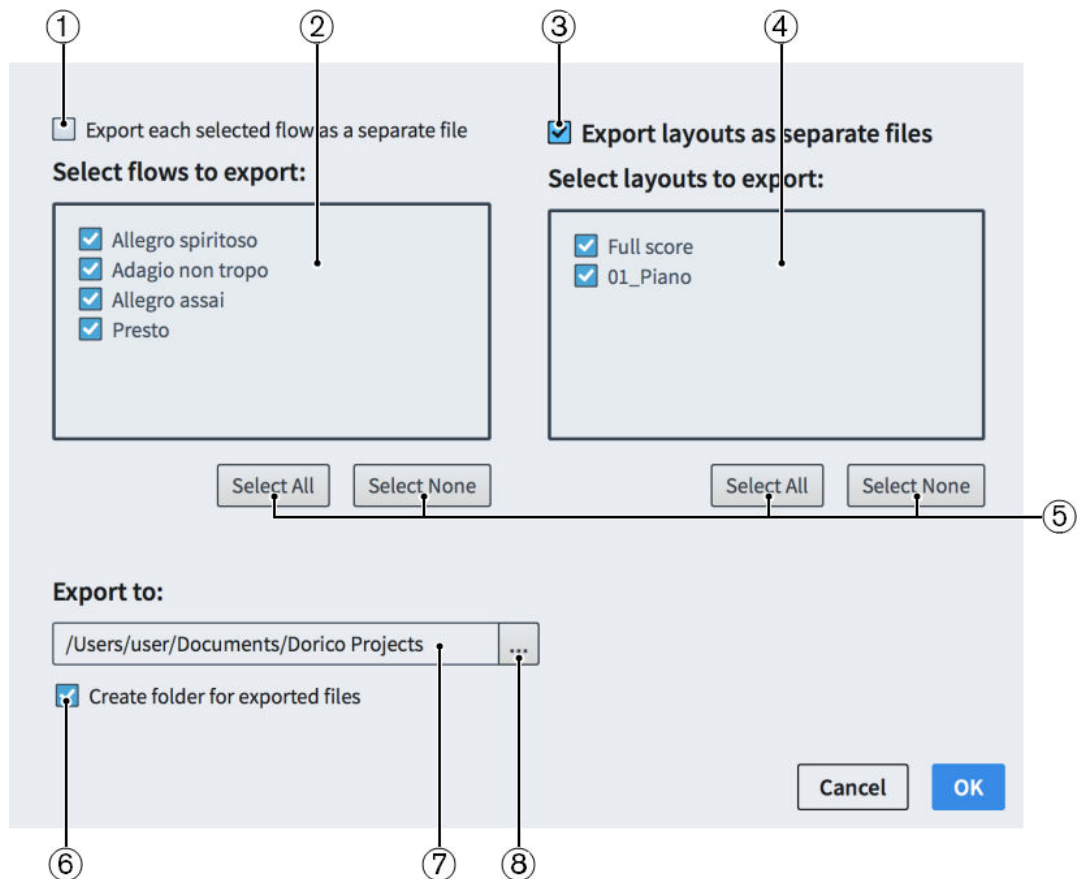
RELATED LINKS

- [Exporting MusicXML files](#) on page 67
- [Exporting MIDI](#) on page 72
- [Exporting tempo tracks](#) on page 75
- [Exporting audio](#) on page 76

Export Flows dialog

The **Export Flows** dialog allows you to save individual flows and layouts as separate Dorico files.

- You can open the **Export Flows** dialog by choosing **File > Export > Flows**.



Export Flows dialog

The **Export Flows** dialog contains the following options and lists:

- 1 **Export each selected flow as a separate file**
Allows you to export each flow as a separate file instead of all the selected flows as a single file.
- 2 **Select flows to export**
Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.
- 3 **Export layouts as separate files**

Allows you to export each layout in the project as a separate file instead of as a single file.

4 Select layouts to export

Contains a list of all the layouts in the project. Layouts are included in the export when their checkbox is activated. Only available if you have activated **Export layouts as separate files**.

5 Selection options

Allow you to select/deselect all the flows/layouts in the corresponding list. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

6 Create folder for exported files

Controls whether or not Dorico Pro generates a new folder for the selected flows within the selected export path. The automatic folder name is “Flows from” followed by the project file name, for example, “Flows from Smyth - String Quintet”.

7 Export to field

Displays the current export path where exported flows will be saved.

8 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Importing MusicXML files

You can import MusicXML files into existing Dorico Pro projects as separate flows, for example, to continue work on a piece started in a different notation software.

PROCEDURE

1. Choose **File > Import > MusicXML** to open the File Explorer/macOS Finder.
2. In the File Explorer/macOS Finder, locate and select the MusicXML files you want to import.
3. Click **Open** to open the **Flow Import Options** dialog for the first selected MusicXML file.
4. In the **Flow Import Options** dialog, choose one of the following options for **Player handling**:
 - **Create All New Players**
 - **Merge with Existing Players Where Possible**
5. Click **OK** to import the selected flows and close the dialog.
6. Optional: If you selected multiple MusicXML files, repeat steps 4 and 5 for each file. The **Flow Import Options** dialog reopens automatically for each file.

RESULT

The selected MusicXML files are imported into the project as new flows.

- If MusicXML files include page size, margin, and staff size settings, Dorico Pro imports those values. If they are not included, Dorico Pro creates suitable settings according to the number of instruments in the file.
- If you chose **Create All New Players**, new players are added as required for each MusicXML file.
- If you chose **Merge with Existing Players Where Possible**, any players that the imported MusicXML files and existing project have in common are merged, for example, if you imported a MusicXML file containing a solo piano into a project containing a piano and viola, the imported MusicXML file is added to the existing piano player.

TIP

- You can also open MusicXML files directly if you want them to be separate projects rather than new flows in existing projects.

- You can change your default preferences for the handling of imported MusicXML files on the **MusicXML Import** page in **Preferences**.
-


RELATED LINKS

- [Flow Import Options dialog](#) on page 63
- [Opening projects/files](#) on page 61

Exporting MusicXML files

You can export flows and layouts as separate MusicXML files, for example, if you want to export just the soloist's layout containing the first flow.

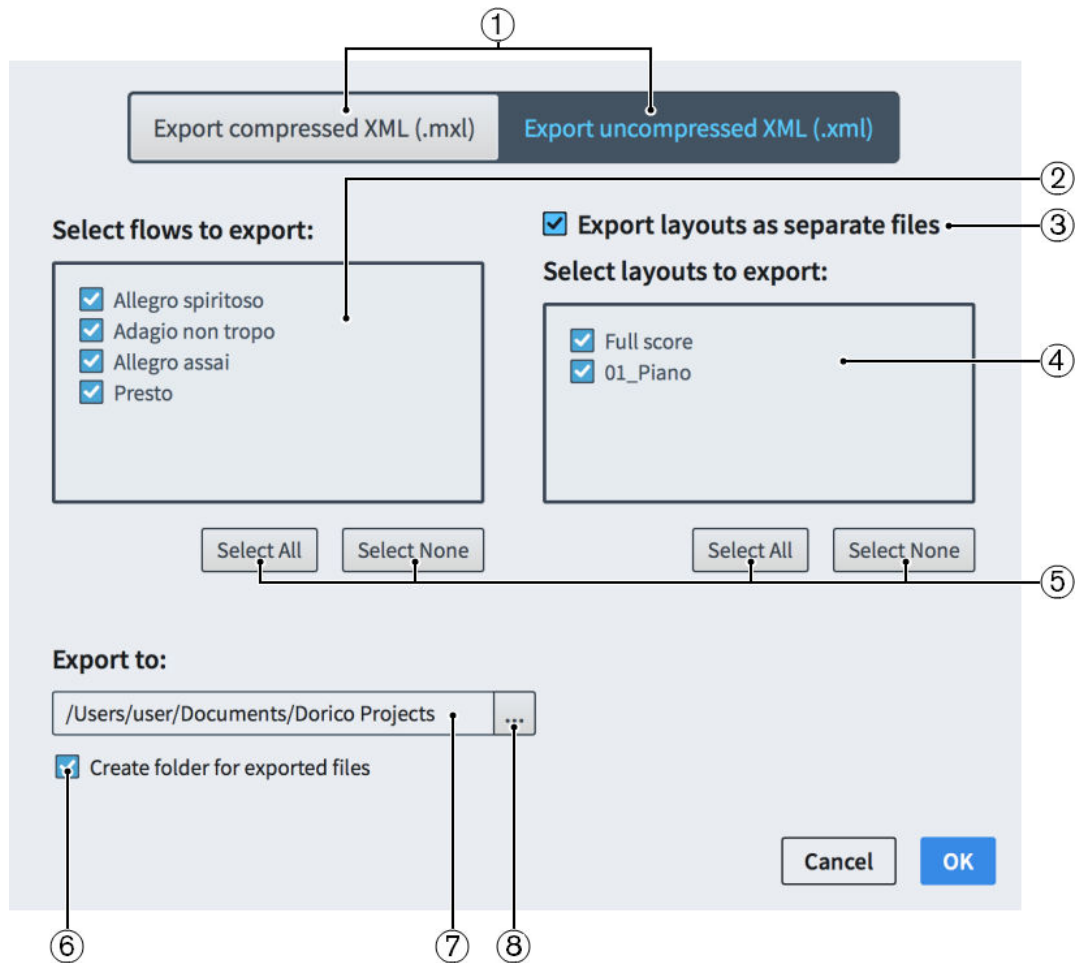
PROCEDURE

1. Choose **File > Export > MusicXML** to open the **Export MusicXML** dialog.
 2. In the **Export MusicXML** dialog, choose one of the following file format options:
 - **Export compressed XML (.mxl)**
 - **Export uncompressed XML (.xml)**
 3. In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
 4. Activate/Deactivate **Export layouts as separate files**.
 5. Optional: If you activated **Export layouts as separate files**, activate the checkbox for each layout you want to export in the **Select layouts to export** list. You can also click **Select All** or **Select None** at the bottom of the list.
 6. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

 7. In the File Explorer/macOS Finder, locate and select the destination folder you want.
 8. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Export to** field.
 9. Activate/Deactivate **Create folder for exported files**.
 10. Click **OK** to export the selected flows/layouts as MusicXML files and close the dialog.
-

Export MusicXML dialog

The **Export MusicXML** dialog allows you to save individual flows and layouts as separate MusicXML files.

- You can open the **Export MusicXML** dialog by choosing **File > Export > MusicXML**.



Export MusicXML dialog

The **Export MusicXML** dialog contains the following options and lists:

1 File format options

Allows you to choose the MusicXML file format you want to export. Compressed MusicXML files contain the same information as uncompressed MusicXML files but have a smaller file size.

2 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

3 Export layouts as separate files

Allows you to export each layout in the project as a separate file instead of as a single file.

4 Select layouts to export

Contains a list of all the layouts in the project. Layouts are included in the export when their checkbox is activated. Only available if you have activated **Export layouts as separate files**.

5 Selection options

Allow you to select/deselect all the flows/layouts in the corresponding list. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

6 Create folder for exported files

Controls whether or not Dorico Pro generates a new folder for the selected flows within the selected export path. The automatic folder name is "Flows from" followed by the project file name, for example, "Flows from Smyth - String Quintet".

- 7 Export to field**
Displays the current export path where exported files will be saved.
- 8 Choose Folder**
Opens the File Explorer/macOS Finder and allows you to change the export path.

Importing MIDI

You can import MIDI files into existing Dorico Pro projects as separate flows, for example, to work on a different version of a section of a piece.

PROCEDURE

1. Choose **File > Import > MIDI** to open the File Explorer/macOS Finder.
2. In the File Explorer/macOS Finder, locate and select the MIDI files you want to import.
3. Click **Open** to open the **MIDI Import Options** dialog for the first selected MIDI file.
4. In the **MIDI Import Options** dialog, change the settings as required.
5. Optional: If you want to customize the quantization settings, click **Quantize Options** and change the settings in the **MIDI Quantize Options** dialog.
6. Optional: Click **OK** to save your quantization settings and return to the **MIDI Import Options** dialog.
7. Click **OK** to close the **MIDI Import Options** dialog, which automatically opens the **Flow Import Options** dialog for the first selected MIDI file.
8. In the **Flow Import Options** dialog, choose one of the following options for **Player handling**:
 - **Create All New Players**
 - **Merge with Existing Players Where Possible**
9. Click **OK** to import the selected flows and close the dialog.
10. Optional: If you selected multiple MIDI files, repeat steps 4 to 9 for each file. The **MIDI Import Options** and **Flow Import Options** dialogs reopen automatically for each file.

RESULT

The selected MIDI files are imported into the project as new flows. Dorico Pro uses an algorithm on imported MIDI notes to produce the correct enharmonic spelling for the imported notes.

- If the MIDI files contained markers, they are also imported, and if they have SMPTE offset values defined, Dorico Pro uses them to set the timecode position for the start of the flow.
- If you chose **Create All New Players**, new players are added as required for each MIDI file.
- If you chose **Merge with Existing Players Where Possible**, any players that the imported MIDI files and existing project have in common are merged, for example, if you imported a MIDI file containing a solo piano into a project containing a piano and viola, the imported MIDI file is added to the existing piano player.

TIP

You can also open MIDI files directly if you want them to be separate projects rather than new flows in existing projects.

RELATED LINKS

[Opening projects/files](#) on page 61

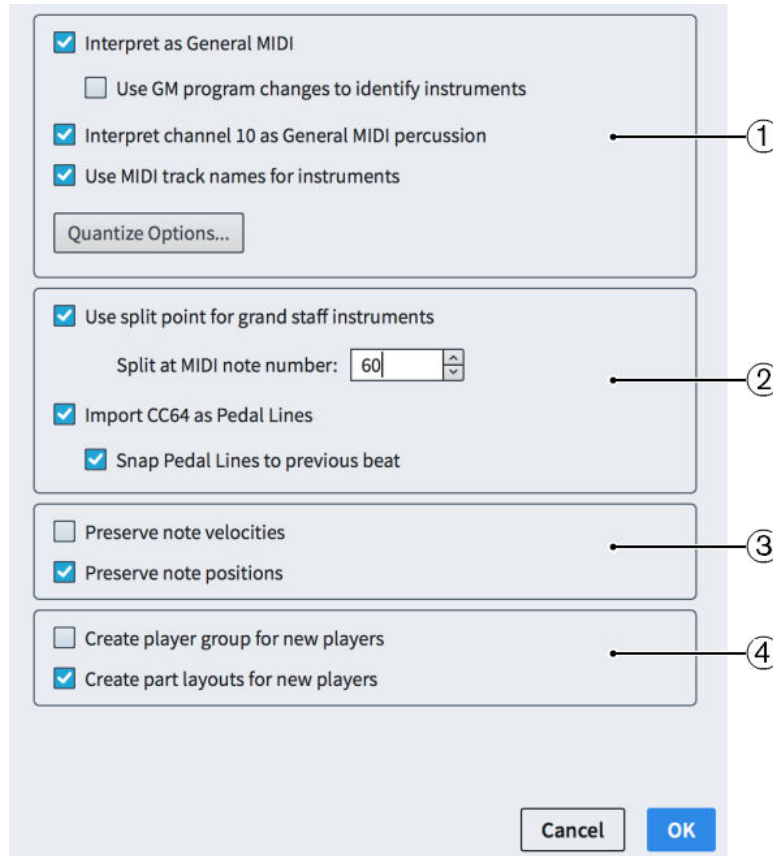
[Requantizing notes](#) on page 178

[Changing the sustain pedal controller settings for MIDI recording/import](#) on page 181

MIDI Import Options dialog

The **MIDI Import Options** dialog allows you to customize the settings Dorico Pro uses to translate MIDI data into a Dorico project when importing MIDI files.

- You can open the **MIDI Import Options** dialog by choosing **File > Import > MIDI** and opening a MIDI file from the File Explorer/macOS Finder.



MIDI Import Options dialog

The **MIDI Import Options** dialog contains the following sections:

1 Instrument handling

The options in this section determine how Dorico Pro chooses and names instruments based on the imported MIDI file.

The **Quantize Options** button opens the **MIDI Quantize Options** dialog, which allows you to customize the quantization settings.

2 Keyboard handling

The options in this section determine how Dorico Pro interprets keyboard music based on the imported MIDI file, including the MIDI note number at which notes are split between the right and left hand staves and whether CC64 indicates pedal lines.

3 Performance preservation

The options in this section allow you to determine how much of the original performance in the MIDI file you want to preserve for playback purposes. They do not affect how the imported MIDI notes are notated, as this is controlled by the quantization options set.

4 Player handling

The options in this section allow you to determine the players and layouts to which instruments in the MIDI file are assigned. For example, if you are importing a MIDI file into an existing project in order to orchestrate, you might want to activate **Create player**

group for new players and deactivate **Create part layouts for new players** to add a single, independent group of players without creating any extra part layouts for them.

RELATED LINKS

[Changing the sustain pedal controller settings for MIDI recording/import](#) on page 181

MIDI Quantize Options dialog

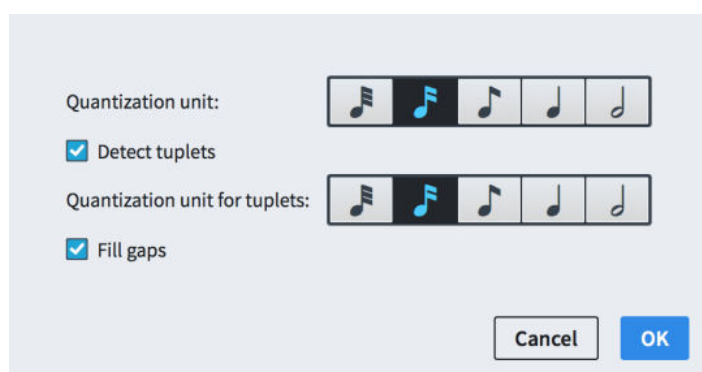
The **MIDI Quantize Options** dialog allows you to customize the quantization settings you want to apply to imported MIDI files and notes input by recording with a MIDI device.

You can open the **MIDI Quantize Options** dialog in any of the following ways:

- Click **Quantize Options** in the **MIDI Import Options** dialog.
- Click **Quantization Options** in the **Recording** subsection of the **Play** page in **Preferences**.

NOTE

Your settings are linked between both ways of accessing the dialog.



MIDI Quantize Options dialog

The **MIDI Quantize Options** dialog contains the following options:

Quantization unit

Allows you to set the smallest beat unit to which you want notes to be quantized. For example, if the smallest intentional note duration in your imported file is an eighth note, set **Quantization unit** to eighth notes.

Detect tuplets

Allows you to control whether off-beat notes can be considered tuplets. If you know there are no intentional tuplets in your imported MIDI file, deactivating **Detect tuplets** ensures no notes are imported as tuplets.

Quantization unit for tuplets

Allows you to set the smallest beat unit to which you want tuplet notes to be quantized. For example, if the smallest intentional tuplet note duration in your imported file is a quarter note, set **Quantization unit for tuplets** to quarter notes.

Fill gaps

Allows you to determine whether Dorico Pro fills in gaps between short notes. If you are importing already precisely quantized music, we recommend that you deactivate **Fill gaps** to ensure that note and rest durations are notated exactly as quantized.


RELATED LINKS

[MIDI recording](#) on page 176

Exporting MIDI

You can export flows as separate MIDI files, for example, if you want to edit the audio in further detail in a DAW. MIDI files exported from Dorico Pro contain any markers in the project by default.

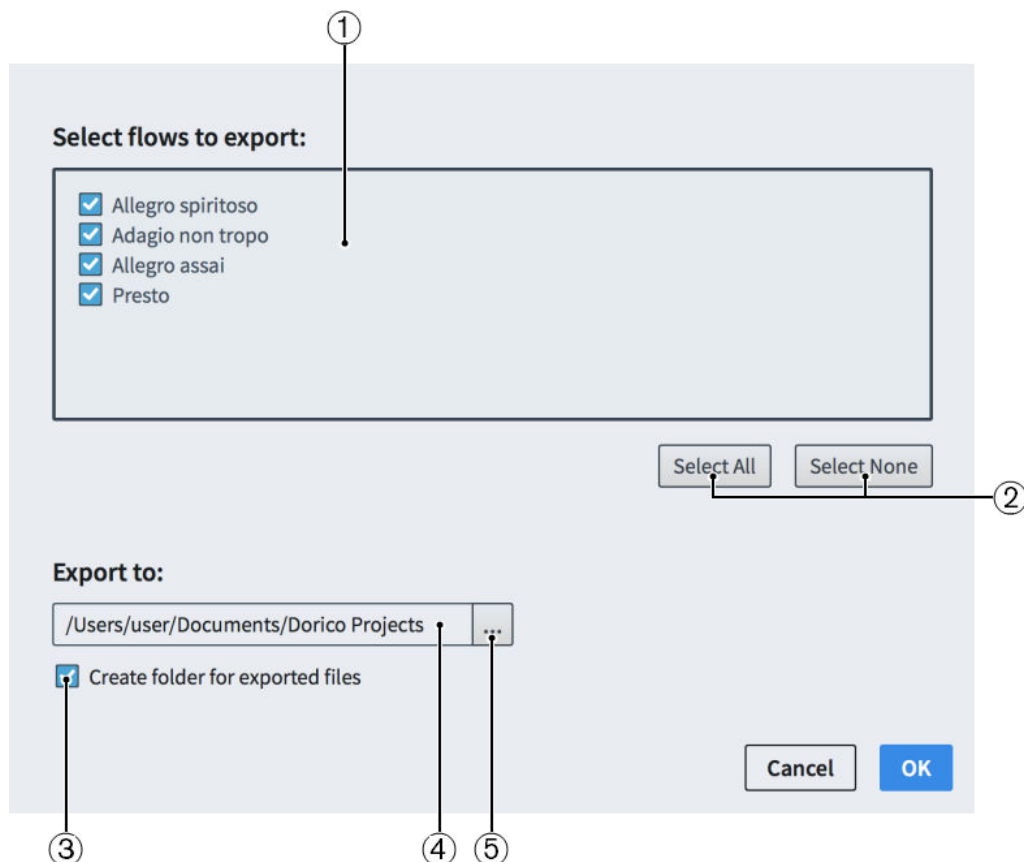
PROCEDURE

1. Choose **File > Export > MIDI** to open the **Export MIDI** dialog.
2. In the **Select flows to export** list, activate the checkbox for each flow you want to export. You can also click **Select All** or **Select None** at the bottom of the list.
3. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

4. In the File Explorer/macOS Finder, locate and select the destination folder you want.
5. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Export to** field.
6. Activate/Deactivate **Create folder for exported files**.
7. Click **OK** to export the selected flows as MIDI files and close the dialog.

Export MIDI dialog

The **Export MIDI** dialog allows you to save individual flows as separate MIDI files.

- You can open the **Export MIDI** dialog by choosing **File > Export > MIDI**.



Export MIDI dialog

The **Export MIDI** dialog comprises the following:

1 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

2 Selection options

Allow you to select/deselect all the flows in the project. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

3 Create folder for exported files

Controls whether or not Dorico Pro generates a new folder for the selected flows within the selected export path. The automatic folder name is “Flows from” followed by the project file name, for example, “Flows from Smyth - String Quintet”.

4 Export to field

Displays the current export path where exported files will be saved.

5 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Importing tempo tracks

You can import tempo tracks into individual flows in existing projects, for example, if you are writing music for a film and changes to the footage require tempo and time signature changes. This does not overwrite the notes and notations in the flow.

PROCEDURE

1. Choose **File > Import > Tempo Track** to open the File Explorer/macOS Finder.
2. In the File Explorer/macOS Finder, locate and select the MIDI file whose tempo track you want to import.
3. Click **Open** to open the **Import Tempo Track** dialog.
4. In the **Import into flow** list, select the flow into which you want to import the tempo track.
5. In the **Import and replace** section, activate the checkbox for each tempo track aspect you want to include.
6. Optional: If you activated the checkbox for **Markers as**, choose one of the following options:
 - **Markers**
 - **System Text**
7. Optional: If you chose **System Text** for **Markers as**, activate/deactivate **Show border around system text markers**.
8. Click **OK** to import the tempo track and close the dialog.

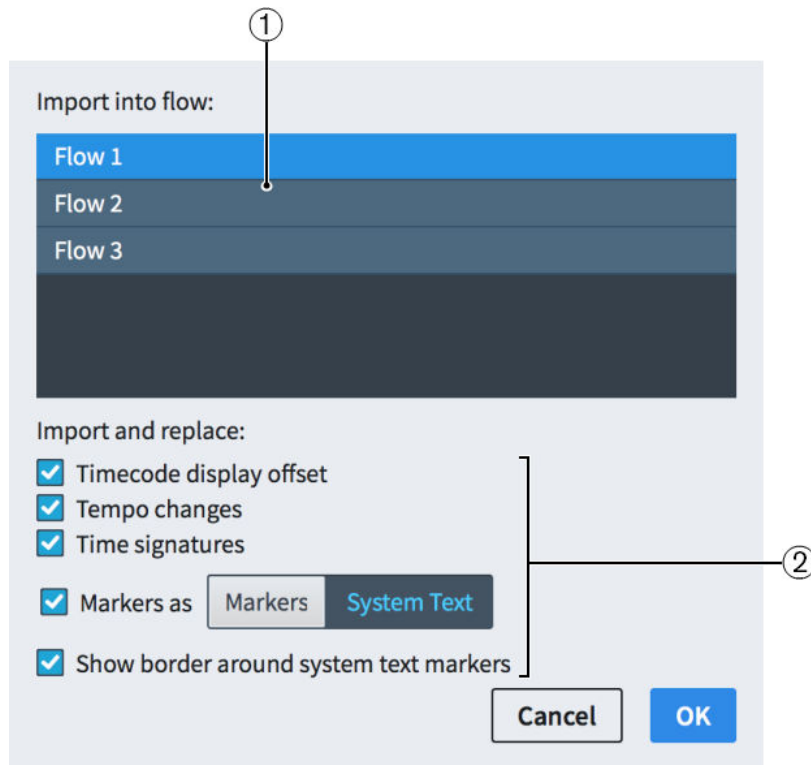
RESULT

The tempo track is imported into the selected flow. All selected aspects are applied to the existing music, and notes and tempo marks are adjusted as required.

Import Tempo Track dialog

The **Import Tempo Track** dialog allows you to import tempo tracks to individual flows within projects and to control which aspects of the tempo track you want to apply to the flow.

- You can open the **Import Tempo Track** dialog by choosing **File > Import > Tempo Track** and opening a MIDI file from the File Explorer/macOS Finder.



Import Tempo Track dialog

The **Import Tempo Track** dialog comprises the following:

1 Import into flow

Contains a list of all the flows in the project. The currently selected flow is highlighted.

NOTE

You can only import tempo tracks into a single flow at a time.

2 Import and replace


Allows you to control which tempo track aspects you want to include in your import and apply to the selected flow.

- **Timecode display offset** sets the initial timecode position at the start of the flow.
- **Tempo changes** replaces all immediate and gradual tempo changes in the flow with the tempo changes from the MIDI file.
- **Time signatures** replaces all time signatures in the flow with time signatures from the MIDI file.
- **Markers as** adds any markers from the MIDI file to the flow as either **Markers** or **System Text**.
Importing markers as **Markers** replaces any existing markers in the flow with markers from the MIDI file, while importing markers as **System Text** does not replace any existing markers or system text objects.
- **Show border around system text markers** adds borders to markers imported as system text objects when activated. Only available if you have chosen **System Text** for **Markers as**.

Exporting tempo tracks

You can export flows as separate tempo tracks, for example, if you want to apply the tempo marks and time signatures of one flow to a different flow, which can be in the same project.

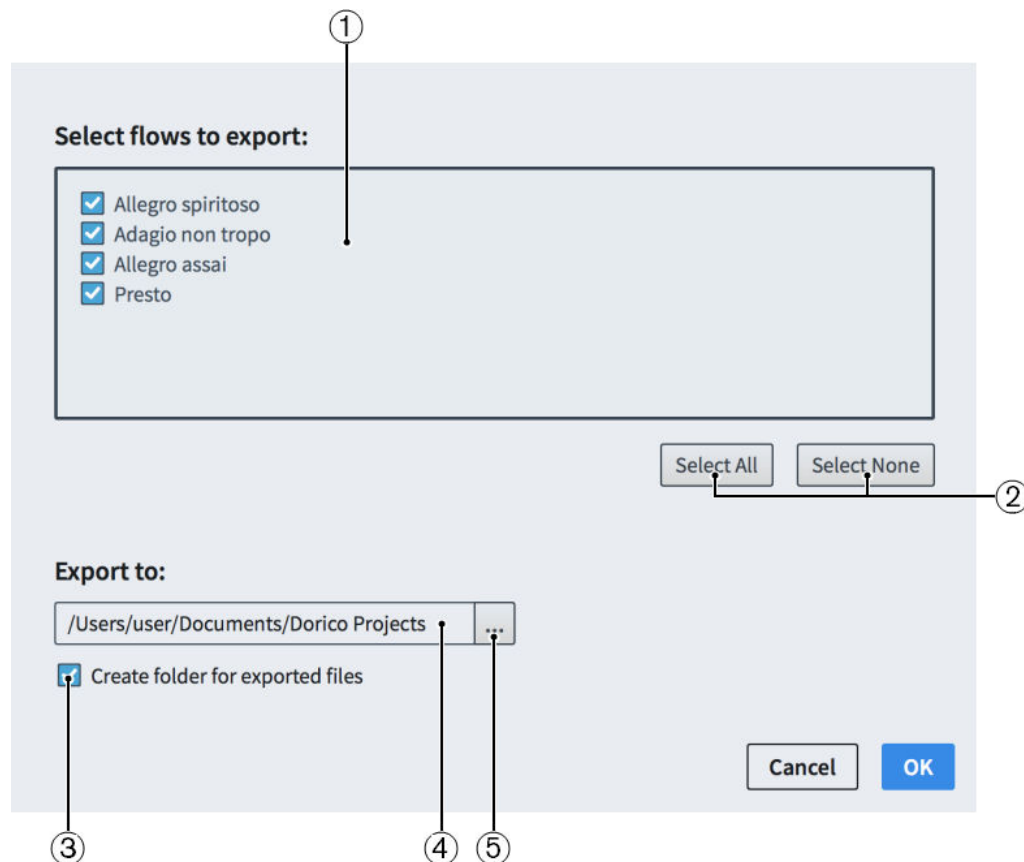
PROCEDURE

1. Choose **File > Export > Tempo Track** to open the **Export Tempo Track** dialog.
2. In the **Export Tempo Track** dialog, activate the checkbox for each flow you want to export as a tempo track. You can also click **Select All** or **Select None** at the bottom of the list.
3. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

4. In the File Explorer/macOS Finder, locate and select the destination folder you want.
5. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Export to** field.
6. Activate/Deactivate **Create folder for exported files**.
7. Click **OK** to export the selected flows as tempo tracks and close the dialog.

Export Tempo Track dialog

The **Export Tempo Track** dialog allows you to save individual flows as separate tempo tracks in the format of MIDI files.

- You can open the **Export Tempo Track** dialog by choosing **File > Export > Tempo Track**.



Export Tempo Track dialog

The **Export Tempo Track** dialog comprises the following:

- 1 **Select flows to export**

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

2 Selection options

Allow you to select/deselect all the flows in the project. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

3 Create folder for exported files

Controls whether or not Dorico Pro generates a new folder for the selected flows within the selected export path. The automatic folder name is “Flows from” followed by the project file name, for example, “Flows from Smyth - String Quintet”.

4 Export to field

Displays the current export path where exported files will be saved.


5 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Exporting audio

You can export projects as audio files in either MP3 or WAV format, including exporting flows and players as separate files, for example, if you want to share an audio mock-up of only the soloist's part in the second flow.

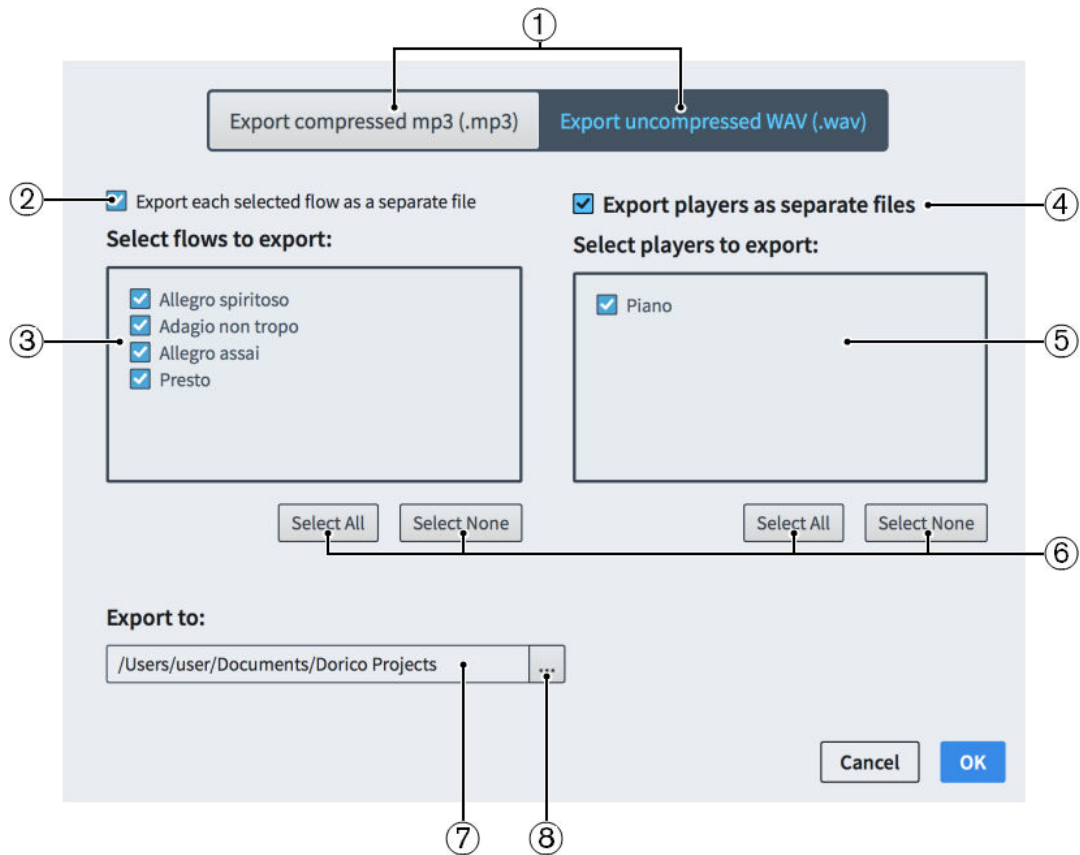
PROCEDURE

1. Choose **File > Export > Audio** to open the **Export Audio** dialog.
 2. In the **Export Audio** dialog, choose one of the following file format options:
 - **Export compressed mp3 (.mp3)**
 - **Export uncompressed WAV (.wav)**
 3. Activate/Deactivate **Export each selected flow as a separate file**.
 4. In the **Select flows to export** list, activate the checkbox for each flow you want to export as audio. You can also click **Select All** or **Select None** at the bottom of the list.
 5. Activate/Deactivate **Export players as separate files**.
 6. Optional: If you activated **Export players as separate files**, activate the checkbox for each player you want to export in the **Select players to export** list. You can also click **Select All** or **Select None** at the bottom of the list.
 7. Click **Choose Folder** beside the **Export to** field to open the File Explorer/macOS Finder.

 8. In the File Explorer/macOS Finder, locate and select the destination folder you want.
 9. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Export to** field.
 10. Click **OK** to export the selected flows/players as the selected type of audio file and close the dialog.
-

Export Audio dialog

The **Export Audio** dialog allows you to save individual flows and players as separate audio files, either MP3 or WAV.

- You can open the **Export Audio** dialog by choosing **File > Export > Audio**.



Export Audio dialog

The **Export Audio** dialog contains the following options and lists:

1 File format options

Allows you to choose the audio file format you want to export. Compressed MP3 files are smaller than WAV files but this corresponds to a reduced audio quality.

2 Export each selected flow as a separate file

Allows you to export each flow in the project as a separate audio file instead of as a single audio file.

3 Select flows to export

Contains a list of all the flows in the project. Flows are included in the export when their checkbox is activated.

4 Export players as separate files

Allows you to export each player in the project as a separate audio file instead of all players in a single audio file.

5 Select players to export

Contains a list of all the players in the project. Players are included in the export when their checkbox is activated. Only available if you have activated **Export players as separate files**.

6 Selection options

Allow you to select/deselect all the flows/players in the corresponding list. For example, you can deselect all flows and then activate the checkbox of a single flow you want to export.

7 Export to field

Displays the current export path where exported audio files will be saved.

8 Choose Folder

Opens the File Explorer/macOS Finder and allows you to change the export path.

Auto-save

The auto-save function stores a version of the currently active project at regular intervals. This reduces the chances of losing significant amounts of work if you accidentally close a project without saving or in the unlikely event that Dorico Pro or your computer crashes.

By default, Dorico Pro uses the **AutoSave** folder inside your **Dorico Projects** folder, whose default location is in the **Documents** folder for your user account. Dorico Pro also auto-saves new projects you have not explicitly saved yet.

NOTE

Dorico Pro might become less responsive briefly in order to perform auto-saves, particularly for larger projects.

Auto-save with multiple projects open

Only the currently activated project is auto-saved at each auto-save interval if you have multiple projects open. This is because only a single project at a time can be activated for playback. If you are switching between multiple projects frequently, we recommend that you set a smaller auto-save interval.

Removal of auto-save files

All files in the **AutoSave** folder are automatically deleted when you close their corresponding projects and also when you quit Dorico Pro.

IMPORTANT

This includes any file in the **AutoSave** folder, not just auto-save projects. Therefore, it is important that you do not choose your main projects folder as your **AutoSave** location or save projects in the **AutoSave** folder.

TIP

If you want to access earlier versions of projects, you can use project backups.

RELATED LINKS

[Toolbar](#) on page 34

[Project backups](#) on page 80

Recovering auto-saved projects

If Dorico Pro crashes, you can recover the most recent auto-saved version of each project that was open.

PROCEDURE

1. Reopen Dorico Pro.
2. In the **Recover Auto-saved Projects** dialog that opens after the Dorico Pro splash screen, activate the checkbox for each auto-saved project you want to recover.

NOTE

Any auto-saved projects you do not recover are permanently deleted once you close the dialog.

3. Click **Recover Selected Projects** to recover the selected auto-saved projects and close the dialog.
-

RESULT

The selected auto-saved projects are recovered and opened in separate project windows.

AFTER COMPLETING THIS TASK

You can save auto-saved projects permanently in any folder location and with new file names if required.

Changing the auto-save frequency

You can change how frequently Dorico Pro auto-saves projects. By default, the auto-save interval is five minutes for the currently active project.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **General** in the page list.
 3. In the **Files** section, change the value for **Auto-save every [n] minutes**.
 4. Click **Apply**, then **Close**.
-

Changing the auto-save location

You can change the folder that Dorico Pro uses to store auto-save files. By default, Dorico Pro uses the **AutoSave** folder inside your **Dorico Projects** folder, whose default location is in the **Documents** folder for your user account.

IMPORTANT

- We strongly recommend not choosing your main **Dorico Projects** as the auto-save location, as all files inside the **AutoSave** folder are deleted when you quit Dorico Pro. Similarly, if you have saved projects in the **AutoSave** folder, those projects are deleted when you quit Dorico Pro.
 - If Dorico Pro is unable to write to the specified folder, it cannot auto-save projects. There is no warning if this is the case, so we recommend that you only change the auto-save location if you are certain your user account can successfully save files there.
-

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **General** in the page list.
 3. In the **Files** section, click **Choose** beside the **Auto-save folder** field to open the File Explorer/macOS Finder.
 4. In the File Explorer/macOS Finder, locate and select the folder where you want to save auto-save projects.
 5. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Auto-save folder** field.
 6. Click **Apply**, then **Close**.
-

RESULT

The default auto-save folder is changed. If the folder specified does not exist, Dorico Pro creates it.

Disabling auto-save

You can disable auto-save completely, for example, if it is significantly affecting the performance of a large project.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **General** in the page list.
 3. In the **Files** section, deactivate **Auto-save every [n] minutes**.
 4. Click **Apply**, then **Close**.
-

Project backups

Dorico Pro stores backup versions of your projects each time you save them explicitly. By default, the previous five saves are stored as backups.

Their default location is in a folder named after the corresponding project file name in the **Backup Projects** folder in the **Dorico Projects** folder, whose default location is in the **Documents** folder for your user account.

Changing the number of backups per project

You can change the number of backups that Dorico Pro stores for each project, for example, if you want to store a greater range of changes.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **General** in the page list.
 3. In the **Files** section, change the value for **Number of backups per project**.
 4. Click **Apply**, then **Close**.
-

Changing the backup location

You can change the folder that Dorico Pro uses to store project backups. By default, Dorico Pro uses the **Backup Projects** folder inside your **Dorico Projects** folder, whose default location is in the **Documents** folder for your user account.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **General** in the page list.
 3. In the **Files** section, click **Choose** beside the **Project backup folder** field to open the File Explorer/macOS Finder.
 4. In the File Explorer/macOS Finder, locate and select the folder where you want to save project backups.
 5. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Project backup folder** field.
 6. Click **Apply**, then **Close**.
-

RESULT

The default folder for project backups is changed. If the folder specified does not exist, Dorico Pro creates it.

Setup mode

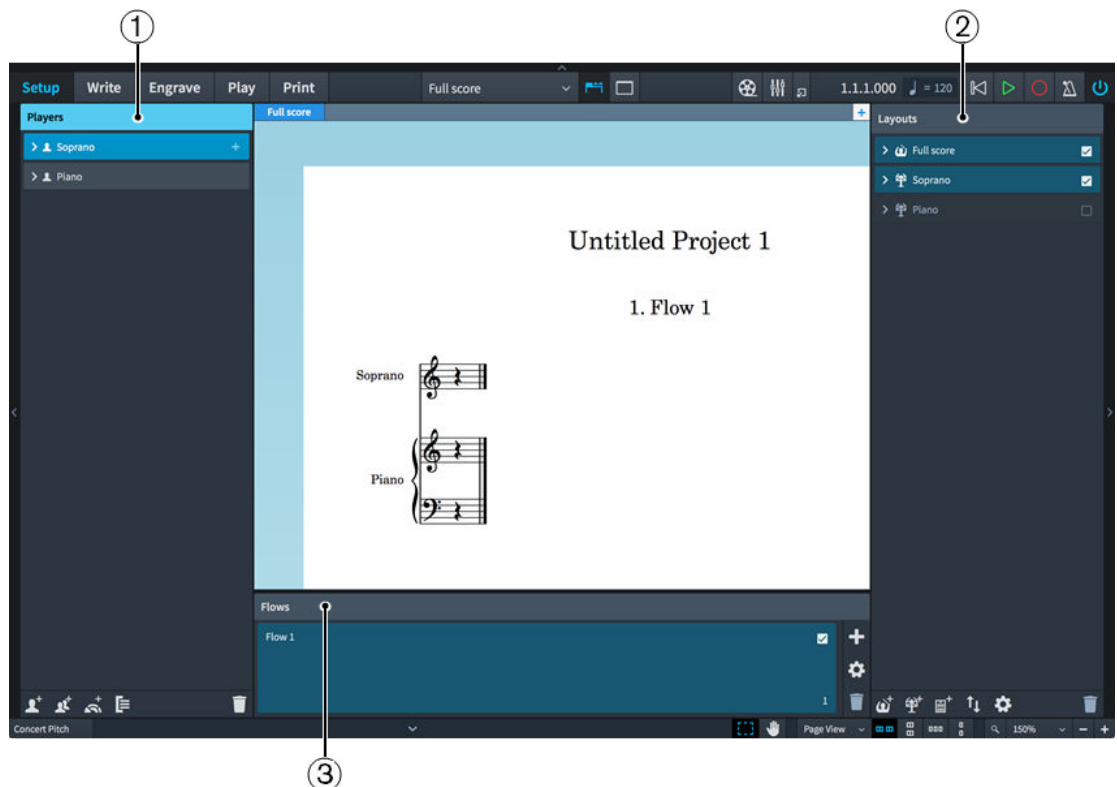
In Setup mode, you can determine the players and instruments for your project. You can also create and manage flows, set up layouts, and add videos.

Project window in Setup mode

The project window in Setup mode contains the default toolbar, the music area, and the status bar. It provides panels with all the tools and functions that allow you to add players and instruments as well as to create layouts and flows for your project.

You can switch to Setup mode in any of the following ways:

- Press **Ctrl/Cmd-1**.
- Click **Setup** in the toolbar.
- Choose **Window > Setup**.



Panels in Setup mode

The following panels are available in Setup mode:

1 Players

Lists the players, instruments, and groups in your project. By default, players are assigned to all flows and to both the full score layout and their own part layout.

2 Layouts

Lists the layouts in your project. A single full score layout and a part layout for each player are created automatically, but you can create and delete layouts as required. By default, layouts contain all flows and full score layouts contain all players.

3 Flows

Shows the flows in your project, ordered left to right. By default, flows contain all players and are assigned to all layouts.

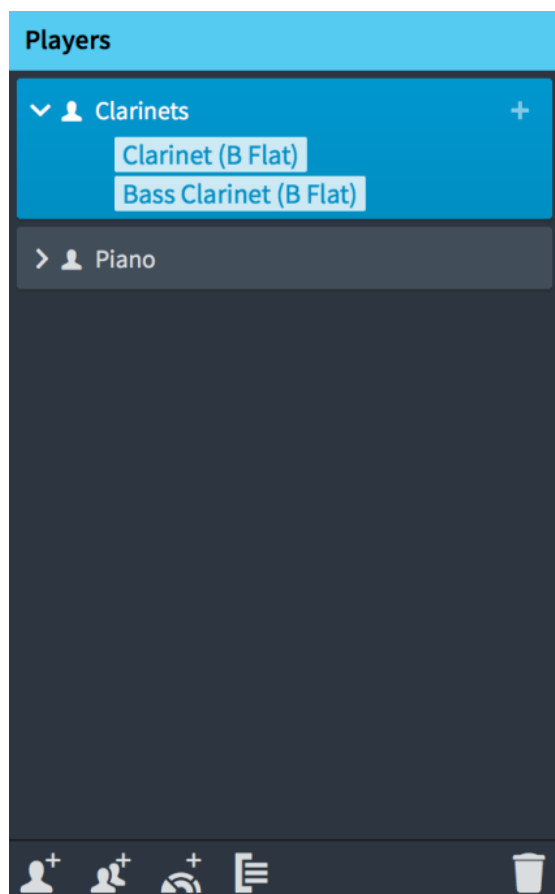
The three panels work together to allow you to control how and where the players, layouts, and flows in your project are used. When you select an item in one of the panels, that panel and the selected item are highlighted in a different color and checkboxes appear in cards in the other panels. You can activate/deactivate these checkboxes independently to change how material is distributed across players, layouts, and flows.

Players panel

The **Players** panel lists the players, instruments, and groups in your project. It is located on the left of the window in Setup mode.

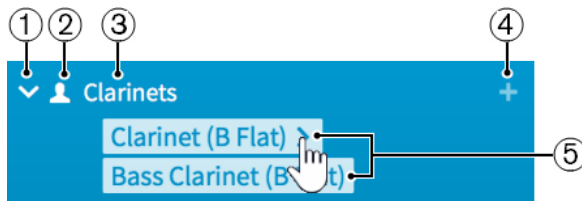
You can hide/show the **Players** panel in Setup mode in any of the following ways:

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window > Show Left Panel**.



Players panel in Setup mode

The **Players** panel contains a list of all the groups, players, and ensembles in your project, with each player shown as a card. Each player card shows the following:





1 Disclosure arrow

Expands/Collapses the player card.

2 Player type

Shows the type of player from the following options:

- Solo player

- Section player


3 Player name

Shows the name of the player. Dorico Pro automatically adds the names of the assigned instruments to the player name. If required, you can rename the player.

4 Add instruments icon

Opens the instrument picker from which you can select an instrument for the player.

5 Instrument labels

Each instrument assigned to a player has its own instrument label. If you hover the mouse pointer over an instrument label, an arrow appears that allows you to open a menu with further options that allow you to, for example, change the instrument names or move the instrument to another player.



The action bar at the bottom of the panel contains the following options:

Add Solo Player



Adds an individual player to your project. Dorico Pro also automatically adds a part layout for the player to the **Layouts** panel.

Add Section Player



Adds a player to your project that represents multiple players who all play the same instrument. Dorico Pro also automatically adds a part layout for the player to the **Layouts** panel.

Add Ensemble



Adds multiple players to your project that represent standard combinations of musical instruments. Dorico Pro also automatically adds part layouts for each player in the ensemble to the **Layouts** panel.

Add Group



Adds a group to your project to which you can assign all types of players.

Delete Player



Deletes selected players or groups from the **Players** panel.

The order in which the players are listed in the panel is the default order in which they appear in layouts. You can change the player order for each layout individually in the **Players** section of the **Players** page in **Setup > Layout Options**.

RELATED LINKS

[Players](#) on page 94

[Layouts panel \(Setup mode\)](#) on page 86

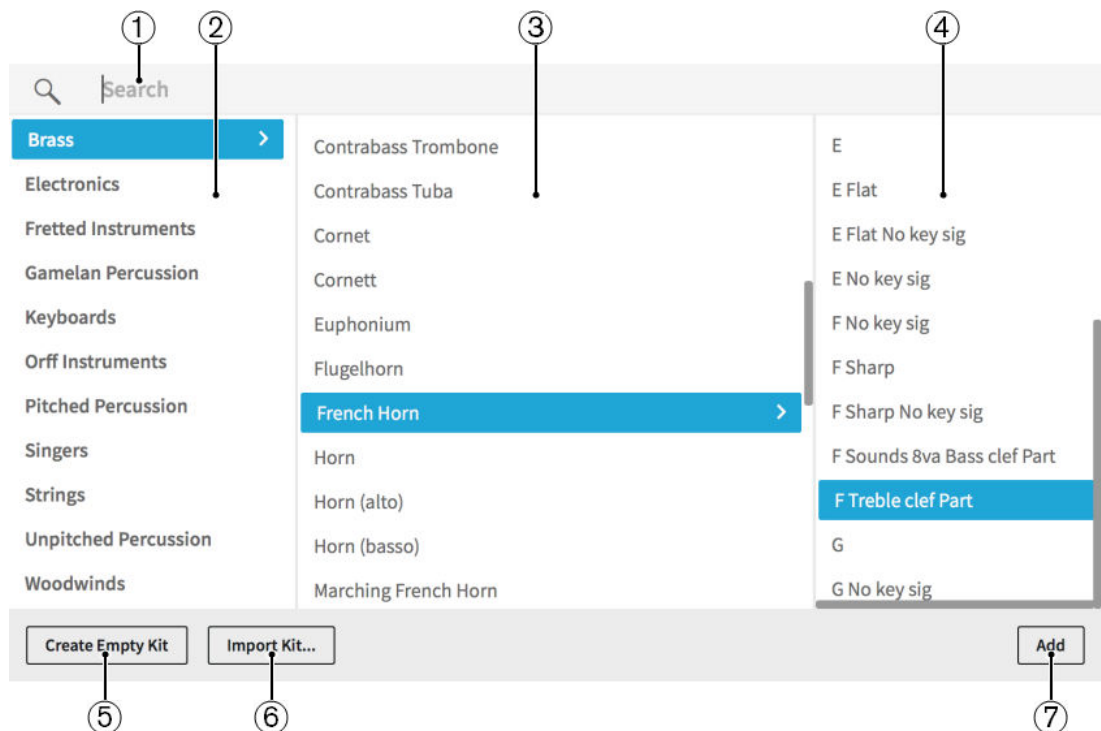
[Layout Options dialog](#) on page 90

Instrument picker

The instrument picker allows you find and add instruments and ensembles to your project. It contains multiple versions of some instruments that have specific formatting requirements, such as French Horn, which has a version whose part layouts are always in treble clef.

You can open the instrument picker in Setup mode in any of the following ways:

- Click the plus symbol in solo player cards in the **Players** panel.
- Select a player in the **Players** panel and press **Shift-I**.
- Right-click a player in the **Players** panel and choose **Add Instrument to Player**.
- Add a new player or ensemble.



Instrument picker

The instrument picker contains the following sections and options:

1 Search field

Allows you to enter the instrument you are searching for directly. You can enter only part of the instrument name, such as cello for Violoncello.

2 Instrument family column

Contains instrument families to help you focus your instrument search.

3 Instrument column

Contains the instruments available in the selected instrument family.

4 Instrument type column

Contains options for multiple possible transpositions or different behavior in part layouts for the selected instrument. This column is not populated for instruments that do not have further options.

5 Create Empty Kit

Adds an empty percussion kit to the player.

6 Import Kit

Imports an existing percussion kit previously exported as a library file.

7 Add/Add Ensemble to Score

Adds the selected instrument/ensemble to the project. Adding an ensemble adds multiple players at once.

In addition to entering the instrument or ensemble you want directly into the **Search** field, you can click options in the instrument picker to select them, and you can also select other items in the same column by pressing **Up Arrow/Down Arrow**.

You can cycle forwards through the instrument picker by pressing **Tab**, which navigates in the following order: **Search field, Instrument, Instrument type, Instrument family**. You can also cycle backwards by pressing **Shift-Tab**, which navigates in the opposite direction.

An enclosure line shows which instrument family or instrument is selected when using the keyboard to navigate.

RELATED LINKS

[Adding solo/section players](#) on page 95

[Adding ensembles](#) on page 102

[Adding empty percussion kits to players](#) on page 105

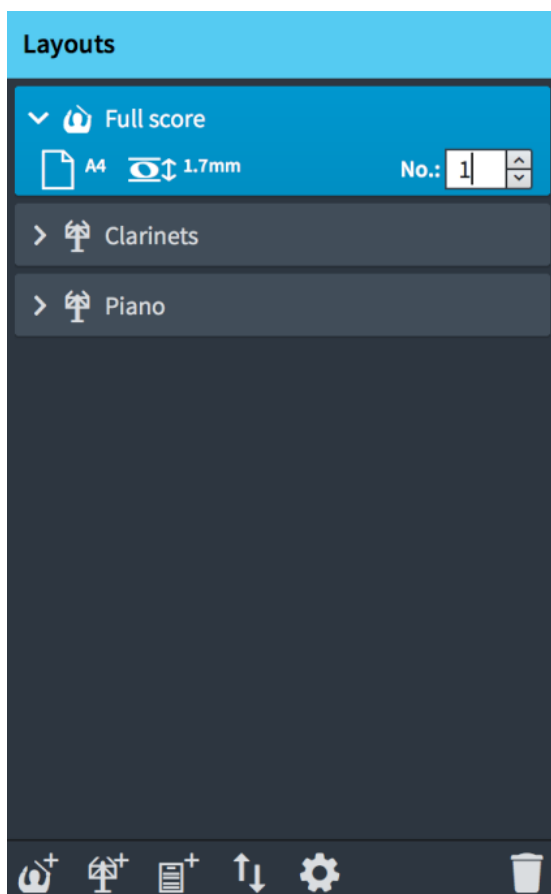
[Importing percussion kits](#) on page 1021

Layouts panel (Setup mode)

In Setup mode, the **Layouts** panel contains a list of all the full score and instrumental part layouts in the project. It is located on the right of the window.

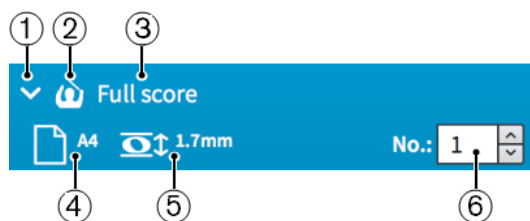
You can hide/show the **Layouts** panel in Setup mode in any of the following ways:




- Press **Ctrl/Cmd-9**.
- Click the disclosure arrow on the right edge of the main window.
- Choose **Window > Show Right Panel**.



Layouts panel in Setup mode

The **Layouts** panel lists the default full score layout and all the layouts that you have created for your project, displayed as cards. Each layout card shows the following:



- 1 Disclosure arrow**
Expands/Collapses the layout card.
- 2 Layout type**
Shows the type of layout from the following options:
 - Full score layout

 - Instrumental part layout

 - Custom score layout

- 3 Layout name**

Shows the name of the layout. Dorico Pro automatically adds default names depending on the name of the instrument that is assigned to a player and on the type of layout that is added. For example, if you assign a flute to a player, the instrumental part layout automatically gets the same name. If you add an empty instrumental part layout, the layout name shows **Empty part** and an incremental number if you add multiple empty part layouts.

4 Page size and orientation

Shows the size and orientation of the layout as set on the **Page Setup** page in **Setup > Layout Options**.

5 Space size

Shows the space size between two staff lines in points, as set on the **Page Setup** page in **Layout Options**. This indicates the size of staves in the layout.

6 Layout number

Allows you to set a unique number for the layout that can be used as part of its file name when exported as a graphic. This can be useful to ensure exported part layout files are organized in their orchestral order, as this is usually different to their alphabetical order.

The action bar at the bottom of the panel contains the following options:

Add Full Score Layout



Adds a full score layout to your project. By default, every player and flow is automatically included in the layout.

Add Instrumental Part Layout



Adds an empty instrumental part layout to your project. You can then add one or multiple players to the layout. By default, a part layout contains all flows that are created in your project.

Add Custom Score Layout



Adds a custom score layout that initially without players or flows.

Sort Layouts



Sorts all layouts in the **Layouts** panel according to their type in the following order: full score layouts, instrumental part layouts, custom score layouts. It does not sort part layouts according to orchestral order.

Layout Options



Opens the **Layout Options** dialog for one or multiple selected layouts.

Delete Layout



Deletes selected layouts from the **Layouts** panel.

RELATED LINKS

[Layouts](#) on page 120

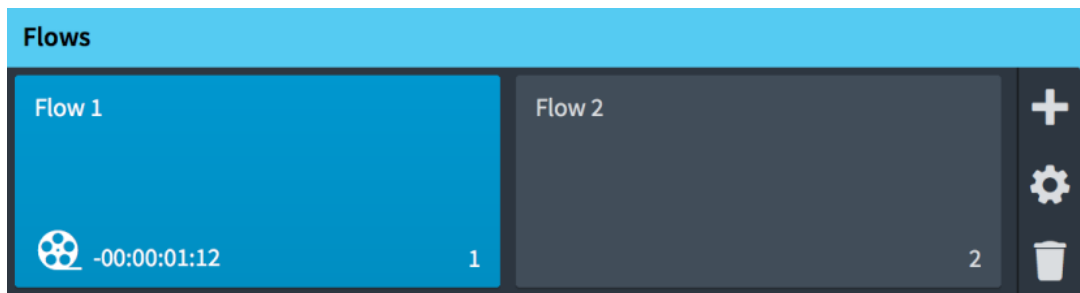
[Layout Options dialog](#) on page 90

Flows panel

The **Flows** panel shows all the flows that are created for your project. It is located at the bottom of the window in Setup mode.

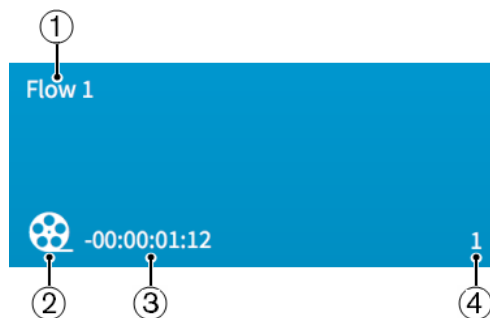
You can hide/show the **Flows** panel in Setup mode in any of the following ways:

- Press **Ctrl/Cmd-8**.
- Click the disclosure arrow at the bottom of the main window.
- Choose **Window > Show Bottom Panel**.



Flows panel in Setup mode

The **Flows** panel shows the default flow and all the flows that you created for your project as cards. Each flow card shows the following:



- 1 Flow name**
Shows the name of the flow. If you create multiple flows without renaming them, each flow name shows a number that increments with each new flow that you create. The number also indicates the position of the flow in a layout.
- 2 Film reel icon**
Indicates the flow has an attached video.
- 3 Flow timecode**
Shows the start timecode for the flow.
- 4 Flow number**
Shows the number of the flow. The number increments with each new flow that you create. The number also indicates the position of the flow in a layout.

To the right of the **Flows** panel, the following options are available:

Add Flow

Adds a new flow to your project. By default, every new flow is automatically included in all layouts, and every player is added to the new flow.



Notation Options

Opens the **Notation Options** dialog that provides multiple options that allow you to make changes that affect the way music is notated for each flow.



Delete Flow

Deletes one or multiple selected flows.



RELATED LINKS

[Flows](#) on page 117

[Notation Options dialog](#) on page 139

[Videos](#) on page 125

Project Info dialog

For every project and every flow that you create in Dorico Pro, you can specify project information in the **Project Info** dialog.

- You can open the **Project Info** dialog by choosing **File > Project Info**.

In the **Project Info** dialog, you can enter information for the whole project and for each flow. For example, each flow in your project might have a different composer and lyricist.

You can use tokens in text frames to refer to the information you enter into the different fields on the different pages in the **Project Info** dialog.

RELATED LINKS

[Text tokens](#) on page 332

Layout Options dialog

The **Layout Options** dialog provides multiple options that allow you to make changes that affect the way the notation is laid out on pages of each layout.

You can change the physical properties of the layout, such as page size, staff size, or margins, and the notation, such as note spacing or staff labels.

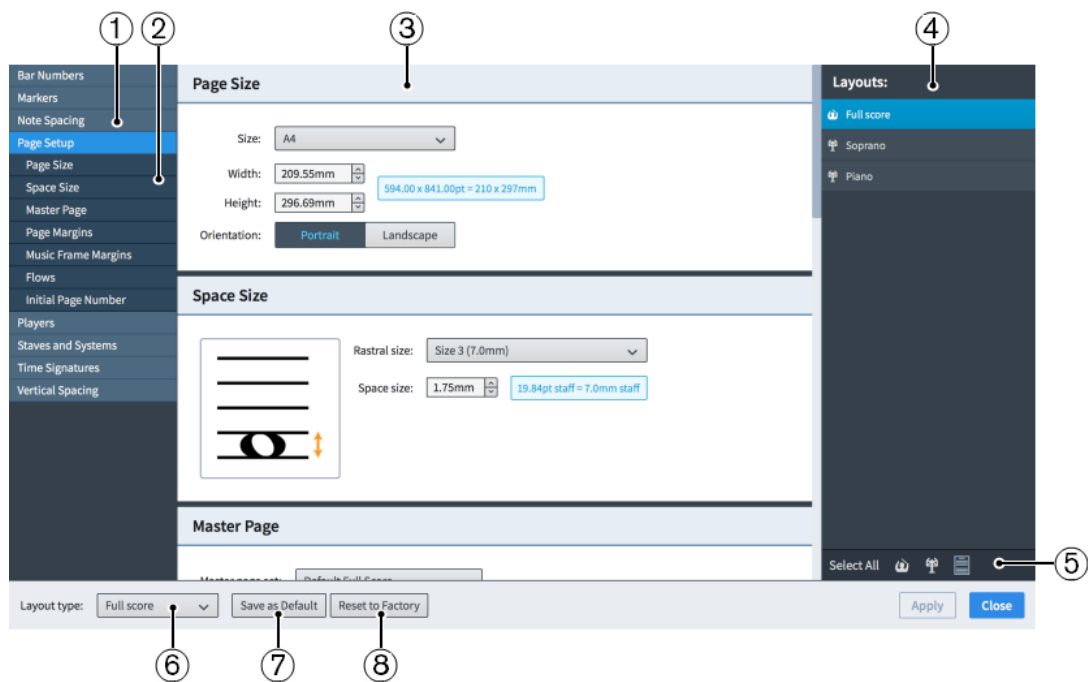
TIP

You can save all options that you set in **Layout Options** as the default for new projects by selecting a layout type from the **Layout type** menu and clicking **Save as Default**.

You can open **Layout Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-L** in any mode.
- Choose **Setup > Layout Options** in Setup mode.
- Click **Layout Options** in the **Layouts** panel in Setup mode.





Layout Options

The **Layout Options** dialog contains the following:

1 Page list

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 Section titles

Shows the titles of any sections on the selected page. You can click these section titles to navigate directly to that section of the page.

3 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the current setting is highlighted.

4 Layouts list

Contains all the layouts in your project. You can select one, multiple, or all layouts. You can select multiple layouts in any of the following ways:

- Click one of the selection options in the action bar.
- **Ctrl/Cmd**-click to select multiple layouts.
- **Shift**-click to select multiple adjacent layouts.

5 Action bar

Contains selection options that allow you to select layouts in the **Layouts** list according to their type.

- **Select All** selects all layouts, regardless of their type.
- **Select All Full Score Layouts** selects all full score layouts only.
- **Select All Part Layouts** selects all part layouts only.
- **Select All Custom Score Layouts** selects all custom score layouts only.

6 Layout type

Allows you to select the layout type for which you want to save your settings as the default. For example, you can save new default settings for part layouts without affecting the default settings for full score layouts.

7 **Save as Default/Remove Saved Defaults**

This button has different functions depending on whether you have existing saved defaults for the selected layout type.

- **Save as Default** saves all options currently set in the dialog as the default for the selected layout type in new projects.
- **Remove Saved Defaults** deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all layouts of the selected type in future projects start with the default factory settings. If you have existing saved defaults, you can access **Remove Saved Defaults** by pressing **Alt** (macOS)/**Ctrl** (Windows).

8 **Reset to Factory/Reset to Saved Defaults**

This button has different functions depending on whether you have existing saved defaults for the selected layout type.

- If you have no saved defaults for the selected layout type, this button is **Reset to Factory**, which resets all the options in the dialog back to the default factory settings for the selected layout type.
- If you have existing saved defaults for the selected layout type, this button is **Reset to Saved Defaults**, which resets all the options in the dialog back to your saved defaults for the selected layout type. You can access **Reset to Factory** instead by pressing **Alt** (macOS)/**Ctrl** (Windows). Resetting options back to the default factory settings only affects the selected layout type in the current project and does not delete your saved defaults, meaning future projects still start with your saved defaults.


RELATED LINKS

[Options dialogs in Dorico Pro](#) on page 30
[Staves](#) on page 906

Making layout-specific changes in Layout Options

You can make project-wide changes for each layout independently in **Layout Options**.

PROCEDURE

1. Open **Layout Options** in any of the following ways:
 - Press **Ctrl/Cmd-Shift-L** in any mode.
 - Choose **Setup > Layout Options** in Setup mode.
 - Click **Layout Options** at the bottom of the **Layouts** panel in Setup mode.
2. In the **Layouts** list, select the layouts in which you want to change options in one of the following ways:
 - Click **Select All** in the action bar.
 - Click **Select All Full Score Layouts** in the action bar.
 - Click **Select All Part Layouts** in the action bar.
 - Click **Select All Custom Score Layouts** in the action bar.
 - **Shift**-click adjacent layouts.
 - **Ctrl/Cmd**-click individual layouts

By default, the layout currently open in the music area is selected when you open the dialog.

3. Click a page in the page list.
4. Look through the available options, and change the settings as required.
5. Click **Apply**, then **Close**.

If you make changes and close the dialog without clicking **Apply**, you are prompted to save or discard your changes.

RESULT

The changes are applied immediately to the selected layouts.

Players, layouts, and flows

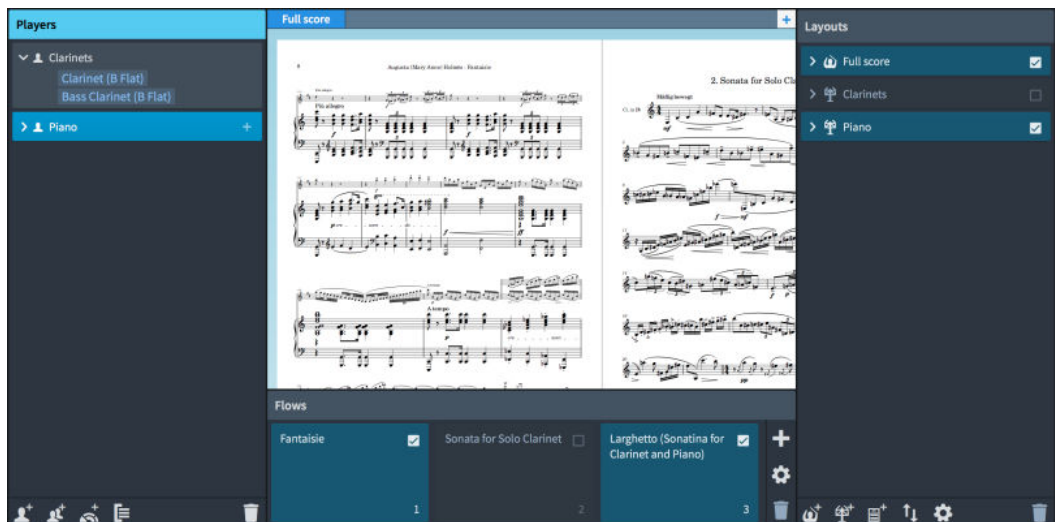
In Dorico Pro, players, layouts, and flows are all connected to each other. Because they exist in the project rather than in a single score, you can, for example, have players and flows saved in the project without showing them in the full score.

- Players can be assigned to any combination of layouts and flows. For example, you can assign a single player to both the full score layout and their own part layout, and remove them from flows in which they do not play. By default, players are assigned to all flows that originated in the project, all full score layouts, and their own part layout.
- Layouts can contain any combination of players and flows. For example, you can assign all the singers to a single part layout, then remove the flows from the layout in which they do not sing. By default, layouts contain all flows and full score layouts contain all players.
- Flows can contain any combination of players and be assigned to/removed from layouts. By default, flows contain all players and are assigned to all layouts.

NOTE

- If you remove a player from a flow, any notes you have already input for that player in that flow are deleted.
 - Removing a flow from a layout automatically removes that layout from the flow, and vice versa. The same is true for players and layouts, and players and flows.
-

When you select a card in one of the panels in Setup mode, each card in the other panels shows a checkbox. Connected cards appear highlighted and have activated checkboxes, while unconnected cards are not highlighted and have deactivated checkboxes. For example, if you select a single player card in the **Players** panel, all the flows to which the player is assigned are highlighted and activated in the **Flows** panel and all layouts to which the player is assigned are highlighted and activated in the **Layouts** panel.



A piano player selected in the **Players** panel with connected flows and layouts highlighted in the **Flows** and **Layouts** panels

RELATED LINKS

- [Project window in Setup mode](#) on page 82
- [Flows](#) on page 117
- [Layouts](#) on page 120
- [Changing the flows assigned to layouts](#) on page 122
- [Changing the players assigned to layouts](#) on page 121
- [Changing the players assigned to flows](#) on page 118

Players

Before you start writing music, you must specify the players that are playing one or multiple instruments.

A player can be a solo player, which represents a single person who can play one or more instruments. For example, a clarinetist may double alto saxophone or bass clarinet.

A player can also be a sectional player, which represents multiple people, each of whom plays the same instrument. For example, a violin section or the soprano section of a choir.

Dorico Pro uses this knowledge about players and their instruments to assist you in producing a practical score efficiently, for example, by making it very easy to handle instrument doubling and divisi.

When you add a player in Dorico Pro, the following happens automatically:

- An instrumental part layout is created.
- The player is added to any full score layouts that already exist. If no full score layouts exist, a new full score layout is created.
- The player is assigned to all existing flows that originated in the project. It is not added to any flows that you imported into the project.

RELATED LINKS

- [Players, layouts, and flows](#) on page 93
- [Flows](#) on page 117
- [Layouts](#) on page 120
- [Changing the players assigned to layouts](#) on page 121
- [Changing the players assigned to flows](#) on page 118

Adding solo/section players

You can add both solo and section players to your project. Solo players can hold multiple instruments, whereas section players can divide.

PREREQUISITE

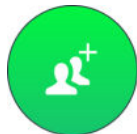
The **Players** panel is open.

PROCEDURE

1. In the **Players** panel, add an empty-handed player in any of the following ways:
 - If you have started a new project, click **Add Solo Player** in the project start area.



- If you have started a new project, click **Add Section Player** in the project start area.



- At the bottom of the **Players** panel, click **Add Solo Player**.



- At the bottom of the **Players** panel, click **Add Section Player**.



The instrument picker opens.

TIP

You can also open the instrument picker at any time by clicking the plus symbol in solo player cards, selecting a player in the **Players** panel and pressing **Shift-I**, or right-clicking a player and choosing **Add Instrument to Player**.

2. Select the instrument you want in the instrument picker.
 3. Press **Return** to add the selected instrument.
-

RESULT

The solo/section player is added to all flows in the project. It is automatically named after the selected instrument.

NOTE

- Players are not automatically added to flows that you imported into the project.
 - If you want to add multiple instruments to your project at the same time, you can add ensembles or use a project template.
-

AFTER COMPLETING THIS TASK

If you added a solo player and you want them to hold multiple instruments, add other instruments to the solo player.

RELATED LINKS

[Instrument picker](#) on page 85

- [Changing player names](#) on page 100
- [Project start area](#) on page 37
- [Adding instruments to players](#) on page 104
- [Adding ensembles](#) on page 102
- [Starting new projects from project templates](#) on page 59

Duplicating players

You can duplicate players. This adds another player of the same type.

PROCEDURE

- In the **Players** panel, right-click the player you want to duplicate and choose **Duplicate Player** from the context menu.

RESULT

A new player is added, with the same instruments as the original player. The original and new players are automatically numbered to ensure their names are unique.

RELATED LINKS

- [Changing player names](#) on page 100
- [Instrument numbering](#) on page 103

Player, layout, and instrument names

In Dorico Pro, you can use three different names to refer to the same player in different contexts. This allows you to show relevant information in different places in the score.

The three different names that relate to players and instruments are:

- Player name
- Layout name
- Instrument name

You can change all of these names for individual players independently of other instruments of the same type. Each name is used in different places. Player and layout names are shown using text tokens.

Player name

Given to players in the **Players** panel. It is not used in the score, instead you can use the player name as part of your own workflow, independently of what instruments and players are called in staff labels and layout names.

Player names are automatically generated when you add instruments.

Layout name

The name for each layout in the **Layouts** panel. They are used at the top of individual part layouts.

Layout names are automatically generated when you add instruments, and are linked to the player name until you change the layout name.

Instrument names

Used in staff labels. This means that the instrument label on each staff is relevant to the instrument currently being played by that player, rather than listing all instruments that player is playing in the flow.

For example, if a clarinettist is doubling bass clarinet, the staff label where the player plays clarinet automatically shows **Clarinet**, and the staff label automatically shows **Bass Clarinet** where the player plays bass clarinet.

All instruments in Dorico Pro come with a set of instrument names that you can change.

You can change the instrument names for individual instruments independently, even if other players in the project are playing the same instrument.

You can save your changes to instrument names as default, so your names are used whenever you add that instrument again in the project.

NOTE

Changing the default instruments names does not change the instrument names of existing instruments of that type in your project.

RELATED LINKS

[Instrument numbering](#) on page 103

[Text tokens](#) on page 332

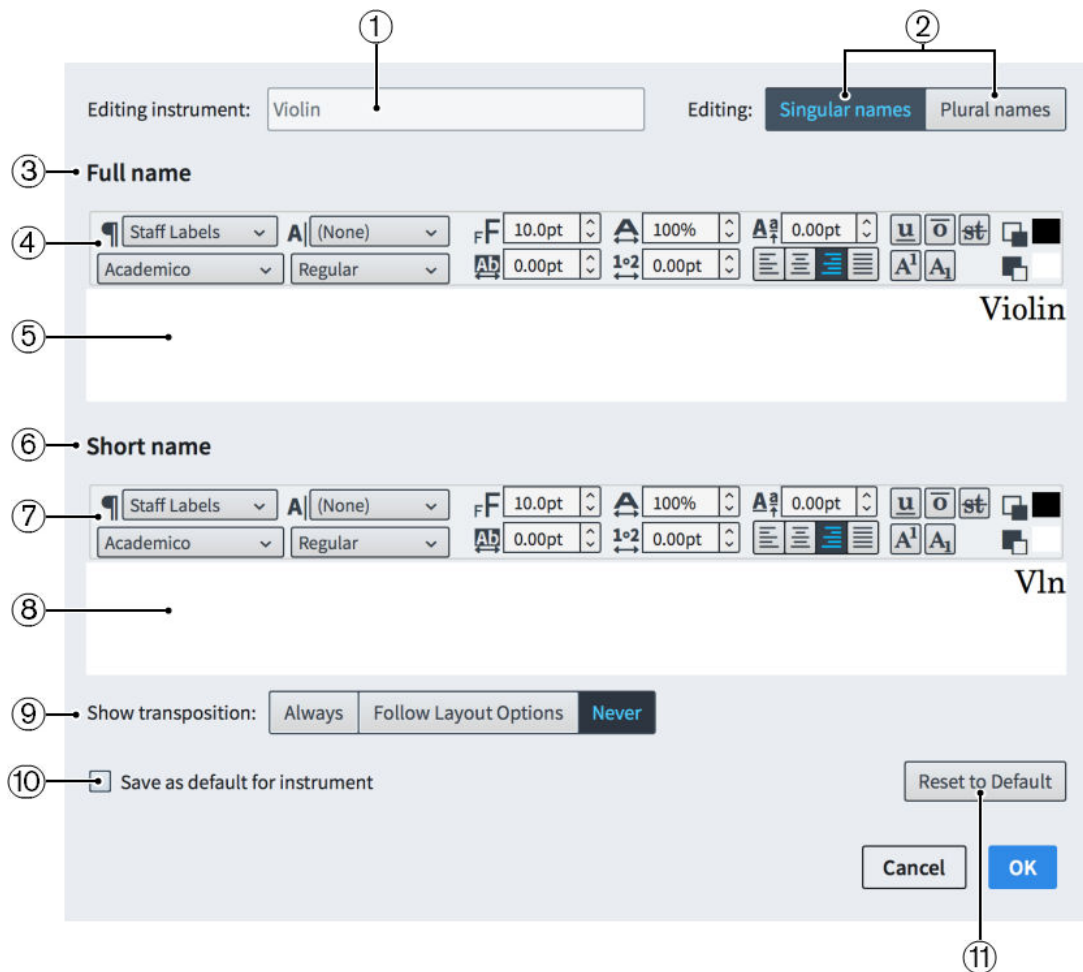
[Staff labels](#) on page 895

[Layouts](#) on page 120

Edit Instrument Names dialog

The **Edit Instrument Names** dialog allows you to change the content and formatting of each instrument's names, which are used in staff labels and instrument change labels shown above the staff. You can edit both singular/plural full instrument names and singular/plural short instrument names.

- You can open the **Edit Instrument Names** dialog in Setup mode by clicking the arrow in an instrument label in the **Players** panel and choosing **Edit Names**.



Edit Instrument Names dialog

The **Edit Instrument Names** dialog contains the following options and sections:

1 Editing instrument

Displays the permanent underlying name of the instrument. You cannot change this name.

2 Editing

Allows you to switch between editing the **Singular names** and **Plural names** of the selected instrument.

Singular names is used when staff labels are shown by default, **Plural names** is used when the staff contains multiple players.

3 Full name section

Contains options that allow you to edit the appearance of the full instrument name.

4 Full name text editor options

Allows you to customize the font, size, and formatting of the long staff label of the selected instrument.

NOTE

The horizontal alignment of staff labels always uses the alignment of the paragraph style, not the alignment set in the **Edit Instrument Names** dialog.

5 Full name text editing area

Shows the current long name for the selected instrument, as it appears in **Full** staff labels. You can select any part of the instrument name and edit it independently of other parts,

for example, if you want to add additional information on a new line and in italics. However, when used for instrument change labels above the staff, instrument names are always shown on a single line.

Staff labels are right-aligned by default, so appear at the right edge of the text editing area.

NOTE

Staff labels always use the alignment set for the paragraph style, they do not use the alignment set in the **Edit Instrument Names** dialog. This ensures consistent alignment across the whole system.

6 Short name section

Contains options that allow you to edit the appearance of the short instrument name.

7 Short name text editor options

Allows you to customize the font, size, and formatting of the short staff label of the selected instrument.

NOTE

The horizontal alignment of staff labels always uses the alignment of the paragraph style, not the alignment set in the **Edit Instrument Names** dialog.

8 Short name text editing area

Shows the current short staff label for the selected instrument, as it appears in **Abbreviated** staff labels. You can select any part of the instrument name and edit it independently of other parts, for example, if you want to add additional information on a new line and in italics. However, when used for instrument change labels above the staff, instrument names are always shown on a single line.

Staff labels are right-aligned by default, so appear at the right edge of the text editing area.

NOTE

Staff labels always use the alignment set for the paragraph style, they do not use the alignment set in the **Edit Instrument Names** dialog. This ensures consistent alignment across the whole system.

9 Show transposition

Allows you to choose when the transposition is shown in the instrument name for the selected instrument. It is common to see the transposition included in the name of transposing instruments, such as Clarinet in B \flat .

You can choose when the transposition is shown from the following options:

- **Always:** instrument transpositions are shown even if you have chosen to hide them on the **Staves and Systems** page in **Setup > Layout Options**.
- **Follow Layout Options:** instrument transpositions can be hidden and shown, depending on your per-layout settings in **Layout Options**.
- **Never:** instrument transpositions are never shown, even if you have chosen to show them in **Layout Options**.

10 Save as default for instrument

Activating the checkbox saves your changes in the dialog as the default for any new instruments of that type that you add to the project.

11 Reset to Default

Removes all your changes to staff labels for the selected instrument type and reverts them to the default settings.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

[Staff labels](#) on page 895

[Changing the length of staff labels project-wide](#) on page 899

Changing player names


You can change the player names of players, and reset renamed players to their default name.

NOTE

Player names are not used for staff labels in the score or for naming layouts, instead they are for your own reference in Setup mode.

Staff labels use the name set for each instrument in the **Edit Instrument Names** dialog.

PROCEDURE

1. In the **Players** panel, select the card of the player whose player name you want to change.
 2. Open the player name text field in any of the following ways:
 - Double-click anywhere in the player card.
 - Right-click in the player card and choose **Rename** from the context menu.
 3. Enter a new name, or click **Reset to Default** to revert the name to the default name.

 4. Press **Return**.
-

RESULT

The player name of the selected player is changed.

NOTE

This does not change the staff label that appears in the score. You can change the name used for staff labels in the **Edit Instrument Names** dialog, and change the layout name for the names at the top of parts.

Changing layout names

Layout names are used to identify individual layouts, for example, as the name at the top of parts. You can change the layout names of players, and reset renamed players to their default name.

NOTE

Layout names are not used for staff labels. Staff labels use the name set for each instrument in the **Edit Instrument Names** dialog.

PROCEDURE

1. In the **Layouts** panel, select the name of the player whose layout name you want to change.
2. Open the layout name text field in any of the following ways:
 - Double-click anywhere in the layout card.
 - Right-click in the layout card and choose **Rename** from the context menu.
3. Enter a new name, or click **Reset to Default** to revert the name to the player name.



4. Press **Return**.
-

RESULT

The layout name of the selected player is changed, or reverted to the default name.

NOTE

This does not change the staff label that appears in the score. You can change the name used for staff labels in the **Edit Instrument Names** dialog, and change the layout name for the names at the top of parts.

Changing instrument names

Instrument names are used in staff labels and instrument change labels shown above the staff. You can change the different instrument names used for each instrument.

NOTE

Changing instrument names does not change the name shown at the top of part layouts. If you want to change the name used at the top of part layouts, change the layout name.

PROCEDURE

1. In the **Players** panel, click the disclosure arrow in the player card containing the instrument whose names you want to change.
This expands the card to show the instruments held by the player.
 2. Click the arrow that appears in the instrument label when you hover over it and choose **Edit Names** to open the **Edit Instrument Names** dialog.
 3. Enter new names in any of the name fields.
 4. Optional: Activate **Save as default for instrument**.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The instrument names for the selected instrument are changed.

- If you did not save your changes as default, only the names of the selected instrument are changed. Any instruments of the same type added later use the original default names.
- If you saved your changes as default, any instruments of the same type added later use your new instrument names. The instrument names of any other instruments of the same type already in your project are not changed.

RELATED LINKS

[Edit Instrument Names dialog](#) on page 97

Changing the orchestral order of players

You can change the order in which players appear in the score in the **Players** panel.

PROCEDURE

1. In the **Players** panel, select the player card of the player whose position in the score you want to change.
2. Click and drag the player card upwards/downwards in the panel.

An insertion line indicates where the player will be positioned.

Deleting players

You can delete players from your project.

PROCEDURE

1. In the **Players** panel, select the players that you want to delete.
2. Press **Backspace** or **Delete**.
3. Choose one of the following options in the warning message that opens:
 - **Delete Player Only:** Deletes the player and the music that you created for the instruments belonging to that player.
 - **Delete Player and Part Layouts:** Deletes the player, the music, and all part layouts to which the player is assigned.

NOTE

The part layout cannot be deleted if it also contains other players.

Ensembles

If you add an ensemble in Dorico Pro, multiple players are added to your project at the same time.

Dorico Pro provides a set of predefined ensembles that you can use. Adding an ensemble is one of the ways to achieve building up an instrumentation quickly. The predefined ensembles that you can create with Dorico Pro follow standard patterns, such as double woodwind which refers to two flutes, two oboes, two clarinets, and two bassoons.

Adding ensembles

You can add multiple players at once by adding ensembles, such as a complete string section or four-part choir.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. Open the instrument picker for ensembles in any of the following ways:
 - If you have started a new project, click **Add Ensemble** in the project start area.



- Click **Add Ensemble** at the bottom of the **Players** panel.



2. Select the ensemble you want in the instrument picker.
 3. Click **Add Ensemble to Score**.
-

RESULT

The ensemble players are added to the **Players** panel, either as solo or as section players.

TIP

You can also add multiple instruments to your project at the same time by using a project template.

RELATED LINKS

[Instrument picker](#) on page 85

[Changing player names](#) on page 100

[Project start area](#) on page 37

[Starting new projects from project templates](#) on page 59

Instruments

You can assign instruments to solo and section players as well as to ensembles.

In Dorico Pro, you can assign multiple instruments to solo players, as solo players often play multiple instruments, such as an oboist doubling the cor anglais.

Before you can assign instruments, you must add players or ensembles, which may in turn also be assigned to groups if needed. If you add ensembles, it is by default not necessary to add any instruments, since these are already included when you select the type of ensemble. However, you can add further instruments to ensembles.

Instruments in Dorico Pro do not have limited ranges; it is possible to notate any pitch in any register on every instrument. However, in the piano roll editor in Play mode, only pitches that fall in the MIDI note range 0-127 can be represented. Similarly, if you input a pitch beyond the range of samples in the assigned VST instrument, the pitch does not sound in playback.

You can always change the initial specification and add or delete instruments.

RELATED LINKS

[Piano roll editor](#) on page 408

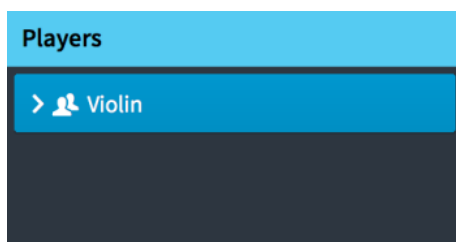
[VST and MIDI Instruments panel](#) on page 402

Instrument numbering

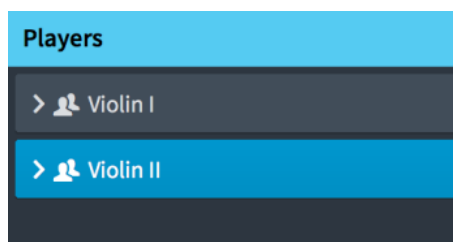
When there are multiple instruments of the same type in the same score, they are each automatically given a number for easy and clear identification.

For example, if there is only one flute in a score, it is called Flute, but if there are three flutes, they are called Flute 1, Flute 2, and Flute 3.

Dorico Pro automatically numbers instruments when there are multiple instruments of the same type in your project.



One violin with no number



Adding a second violin automatically generates numbers for both violins

Instrument numbers are automatically generated for players if the following criteria are met:

- Players are the same type, either solo or section.
- Players have at least one instrument in common.
- Players are in the same group.
- Instrument names are the same.

For example, if you have two flutes in your project, but one flute is a section player and the other flute is a solo player, they are not numbered automatically. Similarly, if the two flutes are in different player groups, they are not numbered automatically.

RELATED LINKS

[Player, layout, and instrument names](#) on page 96

[Changing instrument names](#) on page 101

[Player groups](#) on page 115

Transposing instruments

While most instruments produce notes at concert pitch, transposing instruments produce a note that is different to the one that is written. For example, two common orchestral transposing instruments are clarinet in B \flat and horn in F.

When a clarinet in B \flat plays a C, the sound produced is a B \flat , one tone below. When a horn in F plays a C, the sound produced is an F, a fifth below. Other instruments that conventionally produce a pitch different to the one notated include the piccolo (sounding an octave above written), double bass (sounding an octave below written), and glockenspiel (sounding two octaves above written).

Dorico Pro stores all note information in concert pitch and automatically transposes notes as appropriate for the transposition of the instrument. This means notes are automatically changed in transposing layouts compared to non-transposing layouts. You can also change instruments at any time, and the music is adjusted automatically to ensure the correct pitches are shown.

RELATED LINKS

[Concert vs. transposed pitch](#) on page 123

[Making layouts transposing/concert pitch](#) on page 123

[Setting different clefs for concert/transposed pitch](#) on page 584


Adding instruments to players

You can add instruments to both solo and section players. You can add multiple instruments to solo players, but only a single instrument to section players.

PREREQUISITE

You have added a solo or section player.

PROCEDURE

1. In the **Players** panel, select the player to which you want to add instruments.
2. Open the instrument picker in any of the following ways:
 - Press **Shift-I**.
 - Click the plus symbol to the right of the player card.

3. Select the instrument you want in the instrument picker.
4. Press **Return** to add the selected instrument.

- Optional: Repeat steps 1 to 3 to add multiple instruments to a single solo player.

NOTE

- You can only add a single instrument to each section player.
 - If you want to add multiple instruments to your project at the same time, you can add ensembles or use a project template.
-

RESULT

The selected instrument is added to the player. If you selected multiple players, the instrument is only added to the first player in the **Players** panel.

NOTE

Before you have input any notes, only the first instrument held by solo players is shown in full scores in page view. All instrument staves are shown in galley view, so we recommend switching to galley view to input notes for any other instruments held by solo players.

RELATED LINKS

[Instrument picker](#) on page 85

[Adding ensembles](#) on page 102


[Starting new projects from project templates](#) on page 59

[Switching to galley/page view](#) on page 50

Adding empty percussion kits to players

You can add empty percussion kits to players, to which you can then add unpitched percussion instruments.

PROCEDURE

- In the **Players** panel, open the **Edit Percussion Kit** dialog in any of the following ways:
 - Select a solo or section player, press **Shift-I**, and click **Create Empty Kit** in the instrument picker.
 - Click the plus symbol to the right of the added empty-handed player and click **Create Empty Kit** in the instrument picker.

 - Right-click a player and choose **Create Empty Kit** from the context menu.
 - Add the percussion instruments you want to the kit in the **Edit Percussion Kit** dialog.
-

RELATED LINKS

[Edit Percussion Kit dialog](#) on page 107

[Instrument picker](#) on page 85

Combining individual percussion instruments into kits

If a player is holding one or more individual percussion instruments, you can combine them into a percussion kit.

PROCEDURE

- Right-click the card of the player whose percussion instruments you want to combine into a kit and choose **Combine Instruments into Kit** from the context menu.
- Edit the kit in the **Edit Percussion Kit** dialog that opens.

For example, you can change the order in which the instruments appear in a grid or on a five-line staff.

RESULT

A new kit is created containing all the instruments held by the player.

NOTE

If the player was already holding one or more kit instruments, all individual instruments and any other kits are combined into the first kit.

Changing instruments

You can change the instruments held by players without affecting any music already entered onto their staves, for example, if your Clarinet part is very low and you want to change it to a Bass Clarinet.


NOTE

- You cannot change percussion kits into other instruments, you can only change individual unpitched percussion instruments.
 - You cannot change a pitched instrument into an unpitched instrument, and vice versa.
-

PROCEDURE

1. In the **Players** panel, expand the card of the player whose instrument you want to change. The card lists the instruments of the player.



2. Hover over the label of the instrument you want to change, click the arrow that appears, and choose **Change Instrument** to open the instrument picker.

 3. Select the instrument you want in the instrument picker.
 4. Press **Return** to change to the selected instrument.
-

RESULT

The selected instrument is changed, without affecting any music on its staff.

NOTE

Where appropriate, new clefs are input. This means that notes can appear differently so that they are notated correctly according to the new clef.

RELATED LINKS

[Instrument picker](#) on page 85

Moving instruments between players

You can move individual instruments between players without affecting any music already input for those instruments.

PROCEDURE

- In the Players panel, move instruments to other players in any of the following ways:
 - Click and drag instruments individually and release them over the player card to which you want to move them.
 - Click the arrow that appears in the instrument label when you hover over it and choose **Move Instrument to Player > [Player]**.

NOTE

You can only move instruments to players already added to your project.

RELATED LINKS

[Adding solo/section players](#) on page 95

Deleting instruments

You can delete instruments from players.

IMPORTANT

If you delete an instrument from a player, any music that you have created for this instrument is also deleted.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the instrument you want to delete.
 2. Click the arrow that appears in the instrument label when you hover over it and choose **Delete Instrument**.
 3. Click **OK**.
-

RESULT

The instrument is deleted from the player.

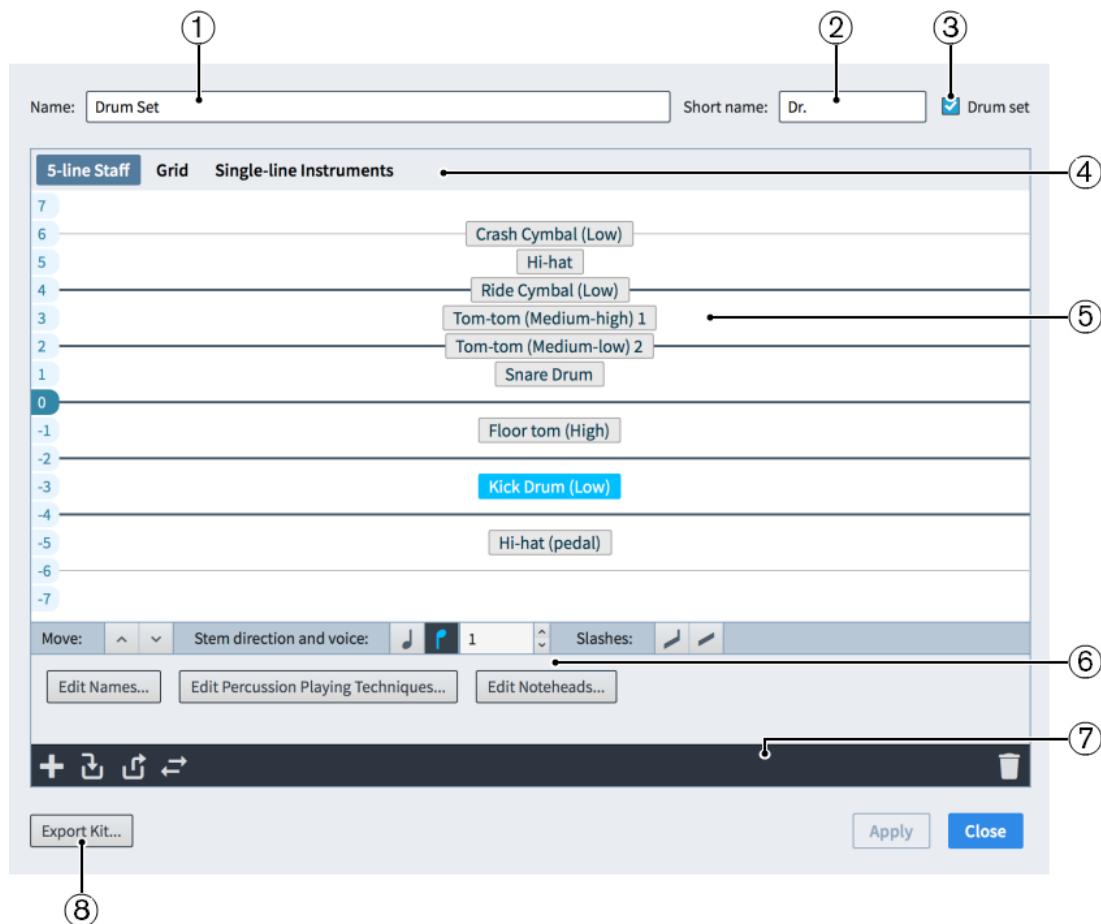
Edit Percussion Kit dialog

The **Edit Percussion Kit** dialog allows you to make changes to percussion kits, including which instruments are included in them and how instruments are arranged in the different available kit presentations.

- The dialog opens automatically when you create empty kits or combine existing instruments into a kit.
- You can also open the **Edit Percussion Kit** dialog manually for existing percussion kit instruments by expanding the player card of the player holding the percussion kit in the **Players** panel in Setup mode, then clicking the arrow in its label and choosing **Edit Percussion Kit**.

NOTE

Percussion kit instrument labels are green in the **Players** panel in Setup mode.



Edit Percussion Kit dialog

- 1 **Name**
Allows you to enter or change the full name for the percussion kit. This is used in **Full** staff labels for percussion kits that use the five-line staff presentation type.
- 2 **Short name**
Allows you to enter or change the abbreviated name for the percussion kit. This is used in **Abbreviated** staff labels for percussion kits that use the five-line staff presentation type.
- 3 **Drum set**
Percussion kits are defined as drum sets when the checkbox is activated. Percussion kits that are defined as drum sets follow your settings for drum sets on the **Percussion** page in **Notation Options**, including for voicing and default stem directions.
- 4 **Presentation types**
Allows you to select a percussion kit presentation type in order to edit how the selected percussion kit appears in that presentation type.
 - **5-line Staff**
Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.
 - **Grid**

Kit instruments are shown on a grid, with each instrument on its own line. You can customize how large the gaps between each line are. Staff labels are shown for each instrument in a smaller font than normal staff labels.

- **Single-line Instruments**

Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

5 Editor

Displays the current arrangement of instruments in the selected percussion kit presentation type. You can change the order of instruments and the layout of lines and spaces in the grid presentation type by using the controls.

6 Controls

Allows you to change the order and stem direction of instruments in the selected percussion kit presentation type. It also allows you to add slash voices to the kit.

You can access dialogs to change the noteheads used for each instrument in the kit by clicking **Edit Noteheads**. You can also change how combinations of noteheads, articulations, and tremolos affect playback by clicking **Edit Percussion Playing Techniques**.

You can also change the names of individual instruments within percussion kits. Click **Edit Names** to open the **Edit Instrument Names** dialog.

NOTE

This changes the appearance of percussion instrument names in all presentations. Depending on the percussion kit presentation type, staff labels might use different information than these instrument names.

7 Action bar

The action bar at the bottom of the dialog provides options that apply to all presentation types.

- **Add New Instrument**



Opens the instrument picker, allowing you to choose a new unpitched percussion instrument to be added to the kit.

- **Add Existing Instrument From Player**



Shows a menu listing the other players in your project that are holding individual percussion instruments not in kits. You can select a percussion instrument from another player to move to this kit, bringing its music with it.

- **Remove Instrument From Kit**



Removes the selected instrument from the kit, so it appears as an individual instrument. You can move individual instruments to other players or into other kit instruments.

- **Change Instrument**



Opens the instrument picker, which allows you to choose a new unpitched instrument to replace the selected instrument while retaining its music.

- **Delete Instrument**



Deletes the instrument from the kit, including its music.

8 Export Kit

Allows you to export the percussion kit as a library file so you can use it in other projects.

RELATED LINKS

[Percussion kits](#) on page 1020

[Staff labels for percussion kits](#) on page 904

[Percussion kit presentation types](#) on page 1025


[Percussion Instrument Playing Techniques dialog](#) on page 1027

[Playing techniques for unpitched percussion instruments](#) on page 1027

Adding instruments to percussion kits

You can add new instruments to percussion kits within the **Edit Percussion Kit** dialog.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit to which you want to add instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Add New Instrument** to open the instrument picker.

4. Select the percussion instrument you want in the instrument picker.
5. Press **Return** to add the selected instrument.
6. Click **Close**.


RESULT

The selected instrument is added to the percussion kit.

Changing instruments in percussion kits

You can change existing instruments in percussion kits while retaining any existing music for that instrument.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to change instruments.
 2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
 3. Click the instrument you want to change.
 4. Click **Change Instrument** in the action bar to open the instrument picker.

 5. Select the percussion instrument you want in the instrument picker.
 6. Press **Return** to change to the selected instrument.
 7. Click **Close**.
-

RESULT

The instrument is changed to the one selected in the instrument picker. Any music input for the previous instrument is retained.

NOTE

Playing techniques expressed using playing technique-specific noteheads are not retained.

Defining percussion kits as drum sets

You can define individual percussion kits as drum sets. Drum sets follow your project-wide setting for voicing in drum sets with five-line staff presentations.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit you want to define as a drum set.
 2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
 3. Activate **Drum set** in the top right of the dialog.
 4. Click **Apply**, then **Close**.
-

RESULT

The selected percussion kit is defined as a drum set. The arrangement of voices for instruments in the kit when using the five-line staff presentation type follows your project-wide setting on the **Percussion** page in **Write > Notation Options**.

NOTE

If you no longer want a percussion kit to be defined as a drum set, you can deactivate **Drum set** in the **Edit Percussion Kit** dialog for that kit.

RELATED LINKS

[Notation Options dialog](#) on page 139

[Percussion Instrument Playing Techniques dialog](#) on page 1027

Creating groups of instruments within grid presentation percussion kits

You can create groups of instruments within percussion kits that use the grid presentation type in order to have a better overview of the instruments in the kit.

In grid presentation percussion kits, the name of each individual instrument is shown in the staff label. You can simplify the staff label of grid presentation percussion kits by creating groups, for example, to show Wood Blocks instead of Wood Block (High), Wood Block (Medium), and Wood Block (Low).

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to create groups in the grid presentation.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Click the first instrument you want to include in the group.
5. **Shift**-click the last instrument you want to include in the group.

NOTE

You can only include adjacent instruments in groups.

6. Click **Add**.



RESULT

A group is created containing the selected instruments. The group is given a default name that you can change.

Renaming groups in grid presentation percussion kits

Group names are shown as instrument labels. You can change the names of groups in percussion kits using grid presentation.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to change the names of groups in the grid presentation.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Open the **Edit Percussion Grid Group Names** dialog in any of the following ways:
 - Double-click the group.
 - Click the group, then click **Edit**.



Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.

5. Enter the names you want to give the group in the corresponding fields in the **Edit Percussion Grid Group Names** dialog:
 - **Full Name**
 - **Short Name**
 6. Click **OK** to save your changes and close the dialog.
-



RESULT

The name of the group is changed. This also changes the staff label for the group.


NOTE

Staff labels for groups in grid presentation percussion kits use a different paragraph style to the staff labels for non-grouped instruments in grid presentation percussion kits.

EXAMPLE

Ride Cymbal —
Hi-hat —
Wood Block 1 —
Wood Block 2 
Wood Block 3 
Tom 1 —
Tom 2 —
Kick Drum —

Ungrouped grid presentation percussion kit

Ride Cymbal —
Hi-hat —
Wood blocks 
Tom 1 —
Tom 2 —
Kick Drum —

Grid presentation percussion kit with wood blocks grouped

RELATED LINKS

[Staff labels for percussion kits](#) on page 904

Deleting groups within grid presentation percussion kits

You can delete groups in percussion kits using grid presentation, without deleting the instruments within the group.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit from whose grid presentation you want to delete groups.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click **Grid** at the top of the dialog.
4. Click the group you want to delete.
Groups are shown as colored blocks in the column to the left of the list of percussion kit instruments.
5. Click **Delete**.



RESULT

The group is deleted. The individual staff labels for each instrument in the group are restored.

Changing the positions of instruments within percussion kits

You can change the positions of instruments within percussion kits of all presentation types to change the order in which the instruments appear in the score and parts. In five-line staff presentation types, you can also change the staff position of slash voices.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit in which you want to change the positions of instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click the kit presentation type in which you want to change the order of instruments.
For example, click **Grid** to change the order of instruments when the kit uses the grid presentation type.
4. Click the percussion instruments and/or slash voices whose position you want to change.

NOTE

When using the mouse, you can only move one instrument or slash voice at a time.

5. Change the position of the selected instruments/slash voices in any of the following ways:
 - Click **Move** up arrow to move them upwards.
 - Click **Move** down arrow to move them downwards.
 - Click and drag a single instrument upwards/downwards (five-line staff presentation only).
 6. Optional: Repeat these steps for other instruments in the percussion kit, and for other kit presentation types for the same percussion kit.
 7. Click **Apply**, then **Close**.
-

RESULT

The positions of the selected instruments and/or slash voices within the kit is changed. Multiple instruments can share the same staff position, but we recommend that they use different noteheads so that the player can tell them apart.

RELATED LINKS

[Moving notes to different instruments in percussion kits](#) on page 1023

Changing the size of gaps between lines in percussion grids

You can change the size of gaps between lines in percussion kits using the grid presentation type.

PROCEDURE

1. In the **Players** panel, expand the card of the player in whose percussion kit you want to change the size of gaps in the grid presentation.
 2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
 3. Click **Grid** at the top of the dialog.
 4. Click the instruments below which you want to change the gap size.
 5. Change the value for **Gap**.
 6. Click **Apply**, then **Close**.
-

RESULT

The size of the gaps below the selected instruments is changed.

Removing individual instruments from percussion kits

You can remove individual instruments from percussion kits, for example, if you want to move an instrument from one percussion kit to another player.

PROCEDURE

1. In the **Players** panel, expand the card of the player holding the kit from which you want to remove instruments.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. Click the instruments you want to remove from the kit.
4. Click **Remove Instrument From Kit** in the action bar.



5. Click **Close**.
-

RESULT

The selected instruments appears as individual instruments belonging to the same player but separate from the percussion kit.

You can then move the instruments to other players if required.

RELATED LINKS

[Moving instruments between players](#) on page 107

Player groups

A group represents a collection of musicians that are considered together, such as a choir, orchestra, or chamber ensemble.

Grouping players together means they are positioned together in the score, numbered independently, and are bracketed together according to the ensemble type chosen on the **Brackets and Braces** page in **Engrave > Engraving Options**.

For example, if your project is for double choir (SATB/SATB), all voices are joined by a single bracket by default because they are in the same family. However, if you add each choir to its own group, they are bracketed separately. This is useful for to bracket players properly in works containing multiple groups, such as in Britten's "War Requiem", which has three distinct groups, or in Walton's "Belshazzar's Feast" which requires two separate off-stage brass groups.

Similarly, you can create a group for an off-stage group of players in a large-scale work.

If the instruments were not already next to each other according to orchestral order, adding a player group changes the order of players in the score project-wide.

RELATED LINKS

[Brackets according to ensemble type](#) on page 558

[Brackets according to project template categories](#) on page 60

Adding groups of players

You can organize players into groups, for example, if you want to bracket them together.

PREREQUISITE

The **Players** panel is open.

PROCEDURE

1. Optional: In the **Players** panel, select the players that you want to include in the group.
2. At the bottom of the **Players** panel, click **Add Group**.



RESULT

If you selected one or more players, they are added to the group. If no player was selected, an empty group is added to the **Players** panel.

RELATED LINKS

[Adding players to groups](#) on page 116

[Brackets and braces](#) on page 555

Renaming player groups

You can change the name of player groups after you have added them.

PROCEDURE

1. In the **Players** panel, double-click the name of the group.
 2. Enter a new name for the group or edit the existing name.
 3. Press **Return**.
-

Deleting player groups

You can delete groups of players, for example, if you no longer need a group of players that you created when importing a MIDI file. When deleting player groups, you can choose to keep the players within the group or delete them as well.

PROCEDURE

1. In the **Players** panel, select the group that you want to delete.
 2. Press **Backspace** or **Delete**.
 3. Choose one of the following options in the warning message that opens:
 - **Keep Players:** Deletes the group but keeps the players.
 - **Delete Players:** Deletes the group and the players it contains.
-

Adding players to groups

You can add existing or new players to player groups.

PREREQUISITE

You have added at least one player, one ensemble, or one group.

PROCEDURE

- In the **Players** panel, do one of the following:
 - Select one or more players and click **Add Group**.
 - Select a group, and click **Add Solo Player**, **Add Section Player**, or **Add Ensemble**.
-

RESULT

If you clicked **Add Group**, a new group is added for the selected players.

If you clicked **Add Solo Player**, **Add Section Player** or **Add Ensemble**, a new player or ensemble is added to the selected group.

RELATED LINKS

[Adding solo/section players](#) on page 95

Moving players between groups

You can move players from one group to another.

PROCEDURE

1. In the **Players** panel, select the players that you want to move to another group.
2. Click and drag the selected players to the position you want in the other group.
An insertion line indicates where the players will be positioned.

RESULT

The players are moved to the other group.

Removing players from groups

You can remove players from groups.

PROCEDURE

- In the **Players** panel, remove players from groups in any of the following ways:
 - Click and drag multiple selected players out of the group and release the mouse button.
 - Right-click a single player and choose **Remove Player from Group** from the context menu.

NOTE

You can only remove a single player from a group at a time when using the context menu.

RESULT

The players are removed from their groups but remain in the project as individual players.

Flows

Flows are separate spans of music within your project, for example, movements or songs.

Every project contains at least one flow, and by default, every layout includes the music from every flow in your project. If you create a new flow in Dorico Pro, the following happens:

- All music that you write for the new flow is automatically included in the existing full score and instrumental part layouts. You can exclude any flow from any layout by deactivating the respective flow card.
- All players are assigned to the new flow. You can exclude players from the flow by deactivating the respective player card.

IMPORTANT

If you exclude a player from a flow, any notes that you have already input for that player in that flow are deleted.

You can change certain options in each flow independently in the **Notation Options** dialog.

RELATED LINKS

[Flows panel](#) on page 89

[Notation Options dialog](#) on page 139

[Players](#) on page 94
[Layouts](#) on page 120
[Changing the players assigned to flows](#) on page 118
[Changing the flows assigned to layouts](#) on page 122
[Importing flows](#) on page 63
[Exporting flows](#) on page 64

Adding flows

If you need more than one flow in your project, you can add new flows.

PROCEDURE

1. In the **Flows** panel, click **Add Flow**.



2. Optional: Repeat for as many flows as you require.
-

RESULT

A new flow is added to your project each time you click **Add Flow**. All existing players are assigned to new flows, and new flows are automatically added to all existing full score and part layouts.

RELATED LINKS

[Importing flows](#) on page 63

Changing the players assigned to flows

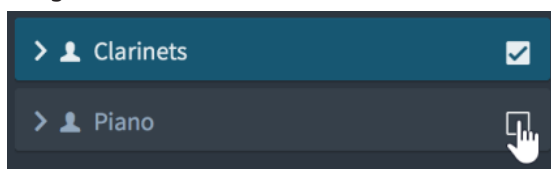
By default, all players in your project are added to all flows that originated in the project. You can assign players to and remove players from flows manually, for example, if the soloists in a choral work do not sing for an entire flow.

NOTE

If you remove a player from a flow, any notes you have already input for that player in that flow are deleted.

PROCEDURE

1. In the **Flows** panel, select the flow whose assigned players you want to change.
2. In the **Players** panel, activate the checkbox in the player card of each player you want to assign to the flow.



TIP

You can **Shift**-click to activate/deactivate the checkboxes in multiple player cards at once.

3. Optional: Repeat steps 1 and 2 for other flows whose assigned players you want to change.
-

RESULT

Players are assigned to the selected flow when the checkbox in their player card is activated, and removed from the flow when the checkbox is deactivated.

RELATED LINKS

[Players](#) on page 94

[Layouts](#) on page 120

[Tacets](#) on page 352

[Changing the flows assigned to layouts](#) on page 122

[Changing the players assigned to layouts](#) on page 121

Flow names and flow titles

Whenever you add a flow to a project, the default name of a flow is **Flow** plus an incremental number. You can rename flows in the **Project Info** dialog and in the **Flows** panel in Setup mode.

When you enter names for flows in the **Flows** panel in Setup mode, those names are automatically added in the **Title** field for the appropriate flow in the **Project Info** dialog. If you change the name in the **Flows** panel again later, the flow title is updated in the **Project Info** dialog.

Titles shown in scores and parts in the music area are linked to the **Title** field for each flow in the **Project Info** dialog.

This link is maintained until you change the names of flows in the **Project Info** dialog. Once you change flow titles in the **Project Info** dialog, changing flow names in the **Flows** panel no longer updates the **Title** field for that flow in the **Project Info** dialog.

This allows you to organize flows in Setup mode with different names to their official title.

RELATED LINKS

[Project Info dialog](#) on page 90

[Text tokens](#) on page 332

Renaming flows in Setup mode

You can change the names of flows in Setup mode. This automatically updates the title of the corresponding flow until you change the title in the **Project Info** dialog.

PROCEDURE

1. In the **Flows** panel, double-click the card of the flow you want to rename to open the flow name text field.
2. Enter a new name for the flow or edit the existing name.
3. Press **Return**.

RESULT

The name of the flow is changed. If you have not entered a different title for the flow in the **Project Info** dialog, the title shown in the music area is updated to match the new flow name.

Changing flow titles in the Project Info dialog

You can change flow titles in the **Project Info** dialog. Once you have done so, flow titles are no longer changed if you change their name in the **Flows** panel in Setup mode.

PROCEDURE

1. Choose **File > Project Info** to open the **Project Info** dialog.

2. Select the flow whose title you want to change from the menu. Alternatively, use the arrow buttons beside the menu to choose the flow.
 3. Enter the new title you want in the **Title** field.
 4. Optional: Repeat steps 2 and 3 for other flows in your project.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The titles of the selected flows are changed to what you entered.

NOTE

This breaks the link between flow names in the **Flows** panel in Setup mode and the title shown in the music area.

Deleting flows

You can delete flows that you no longer need. This deletes all music for all instruments belonging to all players in the flows.

PROCEDURE

1. In the **Flows** panel, select the flows you want to delete.
 2. Press **Backspace** or **Delete**.
-

Layouts

Layouts allow you to present the music in your project differently for different purposes. For example, part layouts only include the music that player needs to play whereas full score layouts contain all staves in the project.

Dorico Pro provides the following layout types:

Full score

A full score layout includes by default all players and all flows in your project. You can remove players and flows that you do not need. Full score layouts are concert pitch by default.

Instrumental part

An instrumental part layout is automatically created when you add a player to your project. You can add further players to the instrumental part layout. You can also create empty instrumental part layouts and add players.

By default, instrumental part layouts contain all flows but you can exclude flows that you do not need. They are also transposed pitch by default.

Custom score

A custom score layout initially does not contain any players or flows. This allows you to create your score manually and to add, for example, only one flow instead of all flows or only vocal and piano staves to create a condensed score for the chorus. Custom score layouts are concert pitch by default.

RELATED LINKS

[Page layouts](#) on page 342

[Flows](#) on page 117

[Players](#) on page 94

[Changing the flows assigned to layouts](#) on page 122

[Changing the players assigned to layouts on page 121](#)

Creating layouts

You can create multiple layouts for full scores and instrumental parts. You can also create multiple custom score layouts.

PROCEDURE

- At the bottom of the **Layouts** panel, click one of the following layout types:

- **Add Full Score Layout**



- **Add Instrumental Part Layout**



- **Add Custom Score Layout**



RESULT

The layout is added to the list of layouts in the **Layouts** panel.

AFTER COMPLETING THIS TASK

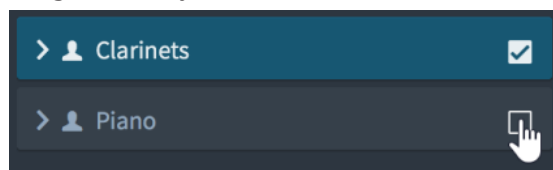
You can assign players and flows to your layout.

Changing the players assigned to layouts

By default, all players are included in full score layouts and each player is automatically assigned its own part layout. You can assign players to and exclude players from layouts manually, for example, if you want to remove unnecessary players from the full score, or you want to add the soloists' music to the part for the accompanist.

PROCEDURE

1. In the **Layouts** panel, select the layout whose assigned players you want to change.
2. In the **Players** panel, activate the checkbox in the player card of each player you want to assign to the layout.



TIP

You can **Shift**-click to activate/deactivate the checkboxes in multiple player cards at once.

3. Optional: Repeat steps 1 and 2 for any other layouts whose assigned players you want to change.

RESULT

Players are assigned to the selected layout when the checkbox in their player card is activated, and removed from the layout when the checkbox is deactivated. If you have not changed the name of the layout, it is automatically updated to reflect the players included in the layout.

RELATED LINKS

[Player, layout, and instrument names](#) on page 96

[Changing layout names](#) on page 100

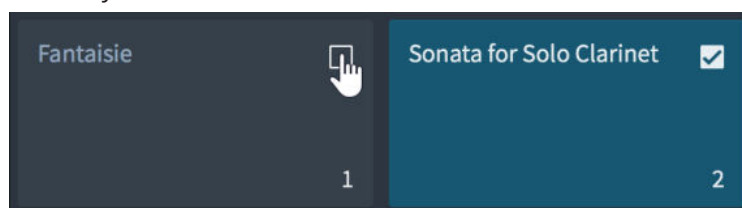
[Changing the players assigned to flows](#) on page 118

Changing the flows assigned to layouts

By default, all flows in your project are added to all layouts. You can exclude flows that you do not want to show in a layout. You can assign flows to and remove flows from layouts manually, for example, if a flow in your project contains specific performance instructions for strings that you want to show in string part layouts but not in other part layouts.

PROCEDURE

1. In the **Layouts** panel, select the layout whose assigned flows you want to change.
2. In the **Flows** panel, activate the checkbox in the flow card of each flow you want to assign to the layout.



TIP

You can **Shift**-click to activate/deactivate the checkboxes in multiple flow cards at once.

3. Optional: Repeat steps 1 and 2 for other layouts whose assigned flows you want to change.

RESULT

Flows are assigned to the selected layout when the checkbox in their flow card is activated, and removed from the layout when the checkbox is deactivated.

RELATED LINKS

[Changing the players assigned to flows](#) on page 118

Renaming layouts

You can change the name of layouts.

If you add an instrumental part layout to project, its default name is **Empty part**. The default names of full score and custom score layouts are **Full score** and **Custom score**. If you add several layouts, an incremental number is added to the default names.

PROCEDURE

1. In the **Layouts** panel, open the layout name text field in any of the following ways:
 - Double-click the name of the layout.
 - Right-click the name of the layout and choose **Rename** from the context menu.
 2. Enter the new name for the layout or edit the existing name.
 3. Press **Return**.
-

RELATED LINKS

[Instrument numbering](#) on page 103

Making layouts transposing/concert pitch

You can change whether each layout in your project is transposing or concert pitch. In Dorico Pro, full score layouts are concert pitch and part layouts are transposing by default.

For example, full scores are often concert pitch, to show notes at their sounding pitch, but part layouts are transposing so the player can read the notes they must play in order to achieve the desired sounding pitch.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts you want to make transposing/non-transposing. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Players** section, activate/deactivate **Transposing layout**.
5. Click **Apply**, then **Close**.

RESULT

The selected layouts are transposed pitch when **Transposing layout** is activated, and concert pitch when it is deactivated.

TIP

You can also make layouts transposing by choosing **Edit > Transposed Pitch**, and concert pitch by choosing **Edit > Concert Pitch**. This automatically updates the layout option but only for the layout currently open in the music area.

RELATED LINKS

[Transposing chord symbols](#) on page 573

[Setting different clefs for concert/transposed pitch](#) on page 584

Concert vs. transposed pitch

Layouts in Dorico Pro can use concert or transposed pitch. This affects the pitches and key signatures on staves belonging to transposing instruments.

When music is in concert pitch, all notes are written as they sound. This means that players with transposing instruments reading music in concert pitch must transpose the music themselves. For example, if a clarinet in $B\flat$ reads a C in concert pitch, they must play the note D on their instrument to produce the sounding note C.

When music is in transposed pitch, the notes written are the ones each instrument must play in order to produce the desired sounding pitch. For example, if a clarinet in $B\flat$ reads a D in transposed pitch, the pitch that sounds from the instrument is C.

Transposing scores and parts also transpose key signatures according to the transposition of the instrument.

RELATED LINKS

[Transposing instruments](#) on page 104

[Transposing key signatures alongside selections](#) on page 687

[Enharmonic equivalent key signatures](#) on page 688

[Setting different clefs for concert/transposed pitch](#) on page 584

Sorting layouts

You can change the order in which layouts appear in the **Layouts** panel and the layout selector, for example, if you added a custom score layout and want it to be positioned at the top next to the full score layout.

PROCEDURE

1. In the **Layouts** panel, click and drag a layout card to a different position.
An insertion line indicates where the layouts will be positioned.
2. Release the mouse button.

RESULT

The layout is inserted at the selected position.

Renumbering layouts

You can renumber all the layouts in their project according to their current position in the **Layouts** panel in Setup mode, for example, after you have dragged layouts to different positions.

PROCEDURE

- In the **Layouts** panel, right-click any layout card and choose **Renumber Layouts** from the context menu.

RESULT

All layouts are renumbered according to their current position in the panel. Full score layouts, custom score layouts, and part layouts are all numbered separately.

RELATED LINKS

[Layouts panel \(Setup mode\)](#) on page 86

Deleting layouts

You can delete any layout from the project, for example, if you only want to use a combined Violin I and II part, you can delete their separate parts.

PROCEDURE

1. In the **Layouts** panel, select the layouts that you want to delete.
2. Press **Backspace** or **Delete**.

Restoring default layouts

You can recreate all the part layouts that Dorico Pro provides by default, for example, if you accidentally deleted some part layouts.

PROCEDURE

- Choose **Setup > Create Default Part Layouts**.

RESULT

The default set of part layouts is restored, recreating a single part layout for each player that contains all flows in the project. Any part layouts that were recreated are added at the bottom of the **Layouts** list.

Videos

Dorico Pro supports the use of videos within the program as well as the associated notations, such as markers and timecodes, and allows you to find appropriate tempos based on where important markers occur.

Videos are a fast sequence of images that create the impression of a moving image. They can be any length, from only a few seconds up to several hours for feature-length films.

Videos in Dorico Pro are shown in a separate **Video** window and play back in sync with the music. Any existing audio in the video is also played back, and you can control the volume of this audio independently of the volume of the music.

TIP

You can use these features, including setting a project frame rate, without having a video attached.

RELATED LINKS

- [Adding videos](#) on page 127
- [Frame rates](#) on page 129
- [Changing the project frame rate](#) on page 130
- [Timecodes](#) on page 819
- [Markers](#) on page 814
- [Changing the volume of video audio](#) on page 129

Supported video formats

Dorico Pro uses the same video engine that was introduced in Cubase and Nuendo in 2017. It supports the most commonly-used video formats.

The following video formats are supported:

- MOV: Including H263, H264, Apple ProRes, DV/DVCPRO and Avid DNxHR codecs
- MP4: Including H263 and H264
- AVI: Including DV/DVCPRO and MJPEG/PhotoJPEG

All the common frame rates, such as 23.976, 24, 24.975, 25, 29.97, and 30 frames per second, are fully supported in Dorico Pro.

NOTE

- Videos with variable frame rates are not supported.
 - Support for more formats is planned for future versions.
-

You can consult the Steinberg support site for more information about the supported formats as well as how to identify and change video formats.

RELATED LINKS

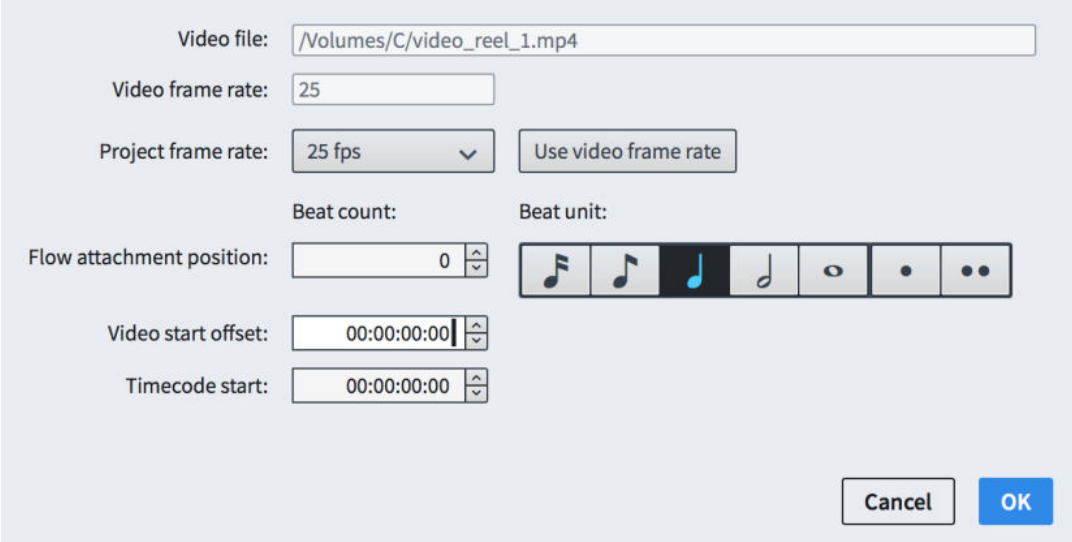
- [Frame rates](#) on page 129

Video Properties dialog

The **Video Properties** dialog allows you to change video-related settings, including their frame rate and start position.

- You can open the **Video Properties** dialog in Setup mode by right-clicking a flow in the **Flows** panel and choosing **Video > Properties** from the context menu.

The dialog also opens automatically when you add a new video.



Video Properties dialog

The **Video Properties** dialog contains the following fields and options:

Video file

Shows the location of the video file on your computer. This field is read-only.

Video frame rate

Shows the frame rate of the video file. This field is read-only.

Project frame rate

Allows you to select a frame rate for your project from the menu. You can only have a single frame rate across the project.

Use video frame rate

Sets the project frame rate to be the same as the video file.

Flow attachment position

Allows you to set the rhythmic position at which the video attaches. This is set using the **Beat count** and **Beat unit** settings in combination, such as eight dotted quarter notes.

Video start offset

Allows you to set a position within the video that syncs with the flow attachment position, for example, you can set the fifth second of the video to attach to the start of the third bar.

Timecode start

Allows you to set the timecode at the start of the video. This also affects the timecode of the flow, but the initial timecode of the flow adjusts to accommodate the video. For example, if the initial timecode of the video is 02:00:00:00 but the video does not start until the start of the third bar in 4/4, the initial timecode of the flow is

eight beats of time less than 02:00:00:00; if the tempo is 60 bpm, this makes the initial flow timecode 01:59:52:00.

NOTE

Flow timecodes are shown in their flow cards in the **Flows** panel.

RELATED LINKS

[Timecodes](#) on page 819

[Flows panel](#) on page 89

Adding videos

You can add a video to each flow in your project. You can also follow these steps to reload videos previously added to the project that Dorico Pro can no longer locate.

Flows with missing videos show a triangle warning icon instead of the video icon in the flow card in the **Flows** panel. This can happen if you send a project to someone else without the video file.

PREREQUISITE

You have added at least one player to the project.

PROCEDURE

1. In the **Flows** panel, right-click the flow to which you want to add/reload a video.
 2. Choose **Video > Attach** from the context menu to open the File Explorer/macOS Finder.
 3. In the File Explorer/macOS Finder, locate and select the video file you want to add.
 4. Click **Open** to open the **Video Properties** dialog.
 5. In the **Video Properties** dialog, change the options as appropriate for your project.
 6. Click **OK** to save your changes and close the dialog.
-

RESULT

The selected video file is added to the flow and is shown in the **Video** window. A video reel icon appears in the flow card in the **Flows** panel, beside a timecode indicating the combination of the **Video start offset** and **Timecode start**.

If you reloaded a video, all your previous settings are retained.

RELATED LINKS

[Timecodes](#) on page 819

[Changing the initial timecode value](#) on page 820

Changing the start position of videos

You can change both the rhythmic position in the music at which videos start, and the position in the video that coincides with that rhythmic position, for example, if you want the fifth second of a video to sync with the start of the third bar of music.

PROCEDURE

1. In Setup mode, open the **Video Properties** dialog in one of the following ways:
 - Add a video to a flow.
 - In the **Flows** panel, right-click a flow and choose **Video > Properties** from the context menu.

2. In the **Video Properties** dialog, change the values for **Flow attachment position** and/or **Video start offset**.
 3. Click **OK** to save your changes and close the dialog.
-

RESULT

Changing the value for **Flow attachment position** changes the rhythmic position in the music at which the video starts.

Changing the value for **Video start offset** changes the position in the video that occurs at the **Flow attachment position**.

For example, if you change the **Video start offset** to 00:00:05:00 and the **Flow attachment position** to 8, then the fifth second in the video happens on the eighth beat in the music.

NOTE

- The initial rhythmic position is 0. Therefore, if the **Flow attachment position** is set to 8 and the time signature is 4/4, the flow attachment occurs on the first beat in the third bar.
 - Changing the **Video start offset** changes what part of the video coincides with the **Flow attachment position**, but this does not cut the video before this point. Any preceding video material is shown as long as it happens within the flow.
-

RELATED LINKS


[Timecodes](#) on page 819

[Changing the initial timecode value](#) on page 820

Hiding/Showing the Video window

You can hide and show the **Video** window at any time and in any mode, for example, if you do not want it in view when working on the music in the music area.

PROCEDURE

- Hide/Show the **Video** window in any of the following ways:
 - Press **F4**.
 - In the toolbar, click **Show Video**.

 - Choose **Window > Video**.
-

RESULT

The **Video** window is hidden/shown. It is shown when a tick appears beside **Video** in the **Window** menu, and hidden when no tick appears.

RELATED LINKS

[Toolbar](#) on page 34

Changing the size of the Video window

You can change the size of the **Video** window at any time.

PREREQUISITE

The **Video** window is shown.

PROCEDURE

- Change the size of the **Video** window in any of the following ways:
 - Click and drag the corners/edges in any direction.
 - **Shift**-click and drag a corner/edge to change the size without changing the shape.
-

RESULT

The size of the **Video** window is changed. Dorico Pro saves the new size and shape and uses this for all projects until you change the size again.

Removing videos

You can remove videos from each flow independently.

PROCEDURE

- In the **Flows** panel, right-click the flow from which you want to remove a video and choose **Video > Detach** from the context menu.
-

RESULT

The video is removed from the selected flow.

Changing the volume of video audio

Any audio that is part of a video you have added is played back in sync with the music in the project. You can change the video volume manually.

PREREQUISITE

The Mixer window is shown.

PROCEDURE

1. Optional: If the **Video** channel is not shown in the Mixer window, click **Video** in the Mixer toolbar.
 2. Change the **Video** channel volume in any of the following ways:
 - Click and drag the **Video** channel fader upwards/downwards.
 - Click **Mute** at the top of the **Video** channel.
-

RESULT

The volume of audio from videos in your project is changed. If you clicked **Mute**, no audio from videos sounds in playback.

RELATED LINKS

[Hiding/Showing the Mixer window](#) on page 445

Frame rates

The frame rate of a video is the number of still images that are used per unit of time in order to create the impression of a moving image, commonly measured in frames per second, or “fps”.

The number of frames per second required to create the impression of a moving image is determined by how fast the human eye processes movement, and so the most common frame rate is around 24 fps. However, recent major films have been released at 48 fps, which results in sharper images.

Dorico Pro supports frame rates from 23.976 fps to 60 fps, for example, the US and Canadian broadcast standard NTSC, which is used in, uses 29.97 fps.

Frame rates are closely linked to timecodes, as timecodes include both the time and the current frame position.

All the common frame rates, such as 23.976, 24, 24.975, 25, 29.97, and 30 frames per second, are fully supported in Dorico Pro.

By default, Dorico Pro uses the same frame rate for the project as the video file, but you can manually choose a different frame rate.

RELATED LINKS

[Timecodes](#) on page 819

Changing the project frame rate

By default, Dorico Pro uses the video frame rate as the project frame rate. You can change the project frame rate if you want it to be different, for example, if your project contains multiple videos with different frame rates.

TIP

You can change the frame rate even if there are no videos in the project.

PROCEDURE

1. In Setup mode, open the **Video Properties** dialog in one of the following ways:
 - Add a video to a flow.
 - In the **Flows** panel, right-click a flow and choose **Video > Properties** from the context menu.
 2. In the **Video Properties** dialog, select the frame rate you want to use for the project from the **Project frame rate** menu.
 3. Click **OK** to save your changes and close the dialog.
-

RESULT

The project frame rate is changed.

Write mode

In Write mode, you can create your music. You can input notes and notations into your project, make changes to existing music, and delete notes and notations.

Project window in Write mode

The project window in Write mode contains the default toolbar, the music area, and the status bar. It provides toolboxes and panels with the tools and functions required to write your music.

You can switch to Write mode in any of the following ways:

- Press **Ctrl/Cmd-2**.
- Click **Write** in the toolbar.
- Choose **Window > Write**.



Toolboxes and panels in Write mode

The following panels and toolboxes are available in Write mode:

- 1 Notes toolbox**
Contains tools that affect note input.
- 2 Notes panel**

Contains the note durations, accidentals, and articulations that are most commonly used during note input.

3 Notations panel

Contains notation items that you can add to your music, such as dynamics and playing techniques, divided into separate categories. Your current selection in the Notations toolbox determines which notation items are shown.

4 Notations toolbox

Allows you to determine which notation items are shown in the Notations panel, and to input certain items directly, such as rehearsal marks, chord symbols, and fingerings.

5 Properties panel

Contains properties that allow you to make individual modifications to the currently selected notes and notations, independently of your project-wide settings.

NOTE

Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts. However, you can copy property changes to other layouts.

RELATED LINKS

[Copying property settings to other layouts](#) on page 363

Notes toolbox

The tools in the Notes toolbox allow you to modify notes and change the type of notes you input. The Notes toolbox is located on the left of the window in Write mode.

Dotted Notes



During step input, this inputs dotted notes, rests, or chords based on the currently selected duration. When editing existing notes, you can use this tool to add/remove rhythm dots from existing notes, rests, and chords.

You can also activate/deactivate **Dotted Notes** by pressing **.** (period). You can increase the number of dots on notes by pressing **Alt-.** (period).

Rests



When this option is activated, you input rests of the currently selected duration instead of notes.

You can also start/stop rest input by pressing **,** (comma).

Chords



When this option is activated, you add multiple notes at the same rhythmic position in order to build a chord. This function prevents the caret from advancing automatically after inputting a note.

You can also start/stop chord input by pressing **Q**.

Tuplets



Clicking this option inputs a triplet bracket and the respective number of rests at the specified rhythmic position. If the notes are beamed, no brackets are used.

You can input other types of tuplet, such as quintuplets, by using the tuplets popover.

Grace Notes



When this option is activated, you input grace notes at the current rhythmic position instead of normal notes.

You can also start/stop grace note input by pressing **/**.

Insert



When this option is activated, the notes you input are inserted before existing music ahead of the caret instead of overwriting it. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes.

You can also activate/deactivate Insert mode by pressing **I**.

Lock to Duration



When this option is activated, the durations of existing notes are used as you input notes. This allows you to maintain the duration of notes while you change their pitches.

You can also activate/deactivate **Lock to Duration** by pressing **L**.

Force Duration



When this option is activated, Dorico Pro always inputs notes/rests with the explicit duration you have selected. For example, you can activate **Force Duration** to force the input of a dotted quarter note on the second quarter beat of 4/4, where Dorico Pro splits the note with a tie by default.

IMPORTANT

You can get unexpected results if you force the duration of notes and later change the time signature or move barlines, for example.

If you activated **Force Duration** during input, you can remove the restrictions on how Dorico Pro notates the music by selecting the affected passage of music and selecting **Edit > Reset Appearance**.

You can also activate/deactivate **Force Duration** by pressing **O**.

Tie



During step input, this ties the note to be input to the previous note of the same pitch. When editing existing notes, you can use this tool to tie together notes of the same pitch in different voices or to tie grace notes to rhythmic notes.

You can also activate **Tie** by pressing **T**.

NOTE

You cannot deactivate **Tie**. If you want to delete ties, you must use **Scissors**.

Scissors



During step input, this splits notes, chords, and explicit rests in two at the caret position. When editing existing notes, it deletes all ties in tie chains.

You can also activate **Scissors** by pressing **U**.

Select



Activates/Deactivates mouse input. When mouse input is deactivated, you cannot input notes by clicking on the staff.

RELATED LINKS

[Inputting notes with rhythm dots](#) on page 152

[Inputting chords](#) on page 167

[Inputting triplets](#) on page 169

[Inputting grace notes](#) on page 167

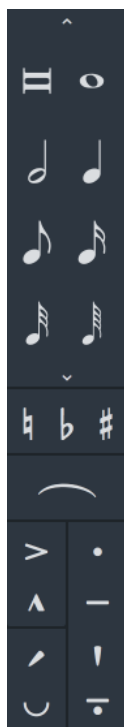
[Activating/Deactivating mouse input](#) on page 151

Notes panel

The Notes panel contains buttons that allow you to select note and rest durations, and to input accidentals, slurs, and articulations. It is located on the left of the window in Write mode.

You can hide/show the Notes panel in any of the following ways:

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window > Show Left Panel**.



The upper part of the Notes panel contains note durations that you can select for input or to change the duration of existing notes. By default, only the most common note durations are shown. You can see all note durations by clicking the **Show/Hide All Notes** disclosure arrows at the top and bottom of the section.

In the middle part of the Notes panel, you can activate/deactivate accidentals and activate slurs. However, you cannot deactivate slurs, you must delete them.

In the bottom part of the Notes panel, you can activate/deactivate articulations.

RELATED LINKS

- [Inputting notes](#) on page 149
- [Inputting accidentals](#) on page 162
- [Inputting articulations](#) on page 182
- [Inputting slurs](#) on page 265

Properties panel (Write mode)

The Properties panel in Write mode contains quick access properties that allow you to change notes and notations, both during note input and by changing existing notes. It is located at the bottom of the window in Write mode.

The Properties panel contains a group of properties for each notation item. When you select a note or item in the music area, the Properties panel displays the groups and options that you might require to edit the selected note or item.

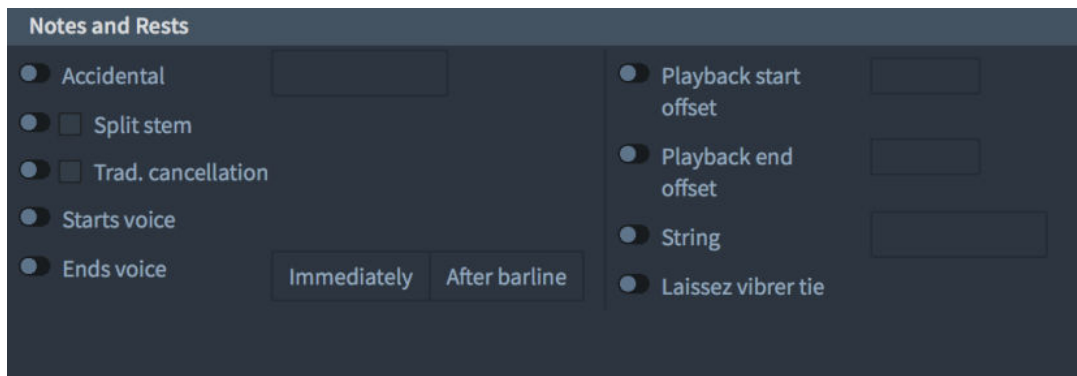
NOTE

- If you select multiple different types of notation items, only the groups that they have in common are displayed. For example, if you select a slur, the **Common** and **Slurs** groups are displayed in the Properties panel. However, if you select a slur and a note, only the **Common** group is displayed.
- Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts. However, you can copy property changes to other layouts.

- If you need to change individual parts of notations, for example, the curvature direction of a single tie within a tie chain, switch to Engrave mode.

You can hide/show the Properties panel in Write mode and Engrave mode in any of the following ways:

- Press **Ctrl/Cmd-8**.
- Click the disclosure arrow at the bottom of the main window.
- Choose **Window > Show Bottom Panel**.



Notes and Rests group of the Properties panel in Write mode

Changing the properties of individual notes and items

You can change the properties of individual notes and notations independently of your project-wide settings, for example, if you want crescendos to appear as hairpins by default but require a single crescendo to appear as text.

NOTE

In Write mode, you can only change the properties of complete notes and notations. For example, if a pedal line extends across multiple systems, you cannot change its line style on one system but keep the original line style on another system. In Engrave mode, you can change individual parts of notes and notations separately.

PROCEDURE

1. Select a note or notation item in the music area.
2. Optional: If the Properties panel is hidden, show it in any of the following ways:
 - Press **Ctrl/Cmd-8**.
 - Click the disclosure arrow at the bottom of the window.
 - Choose **Window > Show Bottom Panel**.
3. In the Properties panel, change the properties you want.

RESULT

The complete note or notation item is changed. The changes are immediately displayed in the music area.

NOTE

- Many properties are layout-specific. For example, if you change the placement of an item relative to the staff in a full score layout, this does not affect the placement of the item in the corresponding part layout. However, you can copy property settings to other layouts.

- You can change the default settings for how notes are notated in each flow independently, such as the default note and beam grouping in different meters, in **Write > Notation Options**.
 - You can change the default appearance and position of all notes and notations project-wide in **Engrave > Engraving Options**.
-

RELATED LINKS

[Notation Options dialog](#) on page 139

[Engraving Options dialog](#) on page 299

[Copying property settings to other layouts](#) on page 363

[Resetting the appearance of items](#) on page 281

[Resetting the position of items](#) on page 281

Notations toolbox

The options in the Notations toolbox allow you to determine what notation items are available in the Notations panel. The Notations toolbox is located on the right of the window in Write mode.

Clefs



Hides/Shows the Clefs panel, which contains sections for the different clefs and octave lines that you can input.

Key Signatures, Tonality Systems, and Accidentals



Hides/Shows the Key Signatures, Tonality Systems, and Accidentals panel, which contains sections for the different key signatures, tonality systems, and accidentals that you can input. You can also create and edit custom tonality systems from this panel.

Time Signatures (Meter)



Hides/Shows the Time Signatures (Meter) panel, which contains sections for the different types of time signatures that you can input, including a section where you can create custom time signatures, such as interchangeable time signatures and time signatures with pick-up bars.

Tempo



Hides/Shows the Tempo panel, which contains sections for the different types of tempo changes that you can input, including gradual tempo changes, metronome marks, and tempo equations.

Dynamics



Hides/Shows the Dynamics panel, which contains sections for the different dynamics that you can input, including immediate, gradual, and custom combined dynamics.

Ornaments



Hides/Shows the Ornaments panel, which contains sections for the different ornaments and glissando lines that you can input.

Repeat Structures



Hides/Shows the Repeat Structures panel, which contains sections for the different types of repeat structures, including repeat endings and segments, repeat markers, single-note and multi-note tremolos, bar repeats, and slash regions.

Bars and Barlines



Hides/Shows the Bars and Barlines panel, which allows you to insert bars and to input the different types of barlines.

Holds and Pauses



Hides/Shows the Holds and Pauses panel, which contains sections for the different types of fermatas, breath marks, and caesuras that you can input.

Playing Techniques



Hides/Shows the Playing Techniques panel, which contains sections for the various instrument family groups. Each section contains playing techniques for the corresponding instrument family.

Cues



Hides/Shows the Cues panel, which allows you to find suitable places for cues and input cues.

Video



Hides/Shows the Video panel, which allows you to open the **Video Properties** dialog and to view and edit markers in the current flow.

Rehearsal Marks



Inserts a rehearsal mark at the selected rhythmic position.

Text



Opens the text editor which allows you to insert text at the selected rhythmic position.

Lyrics



Opens the lyrics popover above the selected note on the staff, which allows you to input lyrics.

Chord Symbols



Opens the chord symbols popover above the selected note on the staff, which allows you to input chord symbols.

Fingerings



Opens the fingerings popover above the selected note on the staff, which allows you to input fingerings.

RELATED LINKS

[Notations input](#) on page 182

[Text editor options in Write mode](#) on page 266

[Video Properties dialog](#) on page 126

Notations panel

The Notations panel contains different notation items for your music depending on your selection in the Notations toolbox. The Notations panel is located on the right of the window in Write mode.

You can hide/show the Notations panel at any time, for example, if you want to find a notation to input but then want to increase the size of the music area after inputting it.

RELATED LINKS

[Hiding/Showing panels](#) on page 18

Notation Options dialog

The **Notation Options** dialog provides multiple options that allow you to make changes that affect the way music is notated for each flow by default.

The changes that you can make affect the following:

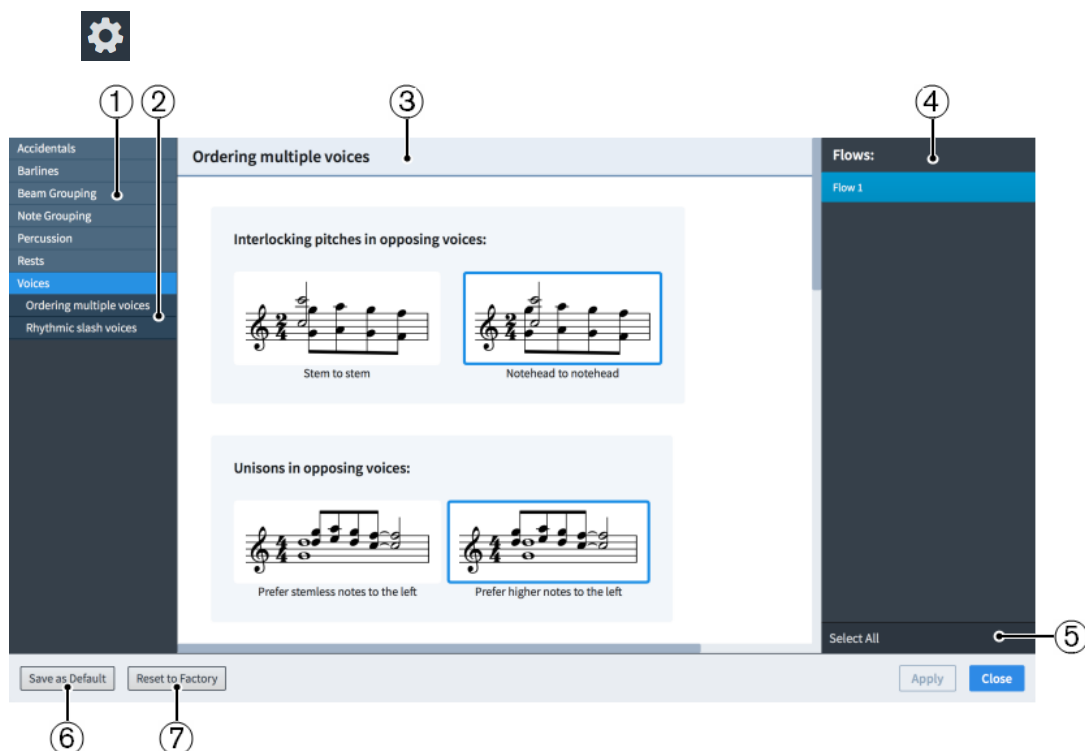
- Note and rest grouping, such as the handling of syncopated rhythms or of different rhythms in different time signatures
- Voices, such as the sharing of noteheads among voices or the order in which multiple voices are tucked together
- Accidentals, such as the handling of cautionary accidentals
- Transposition, such as the handling of key signatures in transposing instruments
- Percussion kits, such as the handling of multiple voices in a single percussion kit

TIP

If you want to make direct changes to notes and notations, you can use the different options in the Properties panel.

You can open **Notation Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write > Notation Options** in Write mode or **Setup > Notation Options** in Setup mode.
- Click **Notation Options** in the **Flows** panel in Setup mode.



Notation Options

The **Notation Options** dialog contains the following:

1 Page list

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 Section titles

Shows the titles of any sections on the selected page. You can click these section titles to navigate directly to that section of the page.

3 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the current setting is highlighted.

4 Flows list

Contains all the flows in your project. You can select one, multiple, or all flows. You can select multiple flows in any of the following ways:

- Click **Select All** in the action bar to select all flows in the project.
- **Ctrl/Cmd-click** to select multiple flows.
- **Shift-click** to select multiple adjacent flows.

5 Select All

Allows you to select all flows in the **Flows** list.

6 Save as Default/Remove Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- **Save as Default** saves all options currently set in the dialog as the default for new projects.
- **Remove Saved Defaults** deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all future projects

start with the default factory settings. If you have existing saved defaults, you can access **Remove Saved Defaults** by pressing **Alt** (macOS)/**Ctrl** (Windows).

7 **Reset to Factory/Reset to Saved Defaults**

This button has different functions depending on whether you have existing saved defaults.

- If you have no saved defaults, **Reset to Factory** resets all the options in the dialog back to the default factory settings.
- If you have existing saved defaults, **Reset to Saved Defaults** resets all the options in the dialog back to your saved defaults. You can access **Reset to Factory** instead by pressing **Alt** (macOS)/**Ctrl** (Windows). Resetting options back to the default factory settings only affects the current project and does not delete your saved defaults, meaning future projects start with your saved defaults.

RELATED LINKS

[Flows](#) on page 117

[Options dialogs in Dorico Pro](#) on page 30

Making flow-specific changes in Notation Options

You can change options in the **Notation Options** dialog for each flow independently.

PROCEDURE

1. Open **Notation Options** in any of the following ways:
 - Press **Ctrl/Cmd-Shift-N** in any mode.
 - Choose **Write > Notation Options** in Write mode.
 - Click **Notation Options** in the **Flows** panel in Setup mode.



2. In the **Flows** list, select the flows in which you want to make changes in one of the following ways:
 - **Ctrl/Cmd**-click individual flows.
 - **Shift**-click adjacent flows.
 - Click **Select All**.

By default, only the current flow is selected when you open the dialog.

3. Click a page in the page list.
 4. Look through the available options, and change the settings as required.
 5. Click **Apply**, then **Close**.
-

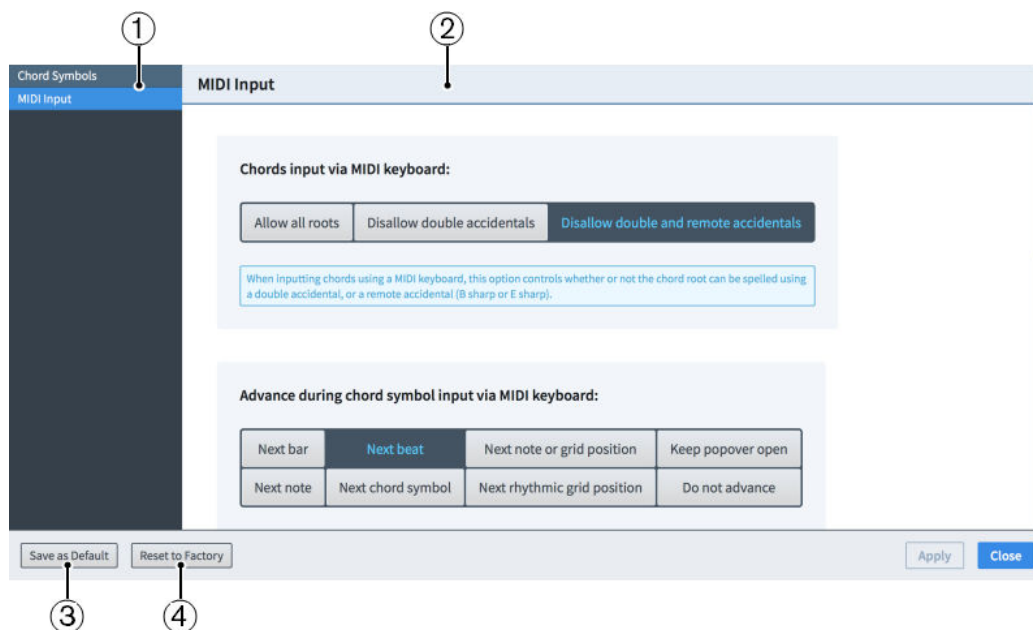
Note Input Options dialog

The **Note Input Options** dialog provides multiple options that allow you to determine how Dorico Pro interprets the data and MIDI you input by default.

For example, there are options relating to how accidentals and notes are spelled when inputting notes using a MIDI keyboard, and what you want to include in chord symbols based on what you play.

You can open **Note Input Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-I** in any mode.
- Choose **Write > Note Input Options** in Write mode.



Note Input Options

1 Page list

Contains the categories of options that you can view and change in the dialog, divided into pages.

2 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the current setting is highlighted.

3 Save as Default/Remove Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- **Save as Default** saves all options currently set in the dialog as the default for new projects.
- **Remove Saved Defaults** deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all future projects start with the default factory settings. If you have existing saved defaults, you can access **Remove Saved Defaults** by pressing **Alt** (macOS)/**Ctrl** (Windows).

4 Reset to Factory/Reset to Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- If you have no saved defaults, **Reset to Factory** resets all the options in the dialog back to the default factory settings.
- If you have existing saved defaults, **Reset to Saved Defaults** resets all the options in the dialog back to your saved defaults. You can access **Reset to Factory** instead by pressing **Alt** (macOS)/**Ctrl** (Windows). Resetting options back to the default factory settings only affects the current project and does not delete your saved defaults, meaning future projects start with your saved defaults.

RELATED LINKS

[Navigation during chord symbol input](#) on page 216

[Accidental selection during MIDI input](#) on page 164

[Options dialogs in Dorico Pro](#) on page 30

Inputting vs. editing

Dorico Pro distinguishes the processes for inputting and editing music.

Inputting

If you can see the caret, you are inputting new music. The caret must be activated in order to input notes and notations. If the caret is activated, selecting tools or items in the Notes toolbox and the Notes panel affects the note or chord that you are about to input, as you can specify the duration, rhythm dot, accidentals, and articulations. Then you specify the pitch by clicking the note into the score, by pressing the letter name of the note on your computer keyboard, or by playing the note or chord on your MIDI keyboard.

When the caret is activated, notes and notations are input at the caret position.

If no notes or chords are selected in the music area and you select a duration, either by pressing its key command or by clicking it in the Notes panel, mouse input is activated. If you move the mouse pointer over the staff, a shadow note is displayed to indicate where the note will be input if you click.

NOTE

Deactivating mouse input prevents Dorico Pro from starting mouse input in this circumstance.

Editing

If you cannot see the caret, you can edit existing music. Editing music includes deleting notes and notations, which you can only do in Write mode, although you can also delete notes in Play mode but not notations. You can switch back and forth between inputting and editing at any time.

When the caret is not activated, new items are input at the position of the first selected item in the music area. If there is no selection, the mouse pointer is loaded with the new item. The item is then created at the location where you click.

To edit existing notes and notations, you must select them in the music area. This allows you to update the selected notes or items when you select, for example, new note durations, accidentals, or articulations in the Notes panel.

We recommend that you spend a moment to understand the difference between how Dorico Pro behaves if the caret is shown and if it is not. In the latter case, all editing functions operate on the items that you have selected in the music area.

RELATED LINKS

[Editing and selecting](#) on page 272

[Caret](#) on page 146

[Note input](#) on page 145

[Notations input](#) on page 182

Mouse input settings

There are a number of different settings that you can choose from to determine how mouse input functions in Dorico Pro.

You can set your preferences for mouse input in the **Editing** section of the **Note Input and Editing** page in **Preferences**.

You can choose between the following options for mouse input:

- **Create item at selection**

Items are input at the position of selected items or notes in the music area.

- **Load pointer with item**

Items are loaded onto the mouse pointer so you can click in the music area where you want to input the item.

You can also activate/deactivate **Allow multiple items to be created with the mouse**.

When **Allow multiple items to be created with the mouse** is activated, you can load an item onto your mouse pointer and input the same item in the music area multiple times without having to reselect the item each time you input it. When this option is deactivated, you can only input an item loaded onto your mouse pointer once. If you want to input the item at multiple positions, you must reselect it each time.

NOTE

Changing your preferences permanently changes the functionality for all new projects.

RELATED LINKS

[Preferences dialog](#) on page 51

Rhythmic grid

The rhythmic grid is a unit of rhythmic duration whose value affects certain aspects of inputting and editing, such as the amount by which items move. However, it does not control the duration of notes and items that you input.



Rhythmic grid set to eighth notes (quavers) shown above the staff

The current rhythmic grid value is shown by the note value in the status bar, and by ruler markings above the staff on which the caret is active. Longer lines in the rhythmic grid indicate beat divisions, while shorter lines indicate beat subdivisions. In Play mode, the rhythmic grid is shown by the frequency of vertical lines in tracks and in the ruler at the top of the event display.

The rhythmic grid helps you to identify the following:

- The exact input position when using the caret or the mouse
- The amount by which the caret moves when using **Right Arrow/Left Arrow**
- The amount by which notes and items are lengthened/shortened
- The amount by which notes and items move

It also allows you to control how precisely notes and items are positioned when inputting them with the mouse or when copying and pasting. For example, setting the rhythmic grid value to 32nd notes allows you to input notes and items at a greater number of possible rhythmic positions than when the rhythmic grid is set to quarter notes.

You can change the rhythmic grid value at any time.

RELATED LINKS

[Caret](#) on page 146

[Moving the caret manually](#) on page 148

[Event display](#) on page 407

Changing the rhythmic grid value

You can change the value of the rhythmic grid. The value is indicated by the note value symbol in the status bar and by the beat divisions and subdivisions in the ruler markings above the caret.

The rhythmic grid value is set to eighth notes (quavers) by default.

PROCEDURE

- Change the value of the rhythmic grid in any of the following ways:
 - Press **Alt-]** to decrease the rhythmic grid value.
 - Press **Alt-[** to increase the rhythmic grid value.
 - Choose **Write > Rhythmic Grid > Decrease Grid Resolution**.
 - Choose **Write > Rhythmic Grid > Increase Grid Resolution**.
 - Choose **Write > Rhythmic Grid > [Beat division]**.
 - Select a value from the **Rhythmic Grid** selector in the status bar.

RESULT

Decreasing the rhythmic grid value makes it finer by making the note value shorter. Increasing the rhythmic grid value makes it coarser by making the note value longer.

TIP

You can assign your own key commands for increasing and decreasing the rhythmic grid value.

RELATED LINKS

[Status bar](#) on page 42

[Assigning key commands](#) on page 55

Note input

In Dorico Pro, you can only input notes during note input, which is when the caret is activated. This allows you to input notations at the caret position at the same time as inputting notes, and also reduces the risk of you adding notes to staves accidentally.

You can input notes in different ways and using any of the following devices, including switching between them at any time:

- MIDI keyboard
- Computer keyboard
- Mouse or touchpad

TIP

A MIDI keyboard is the fastest way to input notes.

RELATED LINKS

[Notes](#) on page 708

[Inputting notes](#) on page 149

Caret

In Dorico Pro, the caret is a vertical line that extends above and below five-line staves but appears shorter on percussion staves. It shows the rhythmic position at which notes, chords, or notation items are input.

A caret is a mark that is commonly used when proofreading published text to denote the position at which something should be inserted or added, for example, a missing letter or a word. In software, the caret shows where something is inserted. The caret is also known as an “insertion point” or “cursor”. In this documentation, we use “caret” to refer to the line that appears during note input, and “cursor” to refer to the line that appears during text input.

If you are inputting notes, the caret advances to the next rhythmic position automatically. If you are inputting chords, the caret does not move automatically, and you must move it to the next rhythmic position manually. The caret has a note symbol beside it, which indicates the stem direction and type of the currently selected voice. It is accompanied by a + symbol if the voice is new.



The caret

The appearance of the caret changes depending on the input mode and the currently selected voice number.

Insert

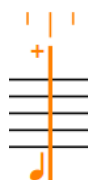
The caret shows V and inverted V shapes at the top and bottom. In Insert mode, inserted notes shift all the music that follows the caret along by the input duration instead of replacing existing notes. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes.



Caret in Insert mode

Chords

The caret shows a plus symbol at the top left. During chord input, you can input multiple notes at the same rhythmic position.



Caret when inputting chords

Lock to Duration

The caret is dashed. **Lock to Duration** allows you to repitch notes without changing their duration or rhythm.



Caret when **Lock to Duration** is activated

Grace Notes

The caret is shorter than the default caret. It allows you to input grace notes at the caret position.



Caret when inputting grace notes

Voices

If you input multiple voices, the caret shows the following:

- A plus symbol at the bottom left
- The voice number into which you are inputting notes
- An up-stem note or a down-stem note symbol to indicate the stem direction of the voice



Caret when inputting notes into a new down-stem voice



Caret when inputting notes into a new, second up-stem voice

Slash voices

The note beside the caret indicates a slash notehead.

If you input multiple slash voices, the caret shows the following:

- A plus symbol on the left at the bottom
- The number of the slash voice into which you are about to input notes
- An up-stem slash note or a down-stem slash note symbol indicating the stem direction of the voice, and whether it has stems or is stemless



Caret when inputting notes into an up-stem slash voice



Caret when inputting notes into a new, second up-stem slash voice



Caret when inputting notes into a new, stemless slash voice

Percussion kits

The caret appears significantly smaller than usual when inputting notes into percussion kits. The name of the kit instrument into which you are currently inputting notes is shown above the rhythmic grid.



Caret when inputting notes into percussion kits

RELATED LINKS

[Inputting notes in Insert mode](#) on page 153

[Inputting chords](#) on page 167

[Repitching notes without changing their rhythm](#) on page 174

[Inputting grace notes](#) on page 167

[Inputting notes into multiple voices](#) on page 159

[Inputting notes in percussion kits](#) on page 154

Activating the caret

When the caret is activated, you can input notes and notations at the caret position, for example, if you want to input a dynamic in the middle of a tie chain. When the caret is deactivated, you cannot input notes, instead you can select and edit items in the music area.

PROCEDURE

- Activate the caret in any of the following ways:
 - Select an item and press **Shift-N** or **Return**.
 - Double-click the rhythmic position on the staff where you want to begin inputting notes.

AFTER COMPLETING THIS TASK

You can deactivate the caret at any time by pressing **Shift-N**, **Return**, or **Esc**. If you have deactivated mouse input, you can click another item in the music area to deactivate the caret.

Switching to another mode also deactivates the caret, as the caret can only be activated in Write mode.

RELATED LINKS

[Functions of the modes](#) on page 17

[Activating/Deactivating mouse input](#) on page 151

Moving the caret manually

The caret moves automatically as you input notes, but you can also move it manually. For example, the caret does not move automatically when inputting chords.

PROCEDURE

- Move the caret in any of the following ways:
 - To move the caret according to the current rhythmic grid value, press **Right Arrow/Left Arrow**.
 - To advance the caret according to the note value currently selected, press **Space**.

- To move the caret to the next/previous bar, press **Ctrl/Cmd-Right Arrow/Ctrl/Cmd-Left Arrow**.
 - To move the caret to the staff above/below, press **Up Arrow/Down Arrow**.
 - To move the caret to the top/bottom staff in the system, press **Ctrl/Cmd-Up Arrow/Ctrl/Cmd-Down Arrow**.
-

RELATED LINKS

[Inputting chords](#) on page 167

Changing the input pitch setting

You can input and record notes at either sounding pitch or written pitch according to the current layout, for example, if you want to record notes at their sounding pitch in transposing part layouts.

In concert pitch layouts, written pitch and sounding pitch are the same.

PROCEDURE

- Choose one of the following input pitch settings:
 - To input/record notes at their written pitch, choose **Write > Input Pitch > Written Pitch**.
 - To input/record notes at their sounding pitch, choose **Write > Input Pitch > Sounding Pitch**.
-

RESULT

The resulting pitch notated or recorded is changed. For example, if you input a C in a Horn in F transposing part layout with the input pitch set to **Sounding Pitch**, the note is written as a G.

RELATED LINKS

[Inputting notes](#) on page 149

[Inputting notes using MIDI recording](#) on page 176

[Making layouts transposing/concert pitch](#) on page 123

Inputting notes

You can input notes into your project when note input is activated. You can input notes with a computer keyboard, with the mouse, or by playing notes with a MIDI keyboard.

NOTE

During step input, you must specify the duration, accidentals, and articulations before specifying the pitch. This applies to all input methods.

You can later add notations to notes after they have been input when note input is deactivated.

PREREQUISITE

- If you want to input notes into multiple instruments held by a single player or instruments not visible in the score in page view, you are in **Galley View**.
 - You have chosen the appropriate input pitch setting.
-

PROCEDURE

1. Start note input in any of the following ways:

- Select a note or rest on the staff where you want to input notes and press **Shift-N** or **Return**.

NOTE

If you select a notation, such as a dynamic, pressing **Return** opens the corresponding popover instead of starting note input.

- Double-click the staff where you want to input notes.
2. Select a note value in any of the following ways:
 - Press the number on your computer keyboard that corresponds to the rhythmic value you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.
 - Click the rhythmic value you want in the Notes panel on the left of the window.
 3. Optional: Add an accidental.
 4. Optional: Add an articulation.
 5. Input the pitches you want in any of the following ways:
 - Press the corresponding letters on your keyboard.

TIP

Dorico Pro automatically selects the note whose register is the smallest interval away from the previously input note. However, you can force a different register.

- To input a note above the previously input note, press **Shift-Alt** as well as the letter for the note.
- To input a note below the previously input note, press **Ctrl** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note.

You must press **Ctrl** on Mac, not **Cmd**.

- Click the staff at the rhythmic position of each note you want to input.
A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
 - Play the notes on a MIDI keyboard.
6. Press **Esc** or **Return** to stop note input.
-

RESULT

Notes are input with the selected duration and are played back as you input them by default. Notes continue to be input with a rhythm dot and any articulations until you deactivate them. However, accidentals are only added to the first note you input after selecting them.

Beams are automatically formed between adjacent notes that are an eighth note or shorter, as appropriate for the time signature and their position in the bar.

TIP

- You can change the default beam grouping in your project on the **Beam Grouping** page in **Notation Options**.
 - You can also move the caret to other rhythmic positions without having to input notes.
-

AFTER COMPLETING THIS TASK

You can move notes to different rhythmic positions after they have been input, and move them to other staves.

RELATED LINKS

- [Changing the input pitch setting](#) on page 149
- [Caret](#) on page 146
- [Moving the caret manually](#) on page 148
- [Adding notes above/below existing notes](#) on page 171
- [Moving notes rhythmically](#) on page 724
- [Per-flow changes to beam grouping defaults](#) on page 539
- [View types](#) on page 43
- [Arranging tools](#) on page 283
- [Playing/Muting notes during note input/selection](#) on page 278

Register selection during step input

Dorico Pro automatically selects the register of pitches during step input, but you can override this and select the register manually.

During step input, Dorico Pro automatically selects the note whose register is the smallest interval away from the previously input note. For example, if you input an F and then press **A**, an A is input a third above the F, rather than a sixth below.

You can override this automatic register selection in the following ways:

- To input a note above the previously input note, press **Shift-Alt** as well as the letter for the note.
- To input a note below the previously input note, press **Ctrl** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note.

NOTE

You must press **Ctrl** on macOS, not **Cmd**.

Register selection when inputting chords

During chord input, Dorico Pro automatically inputs notes above the highest note at the caret position. For example, if you press **A** then **E** then **A**, a chord of A-E-A is input at the caret position.

You can input notes below the lowest note at the caret position instead by pressing **Ctrl** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note name.

For example, press **Ctrl-F** (macOS) or **Ctrl-Alt-F** (Windows) to input an F below the lowest note in the chord at the caret position.

NOTE

You must press **Ctrl** on macOS, not **Cmd**.

RELATED LINKS

- [Inputting notes](#) on page 149
- [Inputting chords](#) on page 167
- [Changing the pitch of individual notes](#) on page 173

Activating/Deactivating mouse input

You can activate/deactivate mouse input, for example, if you only want to input notes using your computer keyboard or MIDI device. Deactivating mouse input also allows you to click other items to stop note input.

PROCEDURE

- In the Notes toolbox, activate/deactivate **Select**.

RESULT

Mouse input is activated in the current project when **Select** is deactivated. Mouse input is deactivated in the current project when **Select** is activated.

TIP

You can change the default setting for whether mouse input is activated/deactivated by activating/deactivating **Enable note input using the mouse** on the **Note Input and Editing** page in **Preferences**.

EXAMPLE



Select when deactivated



Select when activated

RELATED LINKS

[Preferences dialog](#) on page 51

Inputting notes with rhythm dots

The **Dotted Notes** tool allows you to input notes with rhythm dots and add rhythm dots to existing notes. You can input notes with up to four rhythm dots.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select existing notes to which you want to add rhythm dots.
 2. Press the number on your computer keyboard that corresponds to the note value you want to input.
For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
 3. Press **.** (period) to activate **Dotted Notes**.
 4. Optional: Press **Alt-.** (period) to change the number of rhythm dots.
Dotted Notes in the Notes toolbox updates to indicate the current number of rhythm dots. You can input notes with up to four rhythm dots.
 5. Optional: Press **O** to activate **Force Duration**.
If **Force Duration** is not activated, the notes you input might be shown as tied notes rather than dotted notes, depending on their position in the bar and the prevailing meter.
 6. Input the dotted notes you want.
Dotted Notes remains activated until you either select a different note duration or deactivate it.
 7. Press **.** again to deactivate **Dotted Notes**.
 8. Press **Esc** or **Return** to stop note input.
-

RESULT

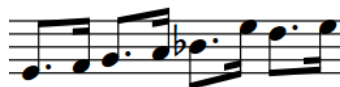
During step input, notes are input as dotted notes until you deactivate **Dotted Notes** or change the note duration.

If you add rhythm dots to multiple existing notes that would then overlap, Dorico Pro adjusts the duration of notes in the selection to avoid deleting notes at the end of the selection.

EXAMPLE



A phrase containing eighth notes



After adding rhythm dots to the whole selection

RELATED LINKS

[Note and rest grouping](#) on page 553

Inputting notes in Insert mode

In Insert mode, you can input notes before existing notes without overriding them. This allows you to push existing notes ahead at the same time as inputting new notes at their previous positions.

NOTE

You cannot input chords in Insert mode.

PROCEDURE

1. In Write mode, start note input.
2. Press the number on your computer keyboard that corresponds to the note value you want to input.
For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
3. Press **I** to activate Insert mode.
In Insert mode, the caret shows V and inverted V shapes at the top and bottom.



4. Input the pitches you want in any of the following ways:
 - Press the corresponding letters on your keyboard.
 - Click the staff at the rhythmic positions where you want to input notes.
A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
 - Play the notes on a MIDI keyboard.
 5. Optional: Press **I** again to deactivate Insert mode and return to normal note input.
 6. Press **Esc** or **Return** to stop note input.
-

RESULT

Notes are inserted before existing notes, without overriding any existing notes at rhythmic positions after the caret. Any existing notes after the caret are pushed ahead to subsequent rhythmic positions.

RELATED LINKS

[Caret](#) on page 146

[Inputting chords](#) on page 167

Inputting notes in percussion kits

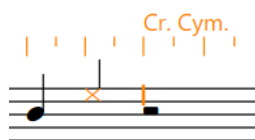
You can input notes on all percussion instruments in percussion kits using any presentation type. When inputting notes in percussion kits, the caret is smaller than when inputting notes on pitched instrument staves.

Instead of occupying the whole height of the staff, the caret in percussion kits is positioned at a particular staff position.

The name of the percussion instrument or slash voice currently selected by the caret, and any applicable playing technique, is shown directly above the rhythmic grid display.

NOTE

You can only input notes into slash voices in percussion kits when using the five-line staff presentation.



Inputting notes on instruments with five-line staff kit presentation

PROCEDURE

1. Optional: If you want to define additional playing techniques for instruments in the kit, do so in the **Percussion Instrument Playing Techniques** dialog.
2. In Write mode, select an item in the percussion kit into which you want to input notes, at the rhythmic position from which you want to input notes.
3. Press **Shift-N** or **Return** to start note input.
4. Move the caret up/down to input notes on different instruments in any of the following ways:
 - Press **Up Arrow** to move it up.
 - Press **Down Arrow** to move it down.
5. Select an appropriate playing technique for the instrument currently selected by the caret before inputting notes.
 - Press **Shift-Alt-Up Arrow** to cycle upwards through playing techniques.
 - Press **Shift-Alt-Down Arrow** to cycle downwards through playing techniques.
 - Play the pitch for the playing technique you want on a MIDI keyboard.

NOTE

You can define MIDI pitches for playing techniques on the **Note Input and Editing** page in **Preferences**.

6. Input notes in one of the following ways:
 - Five-line staff presentation type: Press letters on a computer keyboard or play notes on a MIDI keyboard, corresponding to staff positions for the clef set in **Preferences**. For example, press **B** to input notes for the instrument assigned to the middle line of a five-line staff when **Treble G clef** is set.

- Grid and single-line instruments presentation types: Press the letter of any note name **A** to **G** on a computer keyboard or play any note on a MIDI keyboard to input notes for the instrument on whose line the caret is currently positioned.

NOTE

Notes played on MIDI keyboards are interpreted differently, depending on whether **Use percussion map** or **Use staff position** is set for the different kit presentation types in the **Note Input** section of the **Note Input and Editing** page in **Preferences**.

- Any kit presentation type: Press **Y** to input notes for the instrument and playing technique shown above the rhythmic grid.
 - Any kit presentation type: Click on the staff where you want to input notes, and at the rhythmic positions where you want them.
7. Press **Esc** or **Return** to stop note input.
-

RELATED LINKS

[Caret](#) on page 146

[Percussion kits](#) on page 1020

[Note input setup for percussion kits](#) on page 155

[Percussion Instrument Playing Techniques dialog](#) on page 1027

[Changing the playing techniques of notes on percussion kit staves](#) on page 1022

[Preferences dialog](#) on page 51

Note input setup for percussion kits

Inputting music for unpitched percussion instruments works differently than for pitched instruments. You can use any of the usual methods for unpitched percussion input, but using a MIDI keyboard or a computer keyboard is most efficient.

In the **Note Input** section of the **Note Input and Editing** page in **Preferences** you can find options relating to note input for percussion.

There is one set of options for input onto five-line staves, and another set of options for input onto grids and individual instruments.

The main choice affects input via MIDI keyboards and computer keyboards.

Use percussion map

A percussion map defines which MIDI notes produce which sound for a particular patch in a sound library. For example, in General MIDI percussion, C2 (note 36) produces bass drum, and D2 (note 38) produces snare drum, and so on.

If you know a particular mapping well, you may find it helpful to use the mapping directly for input.

Use staff position

This option uses the staff position defined in the **Edit Percussion Kit** dialog. For example, on a drum set, the bass drum is normally positioned in the bottom space of the staff, while the snare drum is positioned in the third space from the bottom.

You can think of staff positions relative to what they would be when using a treble G clef (F4 and C5 respectively) or using a bass F clef (A2 and E3 respectively).

You can choose which clef is used to interpret staff positions for five-line staves:

- **Treble G clef**
- **Bass F clef**

When you select **Use staff position**, you can designate one octave of your MIDI keyboard to input playing techniques.

By default, the **Input techniques from MIDI key** option is set to MIDI note 48, which is C3, the C one octave below middle C (C4 = MIDI note 60). You can click the MIDI learn button and then play a note on your MIDI keyboard to change the starting pitch. Assuming a starting pitch of C3, ascending notes operate as follows:

- C3 (48): Previous playing technique
- C#3 (49): Next playing technique
- D3 (50): First mapped playing technique
- Eb3 (51): Second mapped playing technique
- E3 (52): Third mapped playing technique

And so on, up to:

- B3 (59): Tenth mapped playing technique

In general, it is recommended that you set **Use staff position** for percussion input.

Use percussion map is normally only useful when you are inputting notes onto a drum set and you have already memorized the General MIDI percussion map.

RELATED LINKS

[Preferences dialog](#) on page 51

[Edit Percussion Kit dialog](#) on page 107

[Inputting notes in percussion kits](#) on page 154

[Changing the playing techniques of notes on percussion kit staves](#) on page 1022

Default note selection during step input for percussion kits

During step input in percussion kits, you can press the letters on a computer keyboard that correspond to staff positions for kits using the five-line staff presentation type. For example, you can press **F** to input a note on the F space or line.

In **Preferences**, you can set options for inputting notes into percussion kits in the **Note Input** section of the **Note Input and Editing** page. For example, if you want to use staff positions to determine notes, choose **Use staff position** for **Input onto kit or grid**.

If you have the staff positions set relative to **Treble G clef**, then **F** could mean either the bottom space on the staff or the top line on the staff. In a standard drum set, this means either the kick drum in the bottom space, or the ride cymbal on the top line.

When inputting notes in pitched instruments, Dorico Pro chooses the lower or upper possible staff position based on which is closer to the current position of the caret.

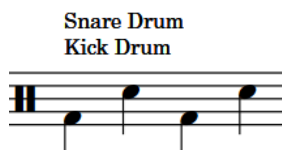
However, when inputting notes in percussion kits, Dorico Pro chooses the staff position of the note with the same stem direction as the last input note, rather than the staff position that is closest to the current position of the caret. This makes it easier to input common note patterns used in percussion kits.

For example, inputting kick drum and snare drum notes on a standard drum set is a common pattern. The kick drum is in the bottom space, and the snare drum is two spaces above: five staff positions away from the bottom space, and four staff positions away from the top line.

You can press **F** for the kick drum and **C** for the snare drum.

The default stem direction behavior for inputting notes in kits in Dorico Pro means that you can alternate pressing **F** and **C**, and the notes are input at the positions of the kick drum and snare drum, even though the top line is the closer position after inputting a snare drum note.

This is because the kick drum uses the same stem direction, and therefore voice, as the snare drum.



NOTE

Dorico Pro automatically changes the directions of stems according to the positions of notes on the staff when only one voice on the staff contains notes, regardless of their voice.

RELATED LINKS

[Preferences dialog](#) on page 51

[Stem direction](#) on page 943

Selecting note/rest durations

You can select different durations for notes/rests either from the Notes panel or by using one of the assigned key commands, both during note input and for existing notes/rests.

PROCEDURE

1. Optional: If you want to select a note duration not shown in the Notes panel, click the **Show/Hide All Notes** disclosure arrows at the top and bottom of the notes list to show more note durations.
 2. Select a note/rest duration in any of the following ways:
 - Press the key command for the duration you want. For example, press **6** for quarter notes (crotchets), **5** for eighth notes (quavers), **7** for half notes (minims), and so on.
 - Click a duration in the Notes panel.
-

RELATED LINKS

[Notes panel](#) on page 134

[Key commands in Dorico Pro](#) on page 11

[Inputting notes](#) on page 149

Changing the duration of notes

You can lengthen/shorten the duration of notes after they have been input.

PROCEDURE

1. Select the notes whose duration you want to change.
2. Change the duration in any of the following ways:
 - Press the key command of the duration you want. For example, press **4** for a 16th note (semiquaver).
 - Click the duration you want in the Notes panel.
 - To lengthen notes by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
 - To shorten notes by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.
 - To double the length of notes, press **Ctrl/Cmd-Shift-Alt-Right Arrow**.
 - To halve the length of notes, press **Ctrl/Cmd-Shift-Alt-Left Arrow**.

- To lengthen notes by the current rhythmic grid value, choose **Write > Edit Duration > Lengthen Duration by Grid Value**.
 - To shorten notes by the current rhythmic grid value, choose **Write > Edit Duration > Shorten Duration by Grid Value**.
 - To double the length of notes, choose **Write > Edit Duration > Lengthen Duration**.
 - To halve the length of notes, choose **Write > Edit Duration > Shorten Duration**.
-

RESULT

The duration of the selected notes is changed. Dorico Pro automatically notates and beams the notes appropriately according to their new duration, the current time signature, and their position in the bar.

TIP

You can assign your own key commands to lengthen/shorten notes by specific durations. You can find these by searching for Shorten duration by and Lengthen duration by on the **Key Commands** page in **Preferences**.

Forcing the duration of notes/rests

Dorico Pro automatically notates and beams notes/rests appropriately according to the current time signature and their position in the bar. You can force the duration of notes/rests to specify their notation.

For example, if you input a half note at the start of a 6/8 bar, it is notated as a dotted quarter note (crotchet) tied to an eighth note (quaver). This is because, according to convention, 6/8 bars are subdivided into two groups of three eighth notes. To reflect this for a half note (four eighth notes), Dorico Pro automatically divides the note to show the correct grouping but you can force the note duration to show a half note instead.

TIP

If you want to force the duration of all notes on a staff to imply a different meter, for example, to show three quarter note groups in 6/8 to indicate a hemiola, you can also input a time signature only on those staves to group notes according to that meter. You can then hide the time signatures if required.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Selecting existing notes whose duration you want to force.
 2. Optional: If you want input rests with forced durations, press , (comma) to start rest input.
 3. Press **O** to activate **Force Duration**.
 4. Select the duration you want.
 5. Optional: During note or rest input, input the notes or rests you want.
-

RESULT

During note or rest input, any notes you input are notated with their whole rhythmic value, whatever their position in the bar. If you move them later, they keep the same notation. Rests are input as explicit rests. Notes that cross barlines are notated as tied notes.

Forcing the duration of existing notes or rests preserves their current duration or any duration to which you subsequently change them.

TIP

- **Force position and duration** in the **Notes and Rests** group of the Properties panel is activated automatically for rests input with forced durations. You can also use this property to force the duration and position of rests.
- You can change how notes are grouped in different contexts project-wide on the **Note Grouping** page in **Write > Notation Options**.

EXAMPLE



Default notation of notes in 6/8



Notes in the down-stem voice input with forced durations

RELATED LINKS

[Implicit vs. explicit rests](#) on page 860

[Inputting notes](#) on page 149

[Inputting rests](#) on page 164

[Selecting note/rest durations](#) on page 157

[Beams according to time signatures](#) on page 539

[Creating custom beat groupings for meters](#) on page 554

[Turning explicit rests into implicit rests](#) on page 862

Inputting notes into multiple voices

By default, notes are input into the first up-stem voice, as indicated by the symbol of an up-stem quarter note beside the caret. You can input notes directly into other voices during step input, and switch between voices as often as you want.

You can also create new voices on staves with existing notes and input notes into those voices anywhere else on those staves.

PROCEDURE

1. In Write mode, start note input on the staff on which you want to input multiple voices, at the rhythmic position where you want the multiple voices to start.

2. Press **Shift-V** to create a new voice.

When a new voice is added, a + sign appears beside the symbol of a quarter note beside the caret. The quarter note symbol indicates the stem direction, and the number beside the quarter note indicates the voice number if applicable.



Caret when adding the first down-stem voice



Caret when adding the second up-stem voice

3. Optional: Repeat step 2 as many times as you require.

For example, on a staff containing no notes, creating one new voice allows you to input notes into the first down-stem voice, but you can also create another new voice immediately if you want to input notes into the second up-stem voice on the staff.

4. Input the notes you want.
 5. Optional: Press **V** to cycle between all the active voices on the staff.
 6. Press **Esc** or **Return** to stop note input.
-

RESULT

Notes are input into new voices, as indicated by the caret symbol. If you are inputting notes into a new voice on a staff that already contains notes in another voice, the stem directions of existing notes at the same rhythmic position change automatically as necessary.

The quarter note symbol beside the caret changes to indicate which voice is currently selected. Any notes input are input into the voice indicated by this symbol.

You can switch between voices as often as you like.

NOTE

If you have three or more voices on a single staff, you can only cycle through all the voices in a set order. For example, if you have two up-stem voices and two down-stem voices, the order is: first up-stem voice, first down-stem voice, second down-stem voice, second up-stem voice.

EXAMPLE



Caret when inputting notes into the first up-stem voice



Caret when inputting notes into the first down-stem voice



Caret when inputting notes into a new, second up-stem voice

RELATED LINKS

[Caret](#) on page 146

[Inputting notes](#) on page 149

[Adding notes above/below existing notes](#) on page 171

[Voices](#) on page 1039

Inputting notes into slash voices

You can input notes into multiple slash voices, for example, if you want to indicate a precise rhythm without specifying pitches. By default, the first slash voice is up-stem, but you can add extra slash voices both with and without stems, and switch between them as often as you want.

You can also input notes into new slash voices on a staff with existing notes. Once you have created a slash voice somewhere on a staff, you can input notes into that slash voice anywhere else on the same staff.

PROCEDURE

1. In Write mode, start note input.
2. Position the caret on the staff on which you want to input slash voices, at the rhythmic position where you want the slash voices to start.
3. Press **Shift-Alt-V** to create a new slash voice.

When a new slash voice is added, a + sign appears beside the symbol of a note beside the caret, which now appears as a slash note. The slash note symbol indicates the stem direction, and the number beside the slash note symbol indicates the voice number if applicable.



Caret when adding the first down-stem slash voice



Caret when adding the second up-stem slash voice

- Optional: Repeat step 3 as many times as you require.
For example, on a staff containing no notes in slash voices, creating one new slash voice allows you to input notes into the first up-stem slash voice, but you can also create a second new slash voice immediately if you want to input notes into a down-stem slash voice.
- Input the notes you want.
Notes in slash voices appear at the same staff position, regardless of their pitch. By default, this is the middle line of the staff, but this changes in multiple-slash-voice contexts.
- Optional: Press **V** to cycle between all the active voices on the staff.
- Press **Esc** or **Return** to stop note input.

RESULT

Notes are input into new slash voices, as indicated by the caret symbol. The slash note symbol beside the caret changes to indicate which voice is currently selected and into which notes are input.

You can switch between voices as often as you like.

NOTE

- If you are inputting notes into a new slash voice on a staff that already contains notes in other voices/slash voices, the stem directions of existing notes and the staff positions of slash voices at the same rhythmic position change automatically as necessary.
- If you have three or more voices of any type on a single staff, you must cycle through all the voices in a set order. For example, if you have two up-stem voices, two down-stem voices, and a slash voice, the order is: first up-stem voice, first down-stem voice, second down-stem voice, second up-stem voice, slash voice.

EXAMPLE



Caret when inputting notes into the first up-stem slash voice



Caret when inputting notes into the first down-stem slash voice



Caret when inputting notes into a new, second up-stem slash voice

RELATED LINKS

[Slash voices](#) on page 1044

[Rhythm slashes](#) on page 849

[Inputting slash regions](#) on page 263

Inputting accidentals

You can input notes with accidentals, both during step input and by adding them to existing notes.

NOTE

Accidentals that are part of the key signature are input automatically. For example, if you press **F** in G major, an **F♯** is input automatically. You would only need to specify an accidental if you want to input an **F♭**, for example.

This also applies if you are using a MIDI keyboard, though you can respell notes if the accidentals chosen automatically are not the ones that you expected.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add accidentals.
2. Select the accidental you want to input in one of the following ways:
 - Press **-** for flat.
 - Press **=** for sharp.
 - Press **0** for natural.
 - Click the accidental you want in the Notes panel.

TIP

You can find uncommon accidentals, such as double sharps and flats, or microtonal accidentals, in the **Accidentals** section of the Key Signatures, Tonality Systems, and Accidentals panel on the right of the window.

3. Optional: During step input, enter the note you want with your selected accidental.

NOTE

- Depending on the accidental duration system in place, subsequent accidentals for the same note in the same register might not appear in the same bar.
 - If you input notes using a MIDI device, Dorico Pro automatically shows an accidental if necessary. It selects a sharp, flat, or natural based on key signature and context. You can later respell accidentals.
-

RESULT

The accidental is added to the selected existing notes.

During step input, the selected accidental is only input on the next note you input. You must reselect the accidental for each subsequent note.

RELATED LINKS

[Accidentals](#) on page 488

[Inputting notes](#) on page 149

Respelling accidentals

You can change the enharmonic spelling of notes so they are shown as their enharmonic equivalents, for example, to show the stepwise movement in a phrase clearly, or to avoid altered unisons in a chord. You can do this for all layouts or just for part layouts.

Dorico Pro uses an algorithm that automatically decides the spelling of pitches, based on key signature and context.

There are always at least three options for every pitch, as Dorico Pro allows enharmonic spellings to show up to two accidental glyphs. This means the same note can be spelled four ways, if the original pitch can be spelled with the note name either two notes below or two notes above, using a maximum of two accidental glyphs. For example, B \sharp is a possible enharmonic spelling of G \sharp because a triple-flat uses a single accidental glyph, whereas an F \sharp uses two accidental glyphs.

PROCEDURE

1. In Write mode, open the layout in which you want to respell accidentals.
If you respell accidentals in a full score layout, this also affects their spelling in part layouts. If you respell accidentals in part layouts, this only affects their spelling in that part layout.
2. Select the notes you want to respell.
3. Respell the selected notes upwards/downwards in any of the following ways:
 - Press **Alt=** to respell upwards.
 - Press **Alt--** to respell downwards.

RESULT

The enharmonic spelling of the selected notes is changed.

EXAMPLE



A G sharp



When respelled downwards, the G sharp becomes an F triple-sharp



When respelled upwards, the G sharp becomes an A flat



When respelled upwards again, the G sharp becomes a B triple-flat

RELATED LINKS

[Accidentals](#) on page 488

Changing accidentals

You can change the accidentals of notes after they have been input.

PROCEDURE

1. In Write mode, select the notes whose accidentals you want to change.
2. Change the accidentals in one of the following ways:
 - Press **0** to change the accidentals to a natural.
 - Press **-** to change the accidentals to a flat.
 - Press **=** to change the accidentals to a sharp.

- Click the type of accidental that you want in the Notes panel.
-

RESULT

All selected notes are changed to have the accidental you selected, even if notes in your selection originally had different accidentals.

RELATED LINKS

[Changing the pitch of individual notes](#) on page 173

Accidental selection during MIDI input

Dorico Pro interprets MIDI data to create accidentals, and automatically determines the spelling of notes according to preset rules.

Dorico Pro automatically displays an accidental if one is required. It selects a sharp or flat based on key signature and context.

The algorithm for this takes into account the key signature and the intervals between successive notes and chords. Therefore Dorico Pro prefers sharp accidentals in a key with sharps, and flats in a key with flats. If you change the spelling of an accidental, Dorico Pro follows your spelling preference whenever that note is used again in the score.

If you input notes with accidentals outside the key signature, Dorico Pro uses sharps if the figure is rising, and flats if it is falling. The spelling is also calculated vertically, meaning a simpler interval is produced where possible, such as a major third rather than a diminished fourth.

By default, Dorico Pro makes retrospective changes to how it has spelled accidentals, depending on how your music develops. For example, in C major, if you input a sequence of pitches C-E-G#, but then input a G \flat , the G# is respelled as an A \flat .

You can disable this setting.

RELATED LINKS

[Respelling accidentals](#) on page 163

Disabling automatic accidental respelling

You can turn off the automatic respelling of accidentals to prevent Dorico Pro from making retrospective changes to accidentals.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-I** to open the **Note Input Options** dialog.
 2. Click **MIDI Input** in the page list.
 3. Deactivate **Allow spelling of notes to be adjusted retrospectively**.
 4. Click **Apply**, then **Close**.
-

Inputting rests

Dorico Pro automatically shows rests as appropriate in the gaps between the notes you input. However, you can also input rests manually.

PROCEDURE

1. Press **,** (comma) to start rest input.
2. Select the duration you want.
3. Optional: Press **O** to activate **Force Duration**.

4. Input rests in any of the following ways:
 - Press **Y** or any of the letters from **A** to **G**.
 - Play notes on a MIDI keyboard.
 5. Optional: Press **,** (comma) again to stop rest input.
-

RESULT

Rests of the selected duration are input. If **Force Duration** is not activated, Dorico Pro automatically combines adjacent rests as appropriate for their position in relation to notes and according to the current meter.

RELATED LINKS

[Rests](#) on page 859

[Implicit vs. explicit rests](#) on page 860

[Selecting note/rest durations](#) on page 157

[Forcing the duration of notes/rests](#) on page 158

Inputting bar rests during step input

When inputting music in multiple voices, rests are normally created automatically when there is a gap in the secondary voice. However, if you want secondary voices to begin with explicit bar rests in strict contrapuntal music, you can input a bar rest during step input.

For music in a single voice, you do not have to input bar rests. Bar rests appear in each new bar automatically when you advance the caret, but you can also hide/show bar rests in all empty bars in each layout independently.

PROCEDURE

1. In Write mode, start note input.
 2. Select the appropriate secondary voice by pressing **V** until the voice direction indicator shows the correct voice.
Alternatively, if you want to input bar rests into a new voice, press **Shift-V** until the voice direction indicator shows the correct voice.
 3. Press **Shift-B** to open the bars and barlines popover.
 4. Enter rest into the popover to add a bar rest.
 5. Press **Return** to close the popover.
 6. Press **Ctrl/Cmd-Right Arrow** to advance the caret to the start of the next bar after the bar rest.
-

RESULT

Bar rests are input at the caret position. If the caret position is within a bar that contains notes for the selected voice, these notes are replaced by the bar rest.

NOTE

Alternatively, you can click **Insert Bar Rest** in the **Insert Bar Rest** section of the Bars and Barlines panel to input bar rests during step input.

RELATED LINKS

[Bars](#) on page 504

[Rests](#) on page 859

[Bars and barlines popover](#) on page 201

[Inputting notes into multiple voices](#) on page 159

[Caret](#) on page 146

[Hiding/Showing bar rests in empty bars](#) on page 864

Inputting ties

Dorico Pro automatically creates ties as required for note durations in each meter. However, you can input ties manually to join two notes of the same pitch, both during step input and by joining two existing notes with a tie.

For example, if you want to input a tie between two quarter notes across a barline, you can input a half note at the rhythmic position where you want to input the first quarter note. Dorico Pro automatically splits the half note into two quarter notes, one on each side of the barline, and joins them with a tie.

NOTE

These steps do not apply to inputting ties between non-adjacent notes or notes in different voices, for example, between two notes of the same pitch on different staves, or between a grace note and a normal note.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the note from which you want the tie to start.
2. Press **T** to input ties.
3. Optional: During step input, input the note that you want at the end of the tie.

NOTE

The second note must be the same pitch as the first note. If the second note is a different pitch to the first note, no tie is input.

RESULT

During step input, the two notes input are joined by a tie.

When inputting ties between existing notes, the selected note is joined by a tie to the next note of the same pitch on the same staff.

NOTE

Depending on the current time signature and your settings on the **Note Grouping** page in **Write > Notation Options**, inputting a tie between two notes can instead create a single note of a different duration, such as a minim instead of two tied quarter notes. You can override your note grouping settings and fix your notated rhythm by forcing their duration. Dorico Pro then notates your input notes with the rhythmic durations specified, as long as they can fit inside the bar.

RELATED LINKS

[Ties](#) on page 966

[Ties vs. slurs](#) on page 968

[Inputting ties between non-adjacent notes](#) on page 971

Inputting grace notes

You input grace notes in the same ways as normal notes, and they can have any rhythmic note value, accidental, and articulation. You can only input grace notes during note input.

PROCEDURE

1. In Write mode, start note input.
2. Position the caret at the rhythmic position where you want to input grace notes.
3. Press **/** to start grace note input.
4. Press the number for the rhythmic duration you want. For example, press **5** for eighth grace notes.
5. Optional: Press **Alt-/** to switch between inputting slashed/unslashed grace notes.



The **Grace Notes** toolbox button when inputting unslashed grace notes.

6. Input the grace notes you want.
7. Press **/** again to stop grace note input and return to normal note input.

RESULT

The pitches you enter are input as grace notes at the caret position.

If you are inputting grace notes after previously inputting normal notes, the rhythmic duration of the grace notes is the same as the last input normal note. You can change the rhythmic duration in the same way as for normal notes.

There is no limit to the number of grace notes that can exist at the same rhythmic position.

TIP

You can also change the type of grace notes after they have been input.

RELATED LINKS

- [Grace notes](#) on page 657
- [Inputting notes](#) on page 149
- [Inputting accidentals](#) on page 162
- [Inputting articulations](#) on page 182
- [Changing the type of grace notes](#) on page 660

Inputting chords

You can input chords during step input when both note input and **Chords** are activated. You can input notes with a computer keyboard, with the mouse, or by playing notes with a MIDI keyboard.

NOTE

You cannot input chords in Insert mode.

PROCEDURE

1. Select the staff where you want to input chords and press **Shift-N** or **Return** to start note input.
2. Press the number on your computer keyboard that corresponds to the note value you want to input.

For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.

3. Press **Q** to start chord input.

In chord input, a + sign appears at the top of the caret. This allows you to input multiple notes at the caret position.



4. Input the pitches you want in any of the following ways:

- Press the corresponding letters on your keyboard.

TIP

Dorico Pro automatically inputs notes above the highest note at the caret position when **Chords** is activated.

You can input notes below the lowest note at the caret position instead by pressing **Ctrl** (macOS) or **Ctrl-Alt** (Windows) as well as the letter for the note name.

- Click the staff at the rhythmic positions where you want to input notes.
A shadow notehead appears when inputting with the mouse to indicate where the note will be input.
 - Play the notes on a MIDI keyboard.
- 5.** Optional: Advance the caret to input chords at other rhythmic positions.
During chord input, notes are input at the same rhythmic position and above the previous note until you advance the caret manually.
- 6.** Press **Q** again to stop chord input.
-

RESULT

Multiple notes are input at the caret position.

If entering pitches by clicking with the mouse, you can put the same pitch into the chord twice by clicking again on the same line.

If entering pitches with the keyboard, repeated notes are automatically input an octave above. You can change the register of notes by forcing the register selection during note input, or by transposing them after they have been input.

NOTE

- You can stop chord input and immediately continue inputting notes as before, with a single note at each rhythmic position and the caret advancing automatically to the next rhythmic position.
 - When chords contain two pitches in the same register but with different accidentals, that is known as an altered unison. Altered unisons are shown with either single stems or with split stems, depending on your settings on the **Accidentals** page in **Write > Notation Options**.
-

RELATED LINKS

[Register selection during step input](#) on page 151

[Moving the caret manually](#) on page 148

[Altered unisons](#) on page 491

Inputting tuplets

You can input all types of tuplets using the tuplets popover. Tuplets are input like normal notes, and so can only be input during note input.

You can also input triplets by clicking **Tuplets** in the Notes toolbox. However, you can only input one triplet at a time this way.

PROCEDURE

1. In Write mode, start note input.
2. Press the number on your computer keyboard that corresponds to the note value on which you want to base your tuplet.
For example, press **5** for eighth notes (quavers), **6** for quarter notes (crotchets), **7** for half notes (minims), and so on.
3. Press **;** to open the tuplets popover.
4. Enter the tuplet you want into the popover as a ratio. For example, enter 3:2 to input triplets.
5. Press **Return** to close the popover.
The tuplet is entered.
6. Optional: Change the selected note duration.
For example, you can input a tuplet based on eighth notes but input a quarter note within that tuplet.
7. Enter or play in the pitches you want.
8. Optional: press **Space** to advance the caret to continue inputting tuplets of the same ratio at later rhythmic positions.
9. Stop tuplet input in any of the following ways:
 - Press **Shift-;** or move the caret with the arrow keys to return to inputting normal notes.
 - Press **Esc** to stop note input completely.

RESULT

The pitches you enter or play in are input as tuplets, starting from the caret position.

If you want to input a different type of tuplet immediately after inputting tuplets, you must stop the first type of tuplet before inputting the second type. If you do not stop the first type, the second type is input as a nested tuplet.

RELATED LINKS

[Tuplets on page 1007](#)

[Nested tuplets on page 1008](#)

[Inputting notes on page 149](#)

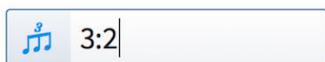
Tuplets popover

The table contains examples of what you can enter into the tuplets popover to input different types of tuplets. The tuplets popover can only be opened during step input.

You can open the tuplets popover during note input in Write mode in any of the following ways:

- Press **;**.
As tuplets are often described in ratios, such as 3:2, the tuplets popover uses the semicolon key to be memorable.
- Choose **Write > Create Tuplet**.

The icon on the left-hand side of the popover matches the corresponding button in the Notes toolbox on the right of the window.



Tuples popover with an example entry



Tuples button in the Notes toolbox

NOTE

Clicking **Tuples** in the Notes toolbox only inputs a single triplet. It does not open the tuples popover.

When inputting tuples with the keyboard, Dorico Pro continues inputting notes as the specified tuplet until any of the following happens:

- You press **Shift-;** to return to inputting normal notes.
- You move the caret with the arrow keys.
- You stop note input.

Type of tuplet	Popover entry
Triplet, three notes in the space of two.	3 or 3:2
Triplet, three notes in the space of four.	3:4
Quintuplet, five notes in the space of four.	5:4
Quintuplet, five notes in the space of two.	5:2
Septuplet, seven notes in the space of four.	7:4
Septuplet, seven notes in the space of two.	7:2
Duplet, two notes in the space of three. Often used in compound meters.	2:3
Quintuplet, five notes in the space of six. Often used in compound meters.	5:6
64th note beat unit in tuplet	z or 2
32nd note beat unit in tuplet	y or 3
16th note beat unit in tuplet	x or 4
Eighth note beat unit in tuplet	e or 5
Quarter note beat unit in tuplet	q or 6
Half note beat unit in tuplet	h or 7
Whole note beat unit in tuplet	w or 8

Type of tuplet	Popover entry
Double whole note beat unit in tuplet	2h or 9
Dotted eighth note beat unit in tuplet	e. or 5.
Dotted quarter note beat unit in tuplet	q. or 6.
Quintuplet, five dotted quarter notes in the space of four.	5:4q. or 5:4-6.

NOTE

You must separate the tuplet ratio from the beat unit using a space or hyphen when using a number to specify the beat unit.

NOTE

The total duration of the tuplet depends on the note value selected when you open the popover. For example, if a quarter note is selected when you input a triplet, the triplet input is three quarter notes in the space of two.

This list is not comprehensive. It is intended to illustrate how you can structure your entry to input different tuplets.

RELATED LINKS

[Inputting tuplets](#) on page 169

[Tuplets](#) on page 1007

[Turning existing notes into tuplets](#) on page 1009

[Selecting note/rest durations](#) on page 157

Adding notes above/below existing notes

You can add notes above/below existing notes. You can add multiple notes at the same time, according to their intervals relative to the existing notes.

PROCEDURE

1. Select the notes to which you want to add notes.
 2. Press **Shift-I** to open the add intervals popover.
 3. Enter the intervals of the notes you want, relative to your selected notes. For example, enter -m3,4 to add notes a minor third below and a fourth above the selected notes.
 4. Press **Return** to close the popover.
-

RESULT

Notes are added to the selected notes according to the intervals you entered into the add intervals popover.

RELATED LINKS

[Changing the pitch of individual notes](#) on page 173

Add intervals popover

The add intervals popover allows you to add notes above and below existing notes, and also transpose existing notes. It makes much of the functionality provided by the **Add Notes Above or Below** and **Transpose** dialogs accessible directly via the keyboard.

You can open the add intervals popover in Write mode in any of the following ways when notes are selected, including during note input:

- Press **Shift-I**.
- Choose **Write > Add Intervals Popover**.

The table contains examples of what you can enter into the add intervals popover to transpose notes or add notes to existing notes.

Example action	Popover entry
Transpose notes upwards by a third.	t3
Transpose notes downwards by a sixth.	t-6
Add notes a third above.	3 or 3rd
Add notes a fourth below.	-4 or -4th
Add multiple notes	3,6 or -3,3,4
NOTE	
Separate notes with commas, not with spaces.	
<hr/>	
Add notes above and/or below all notes in selected chords.	3 all or -M2,m3 to all
NOTE	
Separate notes with commas, not with spaces.	
<hr/>	
Add notes only to the top notes in chords.	-3 top or dim5 top
Add notes only to the bottom notes in chords.	aug4 bottom or -2 bottom
Specify perfect interval.	p, per, or perf
Specify major interval.	M, maj, or major
Specify minor interval.	m, min, or minor
Specify diminished interval.	d, dim, or diminished
Specify augmented interval.	a, aug, or augmented
Specify diatonic interval.	diat or diatonic

Example action

Transpose notes by microtonal intervals.

Popover entry

t 3 8 qt

NOTE

The first number is the interval degree.

The second number is the number of quarter tones.

If you do not otherwise specify it, the interval is calculated by adding or transposing notes by the number of staff positions specified. For example, in C major, if the selected note is a D \sharp and you specify 3 to add a third above, the added note is an F \sharp . You can specify the quality of the interval by including it before the interval.

If the selected material already includes chords, notes are added above the top note in the chord, and added below the bottom note in the chord. You can add notes to all notes in selected chords by including **all** or **to all** at the end of your entry.

For microtonal transpositions, the first number is the interval degree, and the second number is the number of quarter tones. For example, if you have a C natural and you enter T 3 8 qt, it changes to an E natural.

RELATED LINKS

[Transposing existing notes with the add intervals popover](#) on page 174

Changing the pitch of individual notes

You can change the pitch and register of individual notes, including grace notes, after they have been input by octave divisions, by staff position, and by octaves.

PROCEDURE

1. In Write mode, select the notes whose pitches you want to change.
 2. Raise/Lower the pitches of the selected notes in any of the following ways:
 - To move notes up one staff position, such as from C to D, press **Alt-Up Arrow**.
 - To move notes down one staff position, such as from D to C, press **Alt-Down Arrow**.
 - To transpose notes up a single octave division, such as a quarter tone in 24-EDO, press **Shift-Alt-Up Arrow**.
 - To transpose notes down a single octave division, such as a quarter tone in 24-EDO, press **Shift-Alt-Down Arrow**.
 - To transpose notes up an octave, press **Ctrl/Cmd-Alt-Up Arrow**.
 - To transpose notes down an octave, press **Ctrl/Cmd-Alt-Down Arrow**.
-

RESULT

The pitch or register of the selected notes is changed.

NOTE

You can press **Alt-Up Arrow** and **Alt-Down Arrow** to change the staff positions of notes in percussion kits using grid and five-line staff presentation types. However, this also changes the instrument playing the note.

RELATED LINKS

[Equal Division of the Octave \(EDO\)](#) on page 674

[Adding notes above/below existing notes](#) on page 171

[Add intervals popover](#) on page 172

[Changing accidentals](#) on page 163

[Respelling accidentals](#) on page 163

Transposing existing notes with the add intervals popover

You can change the pitch of notes after they have been input using the add intervals popover.

PROCEDURE

1. Select the notes you want to transpose.
 2. Press **Shift-I** to open the add intervals popover.
 3. Enter the transposition interval you want into the popover.
For example, enter t3 to transpose the notes up a third, or t-min6 to transpose the notes down a minor sixth.
 4. Press **Return** to close the popover.
-

RESULT

The selected notes are transposed by the degree specified.

RELATED LINKS

[Add intervals popover](#) on page 172

Repitching notes without changing their rhythm

You can repitch notes after you have input them while keeping their durations the same, for example, if you want to duplicate the rhythm but have different pitches.

PROCEDURE

1. Select the first note you want to repitch.
2. Press **Shift-N** or **Return** to start note input.
3. Press **L** to activate **Lock to Duration**.
4. Enter the pitches you want.
5. Optional: Press **L** again to deactivate **Lock to Duration**.

NOTE

Lock to Duration automatically deactivates when you reach the last existing note on the staff. By default, normal note input continues using the previous note value selected before you activated **Lock to Duration**.

RESULT

Existing notes on the selected staff are repitched without their rhythms being changed. The caret automatically advances from note to note, even if there are large rests between notes on the staff.

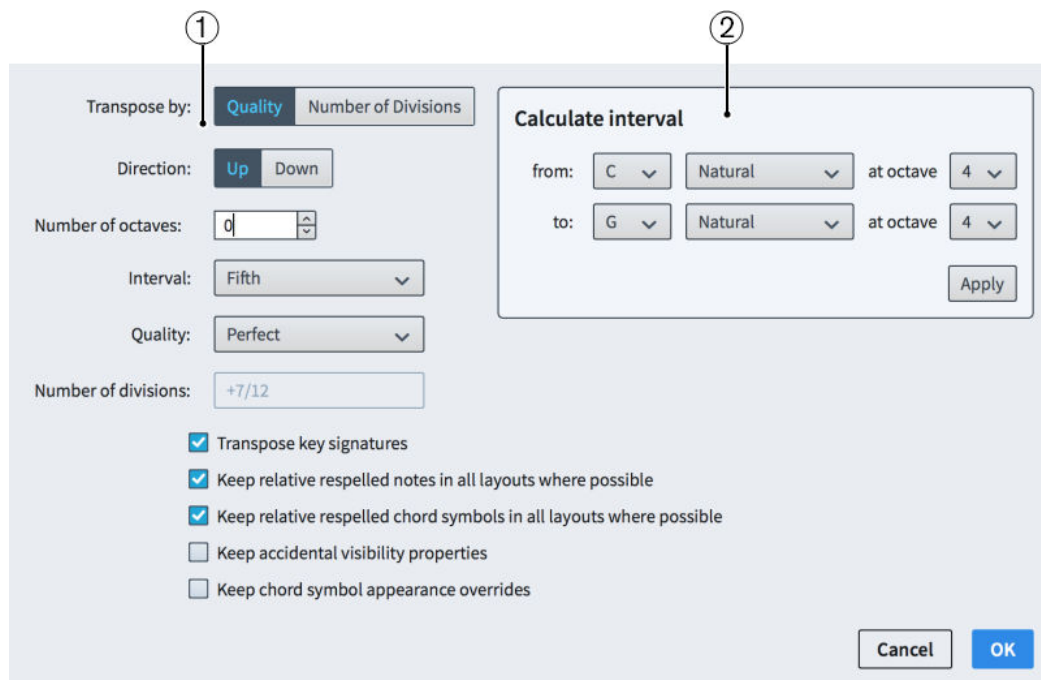
RELATED LINKS

[Caret](#) on page 146

Transpose dialog

The **Transpose** dialog allows you to transpose selections of notes simultaneously, including key signatures. You can transpose according to an interval and quality or by a set number of octave divisions.

- You can open the **Transpose** dialog in Write mode by making a selection in the music area and choosing **Write > Transpose**.



Transpose dialog

The **Transpose** dialog contains the following sections:

1 Transposition options

Contains options that allow you to specify the transposition you want. For example, you can choose to transpose by an interval quality, such as a major third, or by a set number of divisions of the octave. You can choose the direction of the transposition, whether it includes octaves, and the interval and quality or number of divisions by which you want to transpose your selection.

According to convention, different intervals have different possible qualities. For example, you can specify a major third but not a major octave.

Additional options also allow you to transpose any key signatures included in your selection and keep relative respelled notes and chord symbols where possible.

2 Calculate interval

Allows you to set transposition options according to a starting note and the resulting note you want. For example, if you want to transpose a selection relative to a C natural becoming a G# but you are not certain of the interval and quality required, you can enter those two notes in the **Calculate interval** section, click **Apply**, and Dorico Pro automatically sets the required transposition options for you.

NOTE

The **Transpose** dialog does not allow transpositions that would result in impossible notations, such as sharper than a triple sharp, or that require a microtonal accidental that does not exist in the tonality system in place at the position of your selection.

RELATED LINKS

[Add intervals popover](#) on page 172

Transposing selections

You can transpose whole selections together, including key signatures within selections, using the **Transpose** dialog.

PROCEDURE

1. In Write mode, make a selection in the music area.
 2. Choose **Write > Transpose** to open the **Transpose** dialog.
 3. In the **Transpose** dialog, adjust the parameters required for your transposition, such as interval and quality.
 4. Click **OK** to save your changes and close the dialog.
-

RESULT

All notes in your selection are transposed according to the interval or number of divisions of the octave specified in the **Transpose** dialog. If your selection included key signatures and you activated **Transpose key signatures**, all key signatures in the selection are also transposed.

MIDI recording

MIDI recording is a way of inputting notes into Dorico Pro by playing them in real time on a MIDI device. This can be particularly useful if, for example, you prefer to improvise your music rather than plan pitches and note durations in advance.

In Dorico Pro, you can record MIDI notes using any MIDI device. However, you must connect the device to your computer before starting Dorico Pro.

Outside of note input, Dorico Pro uses the instrument sounds of your most recent selection for the notes you play on your MIDI device. In Play mode, this is the most recent track header you clicked, while in Write mode, this is the last instrument staff on which you started note input or into which you recorded MIDI. During note input, Dorico Pro always uses the instrument sounds of the instrument into which you are recording notes.

As you play notes on your MIDI device, Dorico Pro uses an algorithm to produce the correct enharmonic spelling for those notes.

RELATED LINKS

[Optimization for MIDI recording](#) on page 180

Inputting notes using MIDI recording

You can input notes by recording what you play on a MIDI device in real time. You can record notes in both concert and transposed pitch.

PREREQUISITE

- You have connected and enabled the MIDI device you want to use.

NOTE

You must have connected the device to your computer before starting Dorico Pro. If not, you must restart Dorico Pro.

- You have set the quantization options in the **MIDI Quantize Options** dialog as appropriate for the music you intend to record.

- You have set the options in the **Recording** section of the **Play** page in **Preferences** as appropriate for the music you intend to record.
- You have input enough bars or empty rhythmic space for the amount of music you want to record. Dorico Pro does not automatically add extra bars or rhythmic space.
- If you want to hear a click during your recording, you have input a time signature. There is no click in open meter or when there is no time signature.
- You have chosen the appropriate input pitch setting.

PROCEDURE

1. Select a note or rest on the staff/instrument track into which you want to record notes, at the position from which you want to record. You can do this in Write mode and Play mode.

NOTE

- In Play mode you cannot select rests, meaning you can only record into instrument tracks that already contain at least one note.
- You can also record MIDI during note input, but this prevents Dorico Pro from using both staves in grand staff instruments.

2. Optional: If you want to record notes without overwriting any existing notes on the staff, press **Q** to activate **Chords**.
3. Optional: If you want to record into a specific voice on the staff, press **Shift-N** to start note input and then do one of the following:
 - If the voice you want already exists on the staff, press **V** until the note symbol beside the caret indicates the correct voice.
 - If the voice you want does not exist on the staff yet, press **Shift-V** until the note symbol beside the caret indicates the correct voice.
4. Press **Ctrl/Cmd-R** to start recording.
During recording, the playhead appears red and moves along in time. By default, there is one bar of count-in before the playhead reaches the rhythmic position of either your original selection or the caret.
5. Play the notes you want on your MIDI device.
In Write mode, no music appears on the staff until you stop recording. In Play mode, notes appear in the piano roll in real time.
6. Press **Space** or **Ctrl/Cmd-R** to stop recording.

RESULT

The notes you played on the MIDI device are input onto the selected staff. If you did not specify the voice, notes are recorded into the first available voice on the staff, which is usually the first up-stem voice. If you activated **Chords**, the notes you played are merged into the first available voice on the staff without overwriting any existing notes.

The notated duration of the notes follows your quantization settings, but their played durations are retained for playback.

AFTER COMPLETING THIS TASK

If the notes you played in are not notated as you intended, you can requantize them.

RELATED LINKS

[Disabling MIDI input devices](#) on page 182

[Changing the count-in duration](#) on page 180

[Changing the input pitch setting](#) on page 149

[Changing the sustain pedal controller settings for MIDI recording/import](#) on page 181

[Repeats in MIDI recording](#) on page 178

[Input methods for bars and barlines](#) on page 201
[Input methods for time signatures](#) on page 190
[Inputting notes into multiple voices](#) on page 159
[MIDI Quantize Options dialog](#) on page 71

Retrieving played notes that you did not record

During playback, you can play notes on your MIDI keyboard and hear them without recording them into the score. You can use retrospective recording to retrieve these notes and input them into the project without previously explicitly recording them.

PREREQUISITE

You have started playback, played notes on a MIDI device alongside playback, then stopped playback.

PROCEDURE

1. Select a note or rest on the staff where you want to input the retrieved notes.
2. Optional: If you want to input retrieved notes without overwriting any existing notes on the staff, press **Q** to activate **Chords**.
3. Press **Ctrl/Cmd-Alt-R**.

RESULT

All the notes you played on your MIDI device during the previous playback are input on the selected staff, starting from the selected rhythmic position. They are input into the first available voice on the staff and overwrite any existing notes in that voice by default. If you activated **Chords**, the retrieved notes are merged into the first available voice on the staff without overwriting any existing notes.

NOTE

The retrospective recording buffer is cleared each time you start playback, meaning you cannot retrieve music you played before the most recent playback.

RELATED LINKS

[Playing back music](#) on page 431

Repeats in MIDI recording

When recording MIDI into flows that contain repeat structures, such as repeat barlines, Dorico Pro records the notes you play during each playthrough and merges them together into the same voice.

Any differences in rhythms between the recordings are notated according to the current meter.

Requantizing notes

You can requantize notes using different quantization settings, for example, if you want to change notated rhythms after importing MIDI or recording notes using a MIDI device. This does not affect the played duration of notes in playback.

PROCEDURE

1. Select all the notes you want to requantize. You can do this in Write mode and Play mode.
2. Choose **Edit > Requantize** to open the **MIDI Quantize Options** dialog.
3. Change the quantization settings as appropriate for your selection.

4. Click **OK** to save your changes and close the dialog.
-

RESULT

The notated durations of all selected notes are changed according to the quantization options you set. This does not affect their played duration in playback.

RELATED LINKS

[MIDI Quantize Options dialog](#) on page 71

Changing the click settings

You can change the pitch, volume, and subdivision of the metronome click, which is always used during MIDI recording. During playback, the click only sounds if the metronome is activated.

By default, Dorico Pro only subdivides the beat in the metronome click in compound time signatures, and uses a beep for the metronome click sound. The beep is a higher pitched tone for the first beat of the bar and a lower and quieter tone for subsequent beats of the bar. Further beat subdivisions use even lower tones.

NOTE

- The click is produced by a tone generator called DoricoBeep. You can change the device used for the click, but this overrides the playback template. This means you must subsequently load sounds for any new instruments you add to your project manually, or reset the playback template.
 - There is no click in open meter or when there is no time signature.
-

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
 2. Click **Click** in the page list.
 3. In the **Metronome Click** section, activate/deactivate the following options for **Beat subdivisions**:
 - **Subdivide beats in simple time signatures**
 - **Subdivide beats in compound time signatures**
 4. Choose one of the following options for **Click sound**:
 - **Click** (unpitched)
 - **Beep** (pitched)
 5. For **Pitch and velocity**, change the **MIDI pitch** and/or **Velocity** values for any of the following types of beat:
 - **First beat**
 - **Subsequent beats**
 - **Beat subdivisions**
 6. Click **Apply**, then **Close**.
-

RESULT

The pitch, volume, and subdivision settings for the metronome click in the current project are changed.

RELATED LINKS

[Types of time signatures](#) on page 983

[Input methods for time signatures](#) on page 190

[Playback templates](#) on page 436

Changing the count-in duration

For each project, you can change the default number of bars used in the count-in before you start recording. By default, Dorico Pro provides a one bar count-in.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
 2. Click **Click** in the page list.
 3. In the **Count-in** section, change the value for **Number of bars count-in**.
 4. Click **Apply**, then **Close**.
-

RESULT

The default duration of the count-in is changed in the current project.

Optimization for MIDI recording

Depending on your operating system and the MIDI devices you use for recording, you might find that the notes you record are not notated with the durations or at the rhythmic positions you expected. Optimizing the settings related to MIDI recording can help you achieve better results.

Because there can be a time latency between you pressing keys on a MIDI device and the notes being picked up by Dorico Pro, we recommend that you check the latency by inputting a simple rhythm against the click, for example, recording quarter notes in a 4/4 time signature.

Depending on the results, there are different settings you can change:

- If your notes are notated with incorrect durations, such as sixteenth notes notated as eighth notes, we recommend that you change your quantization settings in the **MIDI Quantize Options** dialog.
- If your notes are notated ahead of the beat, we recommend that you increase the latency compensation value.
- If your notes are notated behind the beat, we recommend that you reduce the buffer size for your audio device to the lowest possible value that still produces stable playback with no drop-outs.

NOTE

The built-in audio device on Windows computers cannot always achieve a low enough latency for reliable input in real time. In such cases, we recommend that you use an external USB audio interface with ASIO support.

RELATED LINKS

[MIDI Quantize Options dialog](#) on page 71

[Changing the sustain pedal controller settings for MIDI recording/import](#) on page 181

Changing the MIDI latency compensation value

You can change the MIDI latency compensation value to correct any discrepancy between when you press keys during MIDI recording and where the corresponding notes are notated relative to the beat.

PROCEDURE

1. Press **Ctrl/Cmd-,** (comma) to open **Preferences**.

2. Click **Play** in the page list.
 3. In the **Recording** subsection, change the value for **MIDI input latency compensation**.
 4. Click **Apply**, then **Close**.
-

RESULT

Increasing the latency compensation value increases the time between pressing the key and the note being notated. This is useful if the notes you record were previously notated ahead of the beat.

Decreasing the latency compensation value decreases the time between pressing the key and the note being notated. This is useful if the notes you record were previously notated behind the beat.

Changing the audio device buffer size

You can change the audio buffer size, for example, if the current buffer size is causing notes input using MIDI recording appear significantly after the beat.

NOTE

- If the notes you play when recording MIDI are notated behind the beat, we recommend that you reduce the buffer size for your audio device to the lowest possible value that still produces stable playback with no drop-outs.
 - The built-in audio device on Windows computers cannot always achieve a low enough latency for reliable input in real time. In such cases, we recommend that you use an external USB audio interface with ASIO support.
-

PROCEDURE

1. Choose **Edit > Device Setup** to open the **Device Setup** dialog.
 2. In the **Device Setup** dialog, select the audio device whose buffer size you want to change from the **ASIO Driver** menu.
 3. Click **Device Control Panel** to open the device settings dialog for the selected audio device.
 4. In the audio device settings dialog, change the buffer size in one of the following ways, as appropriate for your operating system:
 - For macOS systems, select a sample rate from the **Buffer Size** menu.
 - For Windows systems, in the **Audio buffer size** section, either drag the slider to a different position or activate **User definable** and change the value in the **Selected buffer size** field.
 5. Click **Close** (macOS)/**OK** ((Windows only)) to close the audio device settings dialog.
 6. Click **Close** to close the **Device Setup** dialog.
-

Changing the sustain pedal controller settings for MIDI recording/import

You can change your default setting for whether Dorico Pro interprets sustain pedal controllers as pedal lines when recording MIDI and importing MIDI files.

NOTE

These options are also available in the **MIDI Import Options** dialog, and your settings are linked between this dialog and **Preferences**.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Play** in the page list.
 3. In the **Recording** subsection, activate/deactivate **Import CC64 as pedal lines**.
 4. Optional: If you activated **Import CC64 as pedal lines**, activate/deactivate **Snap pedal lines to previous beat**.
 5. Click **Apply**, then **Close**.
-

RESULT

When **Import CC64 as pedal lines** is activated, the MIDI controller CC64 is interpreted as pedal lines.

When **Snap pedal lines to previous beat** is activated, the start of pedal lines is automatically moved back to the start of the beat.

RELATED LINKS

[MIDI Import Options dialog](#) on page 70

Disabling MIDI input devices

By default, Dorico Pro accepts MIDI input from all connected MIDI devices, including virtual MIDI cables and inter-application buses. You can disable MIDI devices individually, for example, if you are using devices that continuously output MIDI data or if you want particular devices to remain routed exclusively to another application.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Play** in the page list.
 3. In the **Recording** subsection, click **MIDI Input Devices**.
 4. In the **MIDI Input Devices** dialog, deactivate the checkbox for each MIDI input device you want to disable.
 5. Click **OK** to save your changes and close the dialog.
 6. Click **Apply**, then **Close**.
-

Notations input

You can input many types of notations, both during step input and by adding them to existing notes. In Dorico Pro, “notation” is a broad term that includes many different items, including articulations, slurs, dynamics, and more.

Inputting articulations

You can input notes with articulations during step input, and you can add articulations to notes after they have been input.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add articulations.

2. Select the articulations you want to input in any of the following ways:
 - Press the key commands for the articulations you want.
 - Click the articulations you want in the Notes panel.
 3. Optional: Enter the notes or chords you want with your selected articulations.
-

RESULT

The selected articulations are added to the selected notes.

During step input, the selected articulations are added to all notes that are input until the articulations are deactivated.

NOTE

Some combinations of articulations on the same notes are not possible. For example, you cannot have both staccato and staccatissimo marks on the same notes, as both articulations indicate that notes are played shorter.

RELATED LINKS

[Articulations](#) on page 497

[Note input](#) on page 145

Key commands for articulations

In addition to clicking them in the Notes panel, you can input common articulations by pressing key commands on your computer keyboard.

You can use the following key commands to input articulations with the keyboard:

Type of articulation	Key command
Accent: >	[
Marcato: ^	'
Stressed: ˇ	{
Unstressed: ˇ	@ (Windows) Shift-' (macOS)
Staccato: `]
Tenuto: -	# (Windows) \ (macOS)
Staccatissimo: ', ' or ' ˇ	}
Combined tenuto and staccato: ˇ	~ (Windows) (macOS)

RELATED LINKS

[Articulations](#) on page 497

Inputting fingerings

You can input fingerings on existing notes using the fingerings popover, both during step input and by adding them to existing notes.

NOTE

- You can only add fingerings to notes at one rhythmic position at a time, and you can only input as many fingerings as there are notes at each rhythmic position. For example, you can input three fingerings at the rhythmic position of a chord containing three notes, but only one fingering at the rhythmic position of a single note.
- Although they contain two numbers, substitution fingerings are considered one fingering, meaning you can add substitution fingerings to single notes.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add fingering.
If you want to add fingerings to all notes in a chord, select all the notes in the chord.
2. Press **Shift-F** to open the fingerings popover.
3. Enter the fingerings you want into the popover.
For example, enter:
 - 3-2 for a substitution fingering from the third finger to the second finger.
 - 1,3,5 for a chord.
 - 12 to show the first two valves should be depressed on a valved brass instrument.
4. Optional: When adding fingerings to existing notes, advance the popover in one of the following ways:
 - To advance the popover to the next note/chord in the current voice, press **Space**.
 - To advance the popover to the first note/chord in the current voice in the next bar, press **Tab**.
 - To navigate the popover back to the first note/chord in the current voice in the previous bar, press **Shift-Tab**.
5. Press **Return** to close the popover.

RESULT

The fingerings are input on the selected notes, including during step input.

RELATED LINKS

[Fingering](#) on page 639

[Changing the rhythmic position of substitution fingerings](#) on page 640

[Fingerings for valved brass instruments](#) on page 649

[Deleting fingerings](#) on page 645

Fingerings popover

The table contains examples of what you can enter into the fingerings popover to input the different types of fingerings available.

You can open the fingerings popover in Write mode in any of the following ways when either a note is selected or the caret is active:

- Press **Shift-F**.

- Choose **Write > Create Fingerings**.
- Click **Fingerings** in the Notations toolbox.



Type of fingering	Example popover entry
Single fingerings for individual notes, including for brass valve numbers and trombone slide positions	1, 2, 3, and so on
Valved brass instruments	12
Single fingerings for each note in chords	1,3,5
For keyboard instruments, Dorico Pro automatically orders numbers appropriately according to the hand playing the notes. The default is:	
<ul style="list-style-type: none"> • Right hand for the upper staff • Left hand for the lower staff 	
Left hand fingerings	L2, G2, S5, I2, or H2
Right hand fingerings	R5, D5, or M5
Multiple fingerings for individual notes, for example, for ornaments such as mordents or turns	2343
Single fingerings for multiple notes: enter the same fingering number for two adjacent notes.	1,1
For example, in keyboard music the thumb may depress two keys simultaneously.	
Alternative fingerings	2(3)
NOTE	
You must use parentheses in the popover, even if you choose to show alternative fingerings in square brackets.	
Editorial fingerings	[4]
NOTE	
You must use square brackets in the popover, even if you choose to show editorial fingerings in parentheses.	
Finger substitutions	1-3

Type of fingering	Example popover entry
Thumb indicator for string instruments	T

This list is not comprehensive as there are many possible fingerings. It is intended to illustrate how you can structure your entries to input different types of fingerings.

NOTE

Finger substitutions are shown as immediate by default, but you can change the rhythmic position of the substitution by changing the deferral duration.

You can change the appearance and position of each type of fingering on the **Fingering** page in **Engrave > Engraving Options**.

RELATED LINKS

[Fingering](#) on page 639

[Project-wide engraving options for fingerings](#) on page 640

[Changing the rhythmic position of substitution fingerings](#) on page 640

[Fingerings for valved brass instruments](#) on page 649

Input methods for key signatures

You can input key signatures with the keyboard by using the key signatures popover, and with the mouse by using the Key Signatures, Tonality Systems, and Accidentals panel.

RELATED LINKS

[Key signatures](#) on page 671

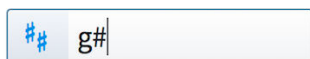
Key signatures popover

The table contains the entries for the key signatures popover that you can use to input the different key signatures available.

You can open the key signatures popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-K**.
- Select an existing key signature and press **Return**.
- Choose **Write > Create Key Signature**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Key signatures popover with an example entry



Key Signatures, Tonality Systems, and Accidentals button in the Notations toolbox

Type of key signature	Popover entry
Open or atonal key signature	open or atonal
Major keys (capital letters)	C, D or G#, Ab, and so on

Type of key signature

Minor keys (lowercase letters)

Number of sharps

NOTE

Assumes the major key for that many sharps.

Number of flats

NOTE

Assumes the major key for that many flats.

Popover entry

g, d, f#, bb, and so on

3s, 2#, and so on

4f, 5b, and so on

This list is not comprehensive as you can input every possible key signature. It is intended to illustrate how you can structure your entry to input different types of key signatures.

RELATED LINKS

[Key signatures](#) on page 671

Key Signatures, Tonality Systems, and Accidentals panel

The Key Signatures, Tonality Systems, and Accidentals panel allows you to create and input common key signatures and your own custom key signatures.

- You can hide/show the Key Signatures, Tonality Systems, and Accidentals panel by clicking **Key Signatures, Tonality Systems, and Accidentals** in the Notations toolbox on the right of the window in Write mode.

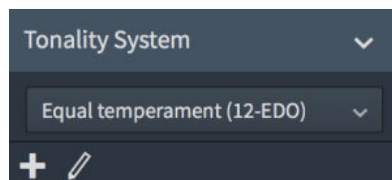


You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Key Signatures, Tonality Systems, and Accidentals panel contains the following sections:

Tonality System

Contains a menu that allows you to select tonality systems to use, and options for editing and creating custom tonality systems.



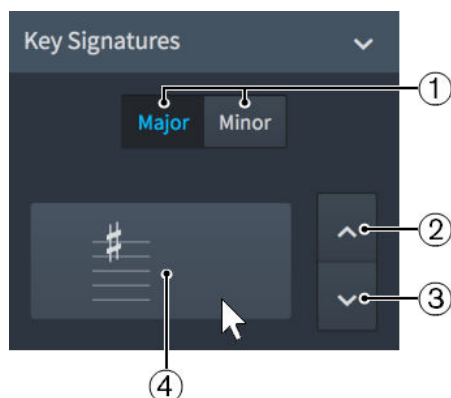
The **Tonality System** section of the Key Signatures, Tonality Systems, and Accidentals panel

Used in This Flow

Contains all the key signatures currently used in the flow.

Key Signatures

Allows you to create key signatures.



The **Key Signatures** section of the Key Signatures, Tonality Systems, and Accidentals panel.

The **Key Signatures** section contains the following parts:

- 1 Major/Minor**
Allow you to choose whether your key signature is **Major** or **Minor**.
- 2 Up button: More Sharps/Fewer Flats**
Each time you click, you add one sharp accidental to the key signature, or remove one flat accidental from the key signature.
- 3 Down button: Fewer Sharps/More Flats**
Each time you click, you remove one sharp accidental from the key signature, or add one flat accidental to the key signature.
- 4 Input key signature**
Shows how the key signature looks on a staff. Clicking this button inputs the key signature it displays. If nothing in the project is selected, the key signature is loaded onto the mouse pointer.

Custom Key Signatures

Contains any custom key signatures you have created for the currently selected tonality system.

Accidentals

Contains all accidentals available in the currently selected tonality system.

RELATED LINKS

[Key signatures](#) on page 671

[Custom tonality systems](#) on page 675

Inputting key signatures with the popover

You can input key signatures using the key signatures popover, both during step input and by adding them to existing music. You can also input key signatures only on single staves.

PROCEDURE

- In Write mode, do one of the following:
 - Start note input.
 - Select an existing barline immediately to the left of where you want to input a key signature.
 - Select an existing notehead or rest immediately to the right of where you want to input a key signature.
- Press **Shift-K** to open the key signatures popover.
- Enter the key signature you want into the popover.

For example, enter **g** for G minor or **3s** for 3 sharps.

NOTE

Entering **3s** creates a key signature of A major, rather than F# minor.

4. Input the key signature and close the popover in one of the following ways:
 - To input a key signature on all staves, press **Return**.
 - To input a key signature on the selected staff only, press **Alt-Return**.
-

RESULT

During step input, key signatures are input at the caret position, even if this is in the middle of a bar. However, it is preferable to input key signature changes at barlines.

All subsequently input notes follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first. If playing in notes using a MIDI keyboard, accidentals are spelled according to the key signature.

When adding key signatures to existing music, they are added immediately to the right of a barline, or immediately to the left of a selected note, even if this is in the middle of an existing bar. If you selected an existing key signature, the new key signature directly replaces the existing one.

NOTE

An individual key signature on a single staff is not intended for transposing instruments. Transpositions of notes and key signatures are done automatically for transposing instruments.

RELATED LINKS

[Key signatures popover](#) on page 186

[Accidental selection during MIDI input](#) on page 164

[Key signatures](#) on page 671

[Project-wide spacing gaps for key signatures](#) on page 685

[Moving key signatures rhythmically](#) on page 686

[Transposing instruments](#) on page 104

[Making layouts transposing/concert pitch](#) on page 123

Inputting key signatures with the panel

You can input key signatures using the Key Signatures, Tonality Systems, and Accidentals panel, both during step input and by adding them to existing music. You can also input key signatures only on single staves.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing barline immediately to the left of where you want to input a key signature.
 - Select an existing notehead or rest immediately to the right of where you want to input a key signature.

2. In the Notations toolbox, click **Key Signatures, Tonality Systems, and Accidentals** to show the Key Signatures, Tonality Systems, and Accidentals panel.



3. Optional: If you have not already used the key signature you want in the current flow, create the key signature you want using the **Key Signatures** editor in the Key Signatures, Tonality Systems, and Accidentals panel.
4. Input the key signature you want in one of the following ways:
 - To input a key signature on all staves, click it in the Key Signatures, Tonality Systems, and Accidentals panel.
 - To input a key signature on the selected staff only, **Alt**-click it in the Key Signatures, Tonality Systems, and Accidentals panel.

RESULT

During step input, key signatures are input at the caret position, even if this is in the middle of a bar. However, it is preferable to input key signature changes at barlines.

All subsequently input notes follow the input key signature, until the next existing key signature or the end of the flow, whichever comes first. If playing in notes using a MIDI keyboard, accidentals are spelled according to the key signature.

When adding key signatures to existing music, they are added immediately to the right of a barline, or immediately to the left of a selected note, even if this is in the middle of an existing bar. If you selected an existing key signature, the new key signature directly replaces the existing one.

NOTE

An individual key signature on a single staff is not intended for transposing instruments. Transpositions of notes and key signatures are done automatically for transposing instruments.

RELATED LINKS

[Key signatures](#) on page 671

[Key Signatures, Tonality Systems, and Accidentals panel](#) on page 187

[Project-wide spacing gaps for key signatures](#) on page 685

[Accidental selection during MIDI input](#) on page 164

[Moving key signatures rhythmically](#) on page 686

[Mouse input settings](#) on page 143

[Transposing instruments](#) on page 104

[Making layouts transposing/concert pitch](#) on page 123

Input methods for time signatures

You can input time signatures with the keyboard by using the time signatures popover, and with the mouse by using the Time Signatures (Meter) panel.

NOTE

You can create most types of custom time signatures using the **Create Time Signature** section of the Time Signatures (Meter) panel, but certain time signatures are only possible using the time signatures popover. For example, you can only specify beat subdivisions with the time signatures popover.

RELATED LINKS

[Preferences dialog](#) on page 51

[Time signatures](#) on page 981

[Types of time signatures](#) on page 983

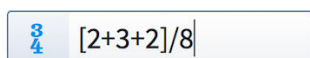
Time signatures popover

The table contains the entries for the time signatures popover that you can use to input the different types of time signatures available.

You can open the time signatures popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-M**.
- Select an existing time signature and press **Return**.
- Choose **Write > Create Time Signature**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Time signatures popover with an example entry



Time Signatures (Meter) button in the Notations toolbox

Type of time signature	Popover entry
Simple time signatures For example, 2/4, 6/8, 3/4, 5/4 and so on	2/4, 6/8, 3/4, 5/4, and so on
Time signatures with a pick-up For example, a 4/4 bar with a dotted quarter note pick-up, or a 6/8 bar with a pick-up of two eighth notes (quavers).	4/4,1.5, 6/8,2, and so on
Alternating time signatures, such as 6/8+3/4	6/8 + 3/4
NOTE	
You must include spaces either side of the plus sign.	
Common time, the equivalent of 4/4	c
Cut common time, the equivalent of 2/2	cutc or ¢
Open meter indicated by X	X or x
Open meter with no indication	open
NOTE	
A time signature signpost is shown at the position of the open meter.	
Additive time signature with explicit beat grouping	3+2+2/8, 3+2/4, and so on

Type of time signature	Popover entry
Beat grouping specified but not shown in the time signature For example, a time signature of 7/8 is shown but beams are subdivided into 2+3+2 eighth notes.	[2+3+2]/8
Aggregate time signature: a dashed barline is shown in the bar to show the division between the different meters	2/4 6/8
Interchangeable time signature with different styles: parenthesized, slash, equals sign, and dashed	2/4 (6/8), 2/4 / 6/8, 2/4 = 6/8, or 2/4 – 6/8

NOTE

You must include spaces either side of the slashes, equals signs, or dashes, and before opening parentheses.

This list is not comprehensive, as there are many possible time signatures. It is intended to illustrate how you can structure your entry to input different time signatures.

RELATED LINKS

[Time signatures](#) on page 981

Time Signatures (Meter) panel

The Time Signatures (Meter) panel allows you to input different time signatures. In the **Create Time Signature** section of the panel, you can create uncommon time signatures.

- You can hide/show the Time Signatures (Meter) panel by clicking **Time Signatures (Meter)** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Time Signatures (Meter) panel contains the following sections:

Used in This Flow

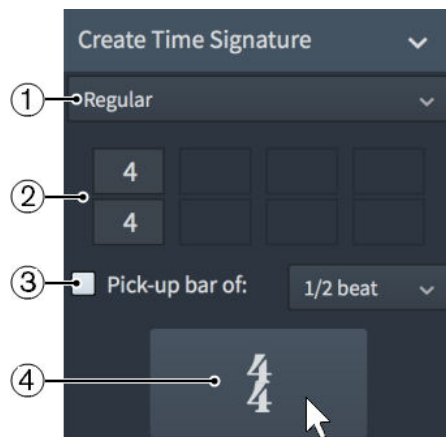
Contains any time signatures already used in the current flow.

Common

Contains common time signatures, such as 4/4, 3/4, 6/8, and 7/8.

Create Time Signature

Allows you to design your own time signatures, including alternating time signatures and aggregate time signatures.



The **Create Time Signature** section of the Time Signatures (Meter) panel

The **Create Time Signature** section contains the following parts:

1 Time signature type menu

Allows you to select one of the following types of time signatures:

- **Regular**
- **Interchangeable**
- **Aggregate**
- **Alternating**

2 Time signature spaces

Allows you to combine up to four time signatures. For example, you can specify only one time signature for a **Regular** time signature, but for an alternating time signature, you might want to include three time signatures.

3 Pick-up bar of

Allows you to include a pick-up bar before the time signature. A pick-up bar is not a complete bar, and so allows you to include only a few beats before the first complete bar.

You can select one of the following options for the number of beats in a pick-up bar:

- **1/2 beat**
- **1 beat**
- **2 beats**

4 Input time signature button

Click the button that displays the time signature to input it. If nothing in the project is selected, the time signature is loaded onto the mouse pointer.

RELATED LINKS

[Time signatures](#) on page 981

Inputting time signatures with the popover

You can input time signatures, including time signatures with pick-up bars, using the time signatures popover, both during step input and by adding them to existing music. You can also input time signatures only on single staves.

NOTE

In order to input an upbeat or pick-up bar, you must input a new time signature that includes the upbeat you want. For example, entering $4/4,1$ into the time signatures popover creates a $4/4$ time signature with one quarter note upbeat.

The number after the comma indicates multiples of the rhythmic unit specified by the denominator of the time signature. For example, $4/4,0.75$ creates a dotted eighth note (dotted quaver) upbeat, whereas $6/8,2$ creates an upbeat of two eighth notes.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select a barline immediately to the left of where you want to input a new time signature.
 - Select a notehead or rest immediately to the right of where you want to input a new time signature.
 2. Press **Shift-M** to open the time signatures popover.
 3. Enter the time signature you want into the popover.
For example, enter $[2+2+3]/8$ for a $7/8$ time signature with a custom beat grouping, or $4/4,1$ for a $4/4$ time signature with one quarter note upbeat.
 4. Input the time signature and close the popover in one of the following ways:
 - To input a time signature on all staves, press **Return**.
 - To input a time signature on the selected staff only, press **Alt-Return**.
-

RESULT

During step input, time signatures are added at the caret position, even if this is in the middle of an existing bar.

When adding time signatures to existing music, they are added immediately to the right of a selected barline, or immediately to the left of a selected note, even if this is in the middle of an existing bar.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Pro automatically inputs and moves barlines as required so that subsequent music is barred correctly.

RELATED LINKS

[Time signatures popover](#) on page 191

[Time signatures](#) on page 981

Inputting time signatures with the panel

You can input time signatures, including time signatures with pick-up bars, using the Time Signatures (Meter) panel, both during step input and by adding them to existing music. You can also input time signatures only on single staves.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PREREQUISITE

If necessary, you have created the time signature you want in the **Create Time Signature** section of the Time Signatures (Meter) panel.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select a barline immediately to the left of where you want to input a new time signature.
 - Select a notehead or rest immediately to the right of where you want to input a new time signature.
2. In the Notations toolbox, click **Time Signatures (Meter)** to show the Time Signatures (Meter) panel.



3. Optional: For pick-up bars, activate **Pick-up bar of** in the **Create Time Signature** section of the Time Signatures (Meter) panel and select one of the following options:
 - **1/2 beat**
 - **1 beat**
 - **2 beats**

NOTE

Not all pick-up bar lengths are possible using this method. For example, a single eighth note upbeat in 6/8 cannot be produced by any of these three options. In such cases, you must use the time signatures popover.

4. Input the time signature you want in one of the following ways:
 - To input a time signature on all staves, click it in the Time Signatures (Meter) panel.
 - To input a time signature on the selected staff only, **Alt-click** it in the Time Signatures (Meter) panel.
-

RESULT

During step input, time signatures are added at the caret position, even if this is in the middle of an existing bar.

When adding time signatures to existing music, they are added immediately to the right of a selected barline, or immediately to the left of a selected note, even if this is in the middle of an existing bar.

All subsequent bars follow the input time signature, until the next existing time signature or the end of the flow, whichever comes first. Dorico Pro automatically inputs and moves barlines as required so that subsequent music is barred correctly.

RELATED LINKS

- [Time signatures](#) on page 981
- [Inputting notes](#) on page 149
- [Time Signatures \(Meter\) panel](#) on page 192
- [Mouse input settings](#) on page 143

Input methods for tempo marks

You can input tempo marks with the keyboard by using the tempo popover, with the mouse by using the Tempo panel, and in the **Time** track in Play mode. You can input a tempo mark containing just a text instruction, metronome mark, or a combination of the two.

Additionally, you can input tempo changes in the **Time** track in Play mode.

RELATED LINKS

- [Tempo marks](#) on page 950
- [Time track](#) on page 421
- [Inputting tempo changes in the Time track](#) on page 423

Tempo popover

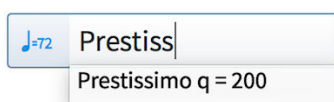
The following tables contain examples of what you can enter into the tempo popover to input tempo marks, tempo equations, and rhythmic feels for swing playback.

When you start entering a tempo into the tempo popover, a menu appears with suggestions containing the letters/words you enter. You can select one of these suggestions to input, or enter your own tempo into the popover.

You can open the tempo popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-T**.
- Select an existing tempo mark and press **Return**.
- Choose **Write > Create Tempo**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Tempo popover with an example entry



Tempo button in the Notations toolbox

Tempo marks

Example tempo mark	Popover entry
<i>Adagio</i>	Adagio
<i>Presto</i> ♩ = 176	Presto q = 176 or Presto q=176
<i>Largo</i> (♩ = 52)	Largo (q = 52) or Largo (q=52)
♩ = 96-112	q = 96-112, q=96-112, 6 = 96-112, or 6=96-112

Example tempo mark	Popover entry
♩ = 84	q. = 84, q.=84, 6. = 84, or 6.=84
♩ = 30	w = 30, w=30, 8 = 30, or 8=30
♩ = 60	h = 60, h=60, 7 = 60, or 7=60
♩ = 120	e = 120, e=120, 5 = 120, or 5=120
♩. = 90	e. = 90, e.=90, 5. = 90, or 5.=90
♩ = 240	x=240, x = 240, 4=240 or 4 = 240
<i>rit.</i>	rit. or rit
<i>accel.</i>	accel. or accel
<i>più</i>	più or piu
<i>meno</i>	meno
Faster, with energy	Faster, with energy

Tempo equations

Tempo equation	Popover entry
♩ = ♩.	e = e., e=e., 5 = 5., or 5=5.
♩ = ♩	q = e, q=e, 6 = 5, or 6=5

This list is not comprehensive as you can enter tempos freely and there are many possible metronome marks, tempo marks, and tempo equations. It is intended to illustrate how you can structure your entry to input different types of tempo marks and metronome marks.

NOTE

The tempo popover is case-sensitive. If you want your tempo mark to start with a capital letter, you must enter a capital letter into the popover.

Rhythmic feels for swing playback

Rhythmic feel	Popover entry
Light swing rhythmic feel	light swing
Medium swing rhythmic feel	medium swing
Heavy swing rhythmic feel	heavy swing

Rhythmic feel

Straight rhythmic feel

Triplet 8th fixed rhythmic feel

Dotted 8th-16th fixed rhythmic feel

Popover entry

straight

2:1 swing (fixed)

3:1 swing (fixed)

RELATED LINKS

[Tempo marks](#) on page 950

[Types of tempo marks](#) on page 951

[Swing playback](#) on page 438

[Enabling swing playback for specific sections/players](#) on page 440

Tempo panel

The Tempo panel contains all the different types of tempo marks available in Dorico Pro, organized into sections. It is located on the right of the window in Write mode.

- You can hide/show the Tempo panel by clicking **Tempo** in the Notations toolbox on the right of the window in Write mode.



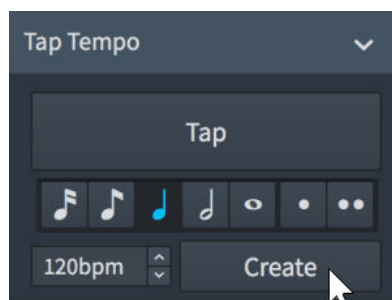
You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

Used in This Flow

Contains any tempo marks already used in the flow, including custom tempo marks added using the tempo popover.

Tap Tempo

Allows you to create an absolute tempo change based on the speed with which you click the **Tap** button. You can use the available options to set the beat unit on which you want the tempo to be based.



Absolute Tempo Change

Contains a range of tempos with both an Italian tempo indication and a metronome mark. You can later choose to show or hide the metronome mark for individual tempo marks.

You can change the range shown in the list by adjusting the sliding bar at the top.



Gradual Tempo Change

Contains tempo marks that indicate a change in tempo over a defined period of time, such as *rallentando* or *accelerando*.

You can add modifiers to gradual tempo changes. Available modifiers are shown at the top of the section.

Relative Tempo Change

Contains tempo marks that indicate a change in tempo that is relative to the previous tempo, such as *mosso* (movement, or with movement). They often include modifiers that qualify the change, such as *poco meno mosso* (a little less movement), and are not defined by a metronome mark.

You can add modifiers to relative tempo changes. Available modifiers are shown at the top of the section.

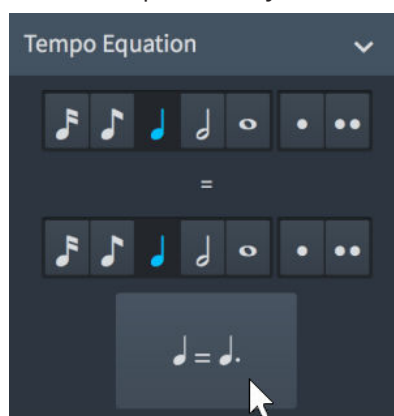
You can later set a relative metronome mark change as a percentage of the previous metronome mark for individual tempo marks.

Reset Tempo

Contains tempo marks that indicate a return to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo*.

Tempo Equation

Allows you to input a tempo equation, using beat units from 16th notes to whole notes and up to two rhythm dots.



RELATED LINKS

[Tempo marks](#) on page 950

[Types of tempo marks](#) on page 951

Inputting tempo marks with the popover

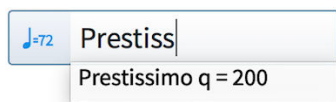
You can input tempo marks using the tempo popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select a barline, notehead, or rest at the rhythmic position where you want to add a tempo mark.
 - Select multiple items that span the duration across which you want to add a gradual tempo change.
2. Press **Shift-T** to open the tempo popover.
3. Enter the tempo you want into the popover.

For example, enter q=72 or Allegretto.

When you start entering a tempo into the tempo popover, a menu appears that shows suggested tempos containing the letters/words you enter. You can select one of these suggestions or you can enter your own tempo into the popover.



4. Press **Return** to close the popover.
-

RESULT

During step input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position with a default duration of a quarter note. Gradual tempo changes do not extend as you input notes.

When adding tempo marks to existing music, they are added at the rhythmic position of the selected barline, notehead, or rest. Gradual tempo changes span the duration of the selected items.

AFTER COMPLETING THIS TASK

You can lengthen/shorten gradual tempo changes.

RELATED LINKS

[Tempo marks](#) on page 950

[Lengthening/Shortening gradual tempo changes](#) on page 956

Inputting tempo marks with the panel

You can input tempo marks using the Tempo panel, both during step input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.

- Select a barline, notehead, or rest at the rhythmic position where you want to add a tempo mark.
 - Select multiple items that span the duration across which you want to add a gradual tempo change.
2. In the Notations toolbox, click **Tempo** to show the Tempo panel.



3. In the Tempo panel, click the tempo mark you want.
4. Optional: Select a modifier from the available options.

NOTE

You can only add modifiers to a **Gradual Tempo Change** or a **Relative Tempo Change**.

RESULT

During step input, tempo marks are input at the caret position. Gradual tempo changes, such as *rallentando*, are also input at the caret position but do not extend as you input notes, and are input with a default duration of a quarter note.

When adding tempo marks to existing music, they are added at the rhythmic position of the selected barline, notehead, or rest. Gradual tempo changes span the duration of the selected items.

AFTER COMPLETING THIS TASK

You can lengthen/shorten gradual tempo changes.

RELATED LINKS

[Tempo marks](#) on page 950

[Lengthening/Shortening gradual tempo changes](#) on page 956

[Mouse input settings](#) on page 143

Input methods for bars and barlines

You can input both bars and barlines with the keyboard by using the bars and barlines popover, and also with the mouse by using the available options in the Bars and Barlines panel. Additionally, you can input bars using the system track, which allows you to input other rhythmic durations, that is, a specified beat region.

Normally you do not need to create bars in Dorico Pro, as they are created automatically as needed when you input music. However, you can add bars in advance if, for example, you are copying or arranging an existing piece of music.

RELATED LINKS

[Bars](#) on page 504

[Barlines](#) on page 509

[System track](#) on page 275

[Inputting bar rests during step input](#) on page 165

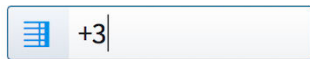
Bars and barlines popover

The following tables contain examples of what you can enter into the bars and barlines popover to add and delete bars and beats, and the entries you can use to input the different barlines available.

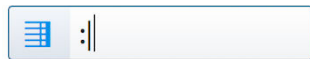
You can open the bars and barlines popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-B**.
- Choose **Write > Create Bar or Barline**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Bars and barlines popover with an example entry for inputting bars



Bars and barlines popover with an example entry for a barline



Bars and Barlines button in the Notations toolbox

Bars

Example action	Popover entry
Add two bars	2 or +2
Add fourteen bars	14 or +14
Delete one bar	-1
Delete six bars	-6
Add a bar rest	rest
Deleting empty bars at the end of the flow	trim

You can specify a number of beats that you want to add/delete by entering the number of beats you want followed by either the number that corresponds to the beat unit, such as 5 for eighth notes, or the letter that corresponds to the beat unit, such as h for half notes. When using numbers for both the number of beats and the beat unit, you must separate them with a space or hyphen. You can also specify beats in the form of a time signature, such as 3/4 for three quarter note beats.

Beats

Example action	Popover entry
Add two quarter note beats	2q, 2-6, 2 6, or 2/4
Add two half note beats	2h, 2-7, 2 7, 2/2, or 4/4
Add one whole note beat	1w, 1-8, 1 8, or 4/4
Add four eighth note beats	4e, 4-5, 4 5, 4/8, or 2/4
Add two 16th note beats	2x, 2-4, 2 4, 2/16, or 1/8
Delete two quarter note beats	-2q, -2-6, -2 6, or -2/4

These lists are not comprehensive, as you can add and delete any number of bars and beats using the popover, including specifying beat units using the numbers one to nine as you would

to specify durations when inputting notes. These tables are intended to illustrate how you can structure your entry to input and delete bars and beats, and input bar rests.

Barlines

Type of barline	Popover entry
Normal (Single)	, single, or normal
Double	or double
Final] or final
Dashed	:, dash, or dashed
Tick	' or tick
Short	, or short
Thick	thick
Triple	triple
Start repeat	: or start
End repeat	: or end
End/Start repeat	: , : , end-start, or endstart

RELATED LINKS

[Inputting bar rests during step input](#) on page 165

[Bars](#) on page 504

[Barlines](#) on page 509

[Deleting bars/beats](#) on page 504

Bars and Barlines panel

The Bars and Barlines panel allows you to input bars, bar rests, and different types of barlines. It is located on the right of the window in Write mode.

- You can hide/show the Bars and Barlines panel by clicking **Bars and Barlines** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The panel contains the following sections:

Insert Bars

Allows you to determine how many bars you want to insert and where to insert them, such as at the end of the flow.

Insert Bar Rest

Allows you to insert a bar rest.

Create Barline

Contains the different barlines you can input.

RELATED LINKS

[Hiding/Showing panels](#) on page 18

Inputting bars/beats with the popover

You can input bars/beats using the bars and barlines popover, both during step input and by adding them to or inserting them into existing music.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing barline after which you want to add bars/beats.
 - Select an existing item before which you want to add bars/beats.
2. Press **Shift-B** to open the bars and barlines popover.
3. Enter the number of bars/beats you want to input.
For example, enter 2 to input two bars or 2q to input two quarter note beats.
4. Press **Return** to close the popover.

RESULT

The number of bars or beats specified is input.

During step input, bars/beats are input from the caret position. If the caret is in the middle of the bar when inputting bars, sufficient beats are added to ensure that the final bar created has the correct number of beats. The caret position stays at its previous position so you can continue inputting music from the same position.

When you add bars/beats to existing music, they are added after a selected barline and before a selected item, including time signatures.

TIP

Another way to add bars is by choosing a note value, such as a whole note when in a 4/4 time signature, and pressing **Space** repeatedly during step input.

RELATED LINKS

[Bars and barlines popover](#) on page 201

[Bars](#) on page 504

Inputting bars with the panel

You can input bars using the Bars and Barlines panel, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing barline after which you want to input bars.
 - Select an existing item before which you want to input bars.
2. In the Notations toolbox, click **Bars and Barlines** to show the Bars and Barlines panel.



3. In the **Insert Bars** section of the Bars and Barlines panel, change the number of bars you want to input by changing the value in the value field.
4. Select one of the following options for where you want to input bars:
 - **Start of Flow:** Bars are input at the beginning of the flow.
 - **Start of Selection:** Bars are input from the selected note or rest.
 - **End of Flow:** Bars are input at the end of the flow.

NOTE

If you want to input bars from the caret position, make sure that you have selected **Start of Selection** from the menu.

5. Click **Insert Bars**.
-

RESULT

The number of bars specified is input.

During step input, bars are input from the caret position.

If you selected **Start of Selection**, bars are input directly after a selected barline, and directly before a selected note, bar, or time signature.

TIP

Another way to add bars is by choosing a note value, such as a whole note when in a 4/4 time signature, and pressing **Space** repeatedly during step input.

RELATED LINKS

[Bars](#) on page 504

Inputting bars/beats with the system track

You can add bars/beats within existing music, for example, if you decide you want to repeat several bars before the next section. You can add whole bars and you can add just a few beats.

NOTE

You cannot use the system track during note input.

PREREQUISITE

The system track is shown.

PROCEDURE

1. In the system track, select the region whose duration you want to insert.
For example, if you want to insert two bars, select two bars in the system track immediately before where you want the two new bars to be input.
2. Click **Add** above the system track.



Add button above the system track



The **Add** button is highlighted when you hover over it

RESULT

The rhythmic duration selected in the system track is added immediately after the end of the selection. Existing music after the selection is pushed back after the inserted bars/beats.

RELATED LINKS

[System track](#) on page 275

Inputting barlines with the popover

You can input barlines using the bars and barlines popover, both during step input and by adding them to existing music. You can also change the type of existing barlines.

PREREQUISITE

If you want to input barlines onto single staves only, you have input an independent key signature on those staves.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing note or rest immediately to the right of where you want to input a barline.
2. Press **Shift-B** to open the bars and barlines popover.
3. Enter the barline you want into the popover.
For example, enter `||` for a double barline.
4. Input the barline and close the popover in one of the following ways:
 - To input a barline on all staves, press **Return**.
 - To input a barline on the selected staff only, press **Alt-Return**.

NOTE

You can only input barlines onto single staves that already have an independent time signature.

-
5. Press **Return** to close the popover.
-

RESULT

During step input, barlines are input at the caret position.

When you add barlines to existing music, they are added immediately to the left of a selected note or rest.

When you change existing barlines, the new barline directly replaces the selected barline.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS

[Bars and barlines popover](#) on page 201

[Barlines](#) on page 509

[Inputting notes](#) on page 149

[Inputting time signatures with the popover](#) on page 194

Inputting barlines with the panel

You can input barlines using the Bars and Barlines panel, both during step input and by adding them to existing music. You can also change the type of existing barlines.


NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PREREQUISITE

If you want to input barlines onto single staves only, you have input an independent key signature on those staves.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing note or rest immediately to the right of where you want to input a barline.
2. In the Notations toolbox, click **Bars and Barlines** to show the Bars and Barlines panel.

3. Input the barline you want in one of the following ways:
 - To input a barline on all staves, click it in the Bars and Barlines panel.
 - To input a barline on the selected staff only, **Alt**-click it in the Bars and Barlines panel.

NOTE

You can only input barlines onto single staves that already have an independent time signature.

RESULT

During step input, barlines are input at the caret position.

When you add barlines to existing music, they are added immediately to the left of a selected note or rest.

When you change existing barlines, the new barline directly replaces the selected barline.

Surrounding music automatically adjusts to accommodate the barline. For example, note grouping, rests, and tied notes all adjust if necessary.

RELATED LINKS

[Barlines](#) on page 509

[Bars and barlines popover](#) on page 201

[Inputting notes](#) on page 149

[Mouse input settings](#) on page 143

Input methods for dynamics

You can input dynamics with the keyboard by using the dynamics popover, and with the mouse by using the Dynamics panel.

RELATED LINKS

[Dynamics](#) on page 613

[Inputting dynamics with the popover](#) on page 210

[Inputting dynamics with the panel](#) on page 212

[Niente hairpins](#) on page 622

[Adding expressive text to existing dynamics](#) on page 624

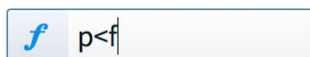
Dynamics popover

The table contains examples of what you can enter into the dynamics popover to input the different dynamics available.

You can open the dynamics popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-D**.
- Select an existing dynamic and press **Return**.
- Choose **Write > Create Dynamic**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Dynamics popover with an example entry



Dynamics button in the Notations toolbox

Dynamic or expression	Popover entry
<i>pianissimo</i> : pp	pp
<i>piano</i> : p	p
<i>mezzo piano</i> : mp	mp
<i>mezzo forte</i> : mf	mf
<i>forte</i> : f	f
<i>fortissimo</i> : ff	ff
<i>subito</i>	subito, sub, or sub.
<i>possibile</i>	possibile, poss, or poss.
<i>poco</i>	poco
<i>molto</i>	molto

Dynamic or expression	Popover entry
<i>più</i>	piu or più
<i>meno</i>	meno
<i>mosso</i>	mosso
<i>crescendo</i> : <	<
<i>cresc.</i> (text)	cresc
<i>diminuendo</i> : >	>
<i>dim.</i> (text)	dim
<i>crescendo</i> then <i>diminuendo</i> messa di voce: <>	<>
<i>diminuendo</i> then <i>crescendo</i> : ><	><
<i>niente</i> hairpins that start/end with a small circle	o< or >o
<i>niente</i> hairpins that start/end with the letter "n"	n< or >n
<i>sforzando</i> : <i>sfz</i>	sfz
<i>rinforzando</i> : <i>rfz</i>	rfz

This list is not comprehensive as you can enter anything as expressive text. It is intended to illustrate how you can structure your entry to input different types of dynamics.

TIP

You can input hairpins directly into the score without the popover by pressing **Shift-**, for a crescendo hairpin and **Shift>.** for a diminuendo hairpin.

You can change the appearance of gradual dynamics project-wide on the **Dynamics** page in **Engraving Options**, or individually by activating **Gradual style** in the **Dynamics** group of the Properties panel, and selecting one of the available options.

Inputting expressive text into the dynamics popover

You can enter expressive text into the dynamics popover, such as *poco*, *molto*, *subito*, *espressivo*, or *dolce*. It appears in the correct italic font beside the dynamic.

However, you must also enter an accompanying immediate dynamic, such as *p* or *f*, and separate the two with a space, for example, *f molto* or *p espressivo*.

You can hide immediate dynamics if you only want to show the expressive text.

RELATED LINKS

[Dynamics](#) on page 613

[Niente hairpins](#) on page 622

[Hiding immediate dynamics](#) on page 624

Dynamics panel

The Dynamics panel contains all the different dynamics available in Dorico Pro, including gradual dynamics, dynamic modifiers, and expressive text, such as *poco* and *possibile*.

- You can hide/show the Dynamics panel by clicking **Dynamics** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Dynamics panel contains the following sections:

Immediate Dynamics

Contains dynamics such as *pp* and *f*, and modifiers, such as *subito* and *possibile*. Available modifiers are shown at the top of the section in boxes.

You can only input modifiers alongside a dynamic.

Gradual Dynamics

Contains dynamics such as \lessgtr and \lessgtr , and modifiers, such as *poco* and *niente*. Available modifiers are shown at the top of the section in boxes.

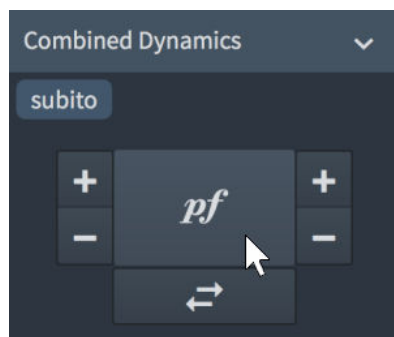
You can only input modifiers alongside a dynamic.

Force/Intensity of Attack

Contains dynamics such as *sfz* and *fz*.

Combined Dynamics

Allows you to create your own combinations of dynamics, such as *fff pp*. The controls allow you to increase and decrease the dynamic on each side, and to swap their order.



Combined Dynamics section of the Dynamics panel

Inputting dynamics with the popover

You can input dynamics and expressive text using the dynamics popover, both during step input and by adding them to existing notes. You can also input different dynamics into each voice independently in multiple-voice contexts.

TIP

You can also change dynamics during step input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.

PROCEDURE

- In Write mode, do one of the following:

- Start note input.
 - Select existing notes across which you want to add dynamics.
2. Press **Shift-D** to open the dynamics popover.
 3. Enter the dynamic you want into the popover.
For example, *p*, *p<f>p*, or *f>*.
 4. Input the dynamics and close the popover in one of the following ways:
 - To input the dynamics for all voices on the staff, press **Return**.
 - During note input, input the dynamics only into the voice indicated by the caret indicator by pressing **Alt-Return**.
- Open-ended dynamics, such as *p<*, automatically extend during step input as you continue inputting notes, or if you advance the caret by pressing **Space**.
5. Optional: During step input, stop open-ended dynamics by pressing **Shift-/** or by opening the dynamics popover again and inputting another immediate dynamic, such as *f*.

RESULT

The selected dynamics are input. They are positioned according to your settings on the **Dynamics** page in **Engrave > Engraving Options**. Voice-specific dynamics are placed below the staff by default, even if they are input into an up-stem voice.

During step input, dynamics are input at the caret position, and extend automatically if you included an open-ended gradual dynamic. Voice-specific dynamics are input in the voice indicated by the quarter note symbol beside the caret.

When you add dynamics to existing notes, immediate dynamics are added to the first note in the selection while gradual dynamics are added across the selection.

NOTE

- If you entered a dynamic phrase into the popover, such as *p<f>p*, each dynamic and hairpin lasts a quarter note (crotchet) by default. You can lengthen/shorten gradual dynamics and groups of dynamics later.
- Some expressive text, such as *molto*, appears before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for expressive text placement.

You can hide immediate dynamics later if you only want to show expressive text.

AFTER COMPLETING THIS TASK

You can move dynamics within dynamic phrases and change the placement of dynamics relative to the staff.

RELATED LINKS

[Dynamics](#) on page 613

[Groups of dynamics](#) on page 632

[Voice-specific dynamics](#) on page 622

[Moving dynamics rhythmically](#) on page 616

[Lengthening/Shortening gradual dynamics and groups of dynamics](#) on page 625

[Hiding immediate dynamics](#) on page 624

[Changing the placement of dynamics relative to the staff](#) on page 615

Inputting dynamics with the panel

You can input dynamics and expressive text using the Dynamics panel, both during step input and by adding them to existing notes. You can also input different dynamics into each voice independently in multiple-voice contexts.

NOTE

- You can also change dynamics during step input by following these steps when the caret is at the rhythmic position of the dynamic you want to change.
 - These steps describe inputting with the default mouse input preference **Create item at selection**.
-

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select existing notes across which you want to add dynamics.
2. In the Notations toolbox, click **Dynamics** to show the Dynamics panel.



3. Input the dynamics you want in one of the following ways:
 - To input dynamics for all voices on the staff, click them in the Dynamics panel.
 - During note input, input the dynamics only into the voice indicated by the caret indicator by **Alt**-clicking them in the Dynamics panel.

NOTE

- If you want to add expressive or qualifying text to the dynamics, do not deselect them.
 - When inputting voice-specific dynamics, you can release **Alt** once you have input the dynamic level, such as *f*.
 - Gradual dynamics have a default duration of a quarter note. You can lengthen/shorten gradual dynamics later.
-
4. Optional: In the Dynamics panel, click the expressive/qualifying texts you want in the **Immediate Dynamics** and **Gradual Dynamics** sections.
-

RESULT

The selected dynamics are input. They are positioned according to your settings on the **Dynamics** page in **Engrave > Engraving Options**. Voice-specific dynamics are placed below the staff by default, even if they are input into an up-stem voice.

During step input, dynamics are input at the caret position. Voice-specific dynamics are input in the voice indicated by the quarter note symbol beside the caret.

When you add dynamics to existing notes, immediate dynamics are added to the first note in the selection while gradual dynamics are added across the selection.

NOTE

- Some expressive text, such as *molto*, appears before immediate dynamics rather than after them, even if you do not enter them in that order. This follows the generally accepted practice for expressive text placement.
 - You can also input gradual dynamics by clicking the gradual dynamic you want in the Dynamics panel when nothing is selected in the music area. Then click and drag to input the gradual dynamic and extend it to the length you want.
-

AFTER COMPLETING THIS TASK

You can move dynamics within dynamic phrases and change the placement of dynamics relative to the staff.

RELATED LINKS

[Dynamics](#) on page 613

[Hiding immediate dynamics](#) on page 624

[Mouse input settings](#) on page 143

Input methods for chord symbols

You can input chord symbols in Dorico Pro with the computer keyboard and any connected MIDI keyboard.

RELATED LINKS

[Chord symbols](#) on page 564

[Inputting chord symbols](#) on page 217

[Project-wide engraving options for chord symbols](#) on page 564

[Navigation during chord symbol input](#) on page 216

Chord symbols popover

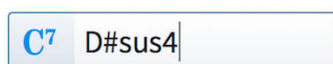
The following tables contain examples of what you can enter into the chord symbols popover to input the different possible chord symbol components. You can enter them in any combination.

You can open the chord symbols popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-Q**.
- Select an existing chord symbol and press **Return**.
- Choose **Write > Create Chord Symbol**.
- Click **Chord Symbols** in the Notations toolbox.



The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Chord symbols popover with an example entry



Chord Symbols button in the Notations toolbox

NOTE

You can combine multiple types of entries to create more complex chord symbols if you enter them one after another into the chord symbols popover without spaces between them. For example, enter Eblocrian for the following chord symbol:

E^bLoc.

Chord symbol roots

Type of chord symbol root	Popover entry
English note names C, D \flat , F \sharp , B, and so on	C, D \flat , F \sharp , B, and so on
German note names C, D \flat , F \sharp , H, and so on	C, Des, Fis, H, and so on
Fixed-do solfège C, D \flat , F, F \sharp , B, and so on	do, reb, so, so \sharp , ti, and so on
Nashville numbers representing scale degrees Assuming C major: C, D \flat , F \sharp , B, and so on	1, 2 \flat , 4 \sharp , 7, and so on

Chord symbol qualities

Chord symbol quality	Popover entry
Major	maj, M, ma, or nothing after entering the root.
Minor	m, min, or mi
Diminished	dim, di, or o
Augmented	aug, au, ag, or +
Half-diminished	half-dim, halfdim, or hd
6/9	6/9, 69, or %

Chord symbol intervals

Interval	Popover entry
Major 7th	\wedge 7 or \wedge
Major 9th	\wedge 9, maj9, or 9maj7

Chord symbol alterations

Type of chord symbol alteration	Popover entry
Alterations	b5, #9, and so on
Added notes	add#11, addF \sharp , addB \flat , and so on

Type of chord symbol alteration**Popover entry**

Suspensions

sus4, sus9, and so on

Omissions

omit3, no7, and so on

Chord symbols with altered bass notes

Example altered bass note chord symbols**Popover entry**

G7/D

G7,D or Gmaj7,D

C(♭5)/E♭

CM♭5/E♭ or Cmaj♭5/E♭

Fm/D♯

Fm/D♯ or Fmi/D♯

Polychord chord symbols

Example polychord chord symbols**Popover entry**

G/E

G;E or Gmaj;E

Cmaj7/D

CM7|D or Cmaj7|D

Fm/D♯

Fm|D♯ Fmi|D♯

No chord symbols

No chord symbol**Popover entry**

No chord

N.C., NC, no chord, or none

Modal chord symbols

Modal chord symbol**Popover entry**

Ionian

ionian

Dorian

dorian

Phrygian

phrygian

Lydian

lydian

Mixolydian

mixolydian

Aeolian

aeolian

Locrian

locrian

Modal chord symbol	Popover entry
Melodic minor	melodicminor
Harmonic minor	harmonicminor
Whole tone	wholetone
Octatonic or diminished half-whole	diminishedhalfwhole, diminishedsemitonetone, octatonichalfwhole, or octatonicsemitonetone
Octatonic or diminished whole-half	diminishedwholehalf, diminishedtonesemitone, octatonicwholehalf, or octatonictonesemitone

This list is not comprehensive, as there are many possible chord symbols. It is intended to illustrate the different components you can use to input different chord symbols.

NOTE

The appearance of the resulting chord symbols depends on the options you have set on the **Chord Symbols** page in **Engrave > Engraving Options**. The structure of your entry in the chord symbols popover is not considered. For example, entering a C major chord as C, Cmaj, or CM results in the same chord symbol.

RELATED LINKS

[Chord symbols](#) on page 564

Navigation during chord symbol input

You can input multiple chord symbols without re-opening the popover each time by manually advancing it to other positions.

Navigating with a computer keyboard

You can move the chord symbols popover to input chord symbols on other notes without having to close and reopen the popover on each note.

Popover navigation	Key command
Advance the popover to the next beat.	Space
Move the popover back to the previous beat.	Shift-Space
Advance the popover to the start of the next bar.	Tab
Move the popover back to the start of the previous bar.	Shift-Tab

Popover navigation

Key command

Move the popover to one of the following positions, whichever is closest:

Right Arrow/Left Arrow

- Next/Previous note
- Next/Previous rest
- Next/Previous rhythmic grid position

Move the popover to the next/previous chord symbol.

Ctrl/Cmd-Right Arrow/Ctrl/Cmd-Left Arrow

Navigating with a MIDI keyboard

When inputting chord symbols using a MIDI keyboard, by default the popover advances automatically to the next beat after you play a chord. You can change this behavior using the **Advance during chord symbol input via MIDI keyboard** options on the **MIDI Input** page in **Write > Note Input Options**.

Furthermore, you can define specific keys or buttons on your MIDI keyboard to trigger different navigation behaviors. Use the **MIDI Learn** button on the **Key Commands** page in **Preferences** to assign specific keys to the **NoteInput > Advance Chord Symbol Input** commands.

RELATED LINKS

[Key Commands page in the Preferences dialog](#) on page 52

[Assigning MIDI commands](#) on page 56

[Assigning key commands](#) on page 55

Chord symbol input options for MIDI keyboards

There are different possible settings for how Dorico Pro interprets the notes you press on your MIDI keyboard when inputting chord symbols.

You can find these options on the **Chord Symbols** page in **Write > Note Input Options**. The available options include:

- Whether you want Dorico Pro to consider the inversion in which you play a given chord, or write the chord symbol as if it had been played in root position
- Whether you want Dorico Pro to notate omissions. For example, if you play C and E, it could be notated as "C" or "C(omit5)"
- How you want Dorico Pro to notate added notes and suspensions
- How you want Dorico Pro to handle complex enharmonic relationships between roots and altered bass notes

RELATED LINKS

[Note Input Options dialog](#) on page 141

Inputting chord symbols

You can add chord symbols to existing music using the chord symbols popover. You can also open the chord symbols popover during note input; however, inputting a chord symbol stops note input.

PROCEDURE

1. In Write mode, select the note or rest where you want to input the first chord symbol.
2. Press **Shift-Q** to open the chord symbols popover.

3. Enter the chord symbol you want into the chord symbols popover in any of the following ways:
 - Enter the appropriate letters and numbers using the computer keyboard.
 - Play the chord using a MIDI keyboard.
 4. Optional: Advance the popover to continue inputting chord symbols on following notes.
 5. Press **Return** to close the popover.
-

RESULT

The chord symbol specified is input.

NOTE

The chord symbol may look different to what you entered into the popover. For example, entering D|C7 may result in two chords placed directly above each other, or two chords placed beside each other, depending on your settings on the **Chord Symbols** page in **Engrave > Engraving Options**.

RELATED LINKS

[Chord symbols](#) on page 564

Inputting polychord chord symbols

Polychord chord symbols indicate that multiple different chords, commonly two, are played simultaneously. You can input polychords when inputting chord symbols with a MIDI keyboard.

PROCEDURE

1. In Write mode, open the chord symbols popover.
 2. Play the first chord of the polychord with one hand.
Keep the keys of the first chord depressed.
 3. Play the second chord with the other hand.
-

RESULT

The two chords you played are input as a polychord chord symbol.

TIP

You can also input polychords by entering the two chords separated by a semicolon or pipe/vertical line character into the chord symbols popover.

RELATED LINKS

[Chord symbols popover](#) on page 213

[Chord symbol input options for MIDI keyboards](#) on page 217

Indicating root notes in chord symbols

You can indicate the root note of chord symbols when inputting chord symbols with a MIDI keyboard.

PROCEDURE

1. In Write mode, open the chord symbols popover.
2. Indicate the root note of a chord symbol in any of the following ways when using a MIDI keyboard:

- First play the root with one finger, and then play the remaining notes of the chord while still holding down the root.
- Play all the notes of the chord together, then release them all, then replay the root note.

TIP

To input a chord symbol that consists only of the root note, just play a single note.

RELATED LINKS

[Chord symbols popover](#) on page 213

[Chord symbol input options for MIDI keyboards](#) on page 217

Indicating altered bass notes in chord symbols

You can indicate that chords have altered bass notes when inputting chord symbols with a MIDI keyboard.

PROCEDURE

1. In Write mode, open the chord symbols popover.
 2. Indicate which note is the altered bass note of a chord in any of the following ways on your MIDI keyboard:
 - Play all notes of the chord together with the altered bass note at the bottom.
 - Play the chord and its altered bass note separately: Hold down the keys for the chord, then play the altered bass note while keeping the rest of the keys of the chord depressed.
-

RELATED LINKS

[Chord symbols popover](#) on page 213

[Chord symbol input options for MIDI keyboards](#) on page 217

Input methods for clefs and octave lines

You can input clefs and octave lines with the keyboard by using the clefs and octave lines popover, and also with the mouse by using the Clefs panel.

Clefs and octave lines share the same popover and panel as both affect the pitch and register of notes.

RELATED LINKS

[Clefs](#) on page 580

[Octave lines](#) on page 586

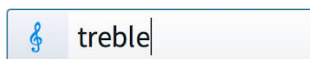
Clefs and octave lines popover

The following tables contain the entries for the clefs and octave lines popover that you can use to input the different clefs and octave lines available.

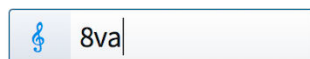
You can open the clefs and octave lines popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-C**.
- Select an existing clef or octave line and press **Return**.
- Choose **Write > Create Clef**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Clefs and octave lines popover with an example entry for a clef



Clefs and octave lines popover with an example entry for an octave line



Clefs button in the Notations toolbox

Clefs

Type of clef	Popover entry
Treble G clef	g, G, sol, or treble
Bass F clef	f, F, fa, or bass
Tenor C clef	ct, CT, ut4, or tenor
Alto C clef	ca, CA, ut3, or alto
Treble G clef, octave below	g8ba, G8ba, g8d, G8d, treble8ba, or treble8d
Treble G clef, two octaves below	g15ba, G15ba, g15d, G15d, treble15ba, or treble15d
Treble G clef, octave above	g8va, G8va, g8u, G8u, treble8va, or treble8u
Treble G clef, two octaves above	g15ma, G15ma, g15u, G15u, treble15ma, or treble15u
Alto C clef, octave below	ca8ba, CA8ba, ca8d, CA8d, alto8ba, or alto8d
Tenor C clef, octave below	ct8ba, CT8ba, ct8d, CT8d, tenor8ba, or tenor8d
Bass F clef, octave below	f8ba, F8ba, f8d, F8d, bass8ba, or bass8d
Bass F clef, two octaves below	f15ba, F15ba, f15d, F15d, bass15ba, or bass15d
Bass F clef, octave above	f8va, F8va, f8u, F8u, bass8va, or bass8u
Bass F clef, two octaves above	f15ma, F15ma, f15u, F15u, bass15ma, or bass15u
Unpitched percussion	perc
4-string tablature	tab4
6-string tablature	tab6
Baritone bass clef	baritonebass

Type of clef	Popover entry
Baritone clef	baritone or ut5
Mezzo-soprano clef	mezzo or ut2
Soprano C clef	soprano or ut1
Sub-bass clef	subbass
Invisible clef	invisible

NOTE

More clefs are available in the Clefs panel, including Indian drum clef and Percussion clef (rectangular).

Octave lines

Function of octave line	Popover entry
Shifts notes up by 1 octave.	8va, 8, 8u, or 1u
Shifts notes up by 2 octaves.	15ma, 15, 15u, or 2u
Shifts notes up by 3 octaves.	22ma, 22, 22u, or 3u
Shifts notes down by 1 octave.	8ba, 8vb, 8d, or 1d
Shifts notes down by 2 octaves.	15ba, 15vb, 15d, or 2d
Shifts notes down by 3 octaves.	22ba, 22vb, 22d, or 3d
<i>Loco</i> indication	loco
End of octave line	or stop

For example, enter **stop** to specify where an octave line ends during step input.

RELATED LINKS

[Clefs](#) on page 580

[Octave lines](#) on page 586

Clefs panel

The Clefs panel contains all the different types of clefs and octave lines available in Dorico Pro, including uncommon and archaic clefs.

- You can hide/show the Clefs panel by clicking **Clefs** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Clefs panel contains the following sections:

Common Clefs

Contains the clefs you are most likely to need, including treble clef and bass clef.

Uncommon Clefs

Contains less frequently used clefs, such as an invisible clef and French violin clef.

Archaic Clefs

Contains clefs that are rarely used any more, such as the mezzo-soprano clef and sub-bass clef.

Octave Lines

Contains octave lines, indicating up to three octaves above and below, and a *loco* line.

Inputting clefs with the popover

You can input clefs using the clefs and octave lines popover, both during step input and by adding them to existing music. You can also use the popover to change the type of existing clefs.

In Dorico Pro, you cannot hide clefs. Therefore, if you do not want to show any clef, you must input an invisible clef.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the note from which you want a new clef to start.
2. Press **Shift-C** to open the clefs and octave lines popover.
3. Enter the appropriate entry for the clef you want into the popover.
For example, enter **bass** or **G8ba**.
4. Press **Return** to close the popover.

RESULT

During step input, clefs are input at the caret position. Note input continues after inputting the clef, so you can continue inputting notes and clefs as required.

When you add clefs to existing music, clefs are added directly before a selected notehead, and apply to all notes on that staff until the next clef, or the end of the flow.

Clefs apply to all notes on the staff until the next clef or the end of the flow, whichever comes first.

RELATED LINKS

[Clefs](#) on page 580

Inputting clefs with the panel


You can input clefs using the Clefs panel, both during step input and by adding them to existing music.

NOTE

- In Dorico Pro, you cannot hide clefs. Therefore, if you do not want to show any clef, you must input an invisible clef.

- These steps describe inputting with the default mouse input preference **Create item at selection**.
-

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the note from which you want a new clef to start.
 2. In the Notations toolbox, click **Clefs** to show the Clefs panel.

 3. In the Clefs panel, click the clef you want.
-

RESULT

During step input, clefs are input at the caret position. Note input continues after inputting the clef, so you can continue inputting notes and clefs as required.

When you add clefs to existing music, clefs are added directly before a selected notehead, and apply to all notes on that staff until the next clef, or the end of the flow.

Clefs apply to all notes on the staff until the next clef or the end of the flow, whichever comes first.

RELATED LINKS

[Clefs](#) on page 580

[Mouse input settings](#) on page 143

Inputting octave lines with the popover

You can input octave lines using the clefs and octave lines popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the notes to which you want to add an octave line.
 2. Press **Shift-C** to open the clefs and octave lines popover.
 3. Enter the appropriate entry for the octave line you want into the popover.
For example, enter **8va** for an octave line that shifts notes up one octave.
 4. Press **Return** to close the popover.
 5. Optional: During step input, press **Space** to advance the caret and extend the octave line.
The octave line also extends automatically as you continue inputting notes.
 6. Optional: During step input, stop any octave line by opening the clefs and octave lines popover again and entering one of the following:
 - |
 - stop
-

RESULT

During step input, octave lines are input from the caret position. When you stop octave lines, they end at the caret position.

When you add octave lines to existing notes, they are added either above or below your selection, depending on whether the octave line indicates that notes are played higher or lower than notated.

TIP

You can also lengthen/shorten octave lines after they have been input.

RELATED LINKS

[Clefs and octave lines popover](#) on page 219

[Octave lines](#) on page 586

[Lengthening/Shortening octave lines](#) on page 587


Inputting octave lines with the panel

You can input octave lines using the Clefs panel, both during step input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the notes to which you want to add an octave line.
 2. In the Notations toolbox, click **Clefs** to show the Clefs panel.

 3. In the Clefs panel, click the octave line you want.
Alternatively, when adding octave lines to existing notes, you can click the octave lines you want in the Clefs panel first, and then click and drag to the length you want.
-

RESULT

During step input, octave lines are input at the caret position. However, if input using the mouse, octave lines do not automatically extend as you continue inputting notes.

When you add octave lines to existing notes, they are added either above or below your selection, depending on whether the octave line indicates that notes are played higher or lower than notated.

TIP

You can also lengthen/shorten octave lines after they have been input.

RELATED LINKS

[Octave lines](#) on page 586

[Lengthening/Shortening octave lines](#) on page 587

[Mouse input settings](#) on page 143

Input methods for holds and pauses

You can input holds and pauses with the keyboard by using the holds and pauses popover in Write mode, and with the mouse by using the Holds and Pauses panel.

RELATED LINKS

[Holds and pauses](#) on page 664

[Correct positioning for caesura input](#) on page 228

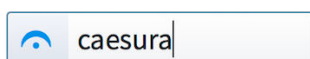
Holds and pauses popover

The table contains the entries for the holds and pauses popover that you can use to input the different holds and pauses available.

You can open the holds and pauses popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-H**.
- Select an existing hold or pause and press **Return**.
- Choose **Write > Create Hold or Pause**.







The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.













Holds and pauses popover with an example entry



Holds and Pauses button in the Notations toolbox

Type of hold or pause	Popover entry
Fermata 	fer or fermata
Very long fermata 	fermataverylong
Long fermata 	fermatalong
Short fermata 	fermatashort
Very short fermata 	fermataveryshort
Short fermata (Henze) 	fermatashorthenze

Type of hold or pause	Popover entry
Long fermata (Henze) 	fermatalonghenze
Curlew (Britten) 	curlew
Caesura 	caesura or //
Thick caesura 	caesurathick
Curved caesura 	caesuracurved
Short caesura 	caesurashort
Breath mark (Comma-like) 	breathmarkcomma, comma, or , (comma)
Breath mark (Tick-like) 	breathmarktick
Breath mark (Upbow-like) 	breathmarkupbow
Breath mark (Salzedo) 	breathmarksalzedo

NOTE

The Curlew mark was originally devised by Benjamin Britten for “Curlew River”, a parable for church performance inspired by Japanese Noh theater. It indicates that a player should hold a note or a rest until a synchronization point in asynchronous music.

RELATED LINKS

[Holds and pauses](#) on page 664

[Types of fermatas](#) on page 664

[Types of caesuras](#) on page 666

[Types of breath marks](#) on page 666

Holds and Pauses panel

The Holds and Pauses panel allows you to input all the different types of holds and pauses available in Dorico Pro, including alternative versions of fermatas.

- You can hide/show the Holds and Pauses panel by clicking **Holds and Pauses** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Holds and Pauses panel contains the following sections:

- **Fermatas**
- **Breath Marks**
- **Caesuras**

NOTE

Holds and pauses do not currently have an effect in playback, but this is planned for future versions.

Inputting holds and pauses with the popover

You can input holds and pauses using the holds and pauses popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing note to which you want to add a hold or pause.

NOTE

You can only add one hold or pause to one note at a time.

2. Press **Shift-H** to open the holds and pauses popover.
 3. Enter the hold or pause you want into the popover.
For example, enter **fermata** or **caesura**.
 4. Press **Return** to close the popover.
-

RESULT

During step input, the specified hold or pause is input at the caret position.

Fermatas appear above the selected note, and above all notes or rests at that rhythmic position on all staves, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata.

Breath marks appear to the right of the caret or selected note.

Caesuras appear to the left of the caret or selected note, and appear on all staves at that same rhythmic position.

RELATED LINKS

[Holds and pauses](#) on page 664

Inputting holds and pauses with the panel

You can input holds and pauses using the Holds and Pauses panel, both during step input and by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing note to which you want to add a hold or pause.

NOTE

You can only add one hold or pause to one note at a time.

2. In the Notations toolbox, click **Holds and Pauses** to show the Holds and Pauses panel.



3. In the Holds and Pauses panel, click the hold or pause you want.
-

RESULT

During step input, the specified hold or pause is input at the caret position.

Fermatas appear above the selected note, and above all notes or rests at that rhythmic position on all staves, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata.

Breath marks appear to the right of the caret or selected note.

Caesuras appear to the left of the caret or selected note, and appear on all staves at that same rhythmic position.

RELATED LINKS

[Holds and pauses](#) on page 664

[Mouse input settings](#) on page 143

Correct positioning for caesura input

Caesuras are commonly placed at the end of a bar, before a barline. In Dorico Pro, caesuras must be attached to the note immediately after the position where you want it to appear, as then Dorico Pro can automatically position them correctly.

If you input caesuras with your mouse input preference set to **Load pointer with item**, you must click the first note in the next bar for a caesura to appear to the left of the barline. You can also click directly on the barline.



A correctly input caesura. The dotted attachment lines are attached to the notehead after the barline, meaning the caesura is correctly positioned before the barline.



An incorrectly input caesura. By clicking to the left of the barline, the caesura is attached to the last eighth note in the bar.

When input correctly, the dotted attachment lines link the caesura to the notehead immediately after the barline.

If your dotted attachment lines do not link the caesura to the notehead immediately after the barline, delete the caesura and re-input it. Caesuras can cause spacing issues when input incorrectly.

RELATED LINKS

[Holds and pauses](#) on page 664

[Types of caesuras](#) on page 666

Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations

You can input ornaments, including arpeggio signs, glissando lines, and jazz articulations, with the keyboard by using the ornaments popover, and with the mouse by using the Ornaments panel.

You can input ornaments and arpeggio signs during step input and by adding them to existing notes, but you cannot input glissando lines during step input. You can only input glissando lines by adding them to existing notes.

You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

RELATED LINKS

[Ornaments](#) on page 729

[Arpeggio signs](#) on page 745

[Glissando lines](#) on page 753

[Jazz articulations](#) on page 759

[Jazz ornaments](#) on page 760

[Inputting ornaments with the popover](#) on page 232

[Inputting ornaments with the panel](#) on page 233

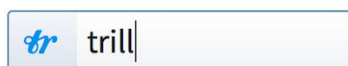
Ornaments popover

The following tables contain the entries for the ornaments popover that you can use to input the different ornaments, arpeggio signs, glissando lines, and jazz articulations available.

You can open the ornaments popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-O**.
- Select an existing ornament and press **Return**.
- Choose **Write > Create Ornament**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.







Ornaments popover with an example entry



Ornaments button in the Notations toolbox

Ornaments




Type of ornament	Popover entry
Trill: 	tr or trill
Short trill: 	shorttr
Turn: 	turn
Mordent: 	mor or mordent

Trill intervals

Trill interval	Popover entry
Major second	tr 2 or tr M2
Minor third	tr m3
Perfect fifth	tr p5
Augmented fourth	tr aug4
Diminished fifth	tr dim5

This list is not comprehensive, as there are many possible trill intervals. It is intended to illustrate how you can structure your entry to input different trill intervals.

Jazz ornaments

Type of jazz ornament	Popover entry
Flip 	flip
Smear 	smear
Jazz turn 	jazz or shake
Bend 	bend

Arpeggio signs

Type of arpeggio sign	Popover entry
Up arpeggio sign	arp, arpup, or arpeggioup
Down arpeggio sign	arpdown or arpeggiodown
Non arpeggio sign	nonarp or nonarpeggio

Glissando lines

Type of glissando line	Popover entry
Straight glissando line	gliss
Wavy glissando line	glisswavy

Jazz articulations

Type of jazz articulation	Popover entry
Plop (bend)	plop
Plop (smooth)	plopsmooth
Scoop	scoop
Doit (bend)	doit
Doit (smooth)	doitsmooth
Fall (bend)	fall
Fall (smooth)	fallsmooth

TIP

Other ornaments are available in the Ornaments panel on the right of the window in Write mode. You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

RELATED LINKS

[Inputting arpeggio signs with the popover](#) on page 234

[Inputting glissando lines with the popover](#) on page 235

[Ornaments](#) on page 729

[Trill intervals](#) on page 737

[Arpeggio signs](#) on page 745

[Glissando lines](#) on page 753

[Jazz articulations](#) on page 759

[Jazz ornaments](#) on page 760

Ornaments panel

The Ornaments panel allows you to input all the different types of ornaments, including jazz articulations, as well as arpeggio signs and glissando lines.

- You can hide/show the Ornaments panel by clicking **Ornaments** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Ornaments panel contains the following sections:

Jazz

Contains ornaments and pitch alterations commonly used in jazz music, such as bends, scoops, and falls.

Baroque and Classical

Contains ornaments commonly used in Baroque and Classical music, such as mordents, turns, and trills.

Arpeggiation

Contains the different types of arpeggio signs.

NOTE

You cannot input arpeggio signs with the mouse during step input.

Glissandi

Contains the different types of glissando lines.

Inputting ornaments with the popover

You can input ornaments and jazz ornaments using the ornaments popover, both during step input and by adding them to existing notes.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select a single existing note to which you want to add an ornament.
 - Select existing notes across which you want to add a trill.

NOTE

You can only add one ornament to one note at a time.

2. Press **Shift-O** to open the ornaments popover.
 3. Enter the appropriate entry for the ornament you want into the popover.
For example, enter trill for a trill or mor for a mordent.
 4. Press **Return** to close the popover.
-

RESULT

During step input, ornaments are input at the caret position. Trills last the duration of the rhythmic value of the note input at the caret position and have a default interval of a second, either major or minor depending on the context. If you specified an interval for your trill, the

interval applies only to the first note in the selection, but you can also change the interval partway through trills.

When adding ornaments to existing notes, ornaments are input above the selected note. Trills are input above the first selected note, with an extender line across any subsequent selected notes.

RELATED LINKS

[Ornaments](#) on page 729

[Jazz ornaments](#) on page 760

[Inputting notes](#) on page 149

[Changing intervals partway through trills](#) on page 739

Inputting ornaments with the panel

You can input ornaments and jazz ornaments using the Ornaments panel, both during step input and by adding them to existing notes.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select a single existing note to which you want to add an ornament.
 - Select existing notes across which you want to add a trill.

NOTE

You can only add one ornament to one note at a time.

2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.



3. In the Ornaments panel, click the ornament you want.
-

RESULT

During step input, ornaments are input at the caret position. Trills are input with a default duration of a quarter note.

When adding ornaments to existing notes, ornaments are input above the selected note. Trills are input above the first selected note, with an extender line across any subsequent selected notes.

RELATED LINKS

[Ornaments](#) on page 729

[Jazz ornaments](#) on page 760

[Inputting notes](#) on page 149

[Mouse input settings](#) on page 143

Inputting arpeggio signs with the popover

You can input arpeggio signs using the ornaments popover, both during step input and by adding them to existing notes. You can also input cross-staff arpeggio signs between notes in different staves that belong to the same instrument, such as piano or harp.

NOTE

You can only add one arpeggio sign to one note or chord at a time.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add an arpeggio sign.

NOTE

- For instruments with multiple staves, such as piano and harp, you can select existing notes in multiple staves to create cross-staff arpeggio signs. However, you cannot create cross-staff arpeggio signs between different instruments.
 - Arpeggio signs are added to all notes in the same voice at the selected rhythmic position.
-
2. Optional: During step input, press **Q** to start chord input.
 3. Press **Shift-O** to open the ornaments popover.
 4. Enter the appropriate entry for the arpeggio sign you want into the popover. For example, enter **arpup** for an up arpeggio or enter **arpdown** for a down arpeggio.
 5. Press **Return** to close the popover.
 6. Optional: During step input, input the notes you want.
-

RESULT

During step input, arpeggio signs are input at the caret position.

When adding arpeggio signs to existing notes, they are input to the left of the selected note or chord.

The length of arpeggio signs is adjusted automatically so that they span the range of all notes in the selected voice at that rhythmic position.

RELATED LINKS

[Ornaments popover](#) on page 229

[Arpeggio signs](#) on page 745

[Inputting notes](#) on page 149

[Inputting chords](#) on page 167

Inputting arpeggio signs with the panel

You can input arpeggio signs on existing notes using the Ornaments panel. You can also input cross-staff arpeggio signs between notes in different staves that belong to the same instrument, such as piano or harp.

NOTE

- You can only add one arpeggio sign to one note or chord at a time, and you cannot input arpeggio signs with the mouse during step input.

- These steps describe inputting with the default mouse input preference **Create item at selection**.
You cannot create cross-staff and cross-voice arpeggio signs if your preference is set to **Load pointer with item**.
-

PROCEDURE

1. In Write mode, select the existing notes to which you want to add an arpeggio sign.

NOTE

- For instruments with multiple staves, such as piano and harp, you can select existing notes in multiple staves to create cross-staff arpeggio signs. However, you cannot create cross-staff arpeggio signs between different instruments.
 - Arpeggio signs are added to all notes in the same voice at the selected rhythmic position.
-

2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.



3. In the Ornaments panel, click the arpeggio sign you want in the **Arpeggiation** section.
-

RESULT

The arpeggio sign specified is input to the left of the selected note or chord. Its length is adjusted automatically so that it spans the range of all notes in the selected voice at that rhythmic position.

RELATED LINKS

[Arpeggio signs](#) on page 745

[Mouse input settings](#) on page 143

Inputting glissando lines with the popover

You can input glissando lines between existing notes using the ornaments popover. You can input glissando lines between both adjacent/non-adjacent notes.

NOTE

You cannot input glissando lines during step input.

PROCEDURE

1. In Write mode, select one of the following:
 - The note from which you want a glissando line to start.
 - Any two notes that you want to join with a glissando line.

TIP

The two notes can be in different voices.

2. Press **Shift-O** to open the ornaments popover.
3. Enter the appropriate entry for the glissando line you want into the popover.
 - Enter **gliss** for a straight glissando line.
 - Enter **glisswavy** for a wavy glissando line.

4. Press **Return** to close the popover.
-

RESULT

If you selected two notes, the glissando line specified is input between the selected notes.

If you selected a single note, the glissando line specified starts from the selected note and ends at the next note on the staff, even if this crosses rests.

NOTE

- You cannot input a glissando line on the last note on a staff.
 - Glissando lines do not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, the text can collide with notes or rests, in which case we recommend that you make further adjustments, such as not showing glissando text for that glissando line.
-

RELATED LINKS

[Ornaments popover](#) on page 229

[Glissando lines](#) on page 753

[Changing glissando line text](#) on page 755

[Changing when glissando line text is shown](#) on page 756

Inputting glissando lines with the panel

You can input glissando lines between existing notes using the Ornaments panel. You can input glissando lines between both adjacent/non-adjacent notes.

NOTE

- These steps describe inputting with the default mouse input preference **Create item at selection**.

If your preference is set to **Load pointer with item**, you can only input glissando lines between the note you click on and the note immediately following it.
 - You cannot input glissando lines during step input.
-

PROCEDURE

1. In Write mode, select one of the following:
 - The note from which you want a glissando line to start.
 - Any two notes that you want to join with a glissando line.

TIP

The two notes can be in different voices.

2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.



3. In the Ornaments panel, click the style of glissando line you want.

- **Glissando (Straight)**



- **Glissando (Wavy)**



RESULT

If you selected two notes, the glissando line specified is input between the selected notes.

If you selected a single note, the glissando line specified starts from the selected note and ends at the next note on the staff, even if this crosses rests.

NOTE

- You cannot input a glissando line on the last note on a staff.
 - Glissando lines do not automatically adjust around any notes or rests between the selected notes. If glissando text is shown, the text can collide with notes or rests, in which case we recommend that you make further adjustments, such as not showing glissando text for that glissando line.
-

RELATED LINKS

[Glissando lines](#) on page 753

[Mouse input settings](#) on page 143

Inputting jazz articulations with the popover

You can input jazz articulations using the ornaments popover, both during step input and by adding them to existing notes.

NOTE

You can input jazz ornaments, such as flips or jazz turns, in the same ways as inputting ornaments.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add jazz articulations.
 2. Press **Shift-O** to open the ornaments popover.
 3. Enter the appropriate entry for the jazz articulation you want into the popover. For example, enter scoop for a scoop or fall for a fall.
 4. Press **Return** to close the popover.
-

RESULT

The jazz articulation you specify is input on all selected notes. During note input, this is usually the previous note you input.

NOTE

When using the popover, all jazz articulations follow your project-wide settings for their line style. You can change their type/length after they have been input.

When using the panel, you can specify the line style of jazz articulations when you input them.

RELATED LINKS

[Ornaments popover](#) on page 229

[Inputting ornaments with the popover](#) on page 232

[Jazz articulations](#) on page 759

[Changing the type/length of existing jazz articulations](#) on page 763

[Changing the line style of smooth jazz articulations](#) on page 763


Inputting jazz articulations with the panel

You can input jazz articulations using the Ornaments panel, both during step input and by adding them to existing notes.

NOTE

- You can input jazz ornaments, such as flips or jazz turns, in the same ways as inputting ornaments.
- These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the existing notes to which you want to add jazz articulations.
2. In the Notations toolbox, click **Ornaments** to show the Ornaments panel.

3. In the Ornaments panel, click the jazz articulation you want in the **Jazz** section.

RESULT

The jazz articulation you specify is input on all selected notes. During note input, this is usually the previous note you input.

RELATED LINKS

- [Inputting ornaments with the panel](#) on page 233
- [Mouse input settings](#) on page 143

Input methods for playing techniques and pedal lines

You can input playing techniques with the keyboard by using the playing techniques popover, and with the mouse by using the Playing Techniques panel. Pedal lines are considered playing techniques in Dorico Pro because both affect the sound that the instrument produces.

RELATED LINKS

- [Playing techniques](#) on page 790
- [Inputting playing techniques with the popover](#) on page 242
- [Inputting playing techniques with the panel](#) on page 243

Playing techniques popover

The following tables contain the entries for the playing techniques popover that you can use to input playing techniques, pedal lines, retakes, and pedal level changes.

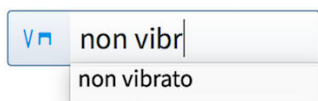
When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters/words you enter. You can then select one of these playing techniques to input.

You can open the playing techniques popover in Write mode in any of the following ways when either an item is selected or the caret is active:

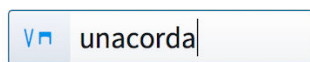
- Press **Shift-P**.
- Select an existing playing technique and press **Return**.

- Choose **Write > Create Playing Technique**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Playing techniques popover with an example entry for inputting a playing technique



Playing techniques popover with an example entry for inputting a pedal line



Playing Techniques button in the Notations toolbox

Playing techniques

Playing technique	Popover entry
<i>Vibrato</i>	vibrato
<i>Senza vibrato</i>	senza vibrato
<i>Naturale</i> (nat.)	nat
Con sord.	con sord
Strong air pressure	strong air pressure
Double-tongue	double-tongue
Down bow	downbow
Up bow	upbow
<i>Sul ponticello</i>	sul pont
<i>Sul tasto</i>	sul tasto
<i>Poco sul tasto</i>	pst
Pizzicato	pizz
<i>Spiccato</i>	spicc
Arco	arco
Tongue click (Stockhausen)	tongue click
Finger click (Stockhausen)	finger click
Vibraphone motor on	motor on
Vibraphone motor off	motor off

Playing technique	Popover entry
Open	open
Damp	damp
Damp (large)	damp large
Full <i>barré</i>	full barre
Half <i>barré</i>	half barre
Strum up	strum up
Strum down	strum down
Left hand	lh
Right hand	rh

This list is not comprehensive as there are many valid playing techniques. It is intended to illustrate how you can structure your entry to input different types of common playing techniques.

If you do not know the correct entry for a playing technique, start entering part of the playing technique and see if it becomes available in the popover menu.

NOTE

As playing techniques correspond to specific samples, they must be input as described or selected from the popover menu.

Pedal lines

Type of pedal line, retake, or pedal level change	Popover entry
Sustain pedal line	ped
Set sustain pedal level to 1/4	1/4
Set sustain pedal level to 1/2	r
Set sustain pedal level to 3/4	3/4
Fully depress sustain pedal	1
Retake in sustain pedal line	^, notch, or retake
Remove retake in sustain pedal line	nonotch
Stop sustain pedal line	*

Type of pedal line, retake, or pedal level change	Popover entry
<i>Sostenuto</i> pedal line	sost
Stop <i>sostenuto</i> pedal line	s*
<i>Una corda</i> pedal line	unacorda
Stop <i>una corda</i> pedal line	u*

RELATED LINKS

[Playing techniques](#) on page 790

[Pedal lines](#) on page 771

[Sustain pedal retakes and pedal level changes](#) on page 772

[Adding retakes and pedal level changes to existing pedal lines with the popover](#) on page 244

Playing Techniques panel

The Playing Techniques panel contains all the different playing techniques available in Dorico Pro, divided into instrument families. Pedal lines are included in the **Keyboard** section.

- You can hide/show the Playing Techniques panel by clicking **Playing Techniques** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Playing Techniques panel contains the following sections:

Common

Contains commonly used playing techniques that also apply to multiple different instrument families, such as “mute” and “legato”.

Wind

Contains playing techniques typically only used for wind instruments, such as “key clicks” and “whistle tones”.

Brass

Contains playing techniques typically only used for brass instruments, such as “cup mute” and “stopped”.

Unpitched Percussion

Contains playing techniques typically only used for unpitched percussion instruments, such as “rim” and “scrape”.

Pitched Percussion

Contains playing techniques typically only used for pitched percussion instruments, such as “motor on” and “½ Ped.” for vibraphones.

Keyboard

Contains playing techniques typically only used for keyboard instruments, such as “Ped.” and different pedal depression levels.

Choral

Contains playing techniques typically only used for the voice, such as “mouth open” and “tongue click”.

Strings

Contains playing techniques typically only used for string instruments, such as “col legno battuto” and “down bow”.

Guitar

Contains playing techniques typically only used for guitars and fretted instruments, such as “half barré” and “strum up”.

TIP

- You can hover your mouse pointer over the options in each section to show the name of each playing technique.
 - You can use the action bars at the bottom of each section to access the **Edit Playing Techniques** dialog.
-

RELATED LINKS

[Edit Playing Techniques dialog](#) on page 796

Inputting playing techniques with the popover

You can input playing techniques using the playing techniques popover, both during step input and by adding them to existing notes.

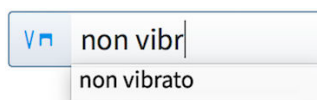
PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing note to which you want to add a playing technique.

NOTE

You can only add playing techniques to one note at a time.

2. Press **Shift-P** to open the playing techniques popover.
3. Enter the appropriate entry for the playing technique you want into the popover.
For example, enter *non vibrato* or *tongue click*.
When you start entering a playing technique into the playing techniques popover, a menu appears that shows valid playing techniques containing the letters/words you enter, which you can select.



4. Press **Return** to close the popover.
-

RESULT

The playing technique is added to the selected note.

During step input, playing techniques are input at the caret position.

Inputting playing techniques with the panel


You can input playing techniques using the Playing Techniques panel, both during step input and by adding them to existing notes.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

If you want to add the same playing technique to multiple notes, activate **Allow multiple items to be created with the mouse** in the **Editing** section of the **Note Input and Editing** page in **Preferences**, so that you do not have to reselect the playing technique for each note.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an existing note to which you want to add a playing technique.
- ### NOTE
- You can only add playing techniques to one note at a time.
-
2. In the Notations toolbox, click **Playing Techniques** to show the Playing Techniques panel.

 3. In the Playing Techniques panel, click the playing technique you want.
-

RESULT

The playing technique is added to the selected note.

During step input, playing techniques are input at the caret position, even if your preference is set to **Load pointer with item**.

RELATED LINKS

[Mouse input settings](#) on page 143

Inputting pedal lines, retakes, and pedal level changes with the popover

You can input pedal lines using the playing techniques popover, both during step input and by adding them to existing music. Because the pedal line extends automatically as you input notes during step input, you can input retakes and pedal level changes when you reach the appropriate rhythmic position.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select the notes to which you want the pedal line to apply.
2. Press **Shift-P** to open the playing techniques popover.
3. Enter the appropriate entry for the pedal line you want into the popover.
For example, enter **ped** for a sustain pedal line.
4. Press **Return** to close the popover.
The pedal line is input.

5. Optional: During step input, extend the pedal line by pressing **Space** to advance the caret. The pedal line also extends automatically as you continue inputting notes.
 6. Optional: During step input, input retakes or pedal level changes by opening the playing techniques popover again at the appropriate rhythmic position and enter the entry for the retake or pedal level change you want into the popover.
For example, enter ^ or retake for a retake.
 7. Optional: During step input, stop the pedal line by opening the playing techniques popover again and enter the appropriate entry into the popover.
For example, enter * to stop a sustain pedal line.
 8. Press **Return** to close the popover.
-

RESULT

During step input, pedal lines start at the caret position, and end at the caret position. When you add pedal lines to existing notes, pedal lines are added across the selected notes.

RELATED LINKS

[Sustain pedal retakes and pedal level changes](#) on page 772

[Inputting notes](#) on page 149

[Adding retakes and pedal level changes to existing pedal lines with the popover](#) on page 244

[Positions of pedal lines](#) on page 777

Adding retakes and pedal level changes to existing pedal lines with the popover

You can add retakes and pedal level changes to existing sustain pedal lines using the playing techniques popover.

NOTE

You cannot add retakes and pedal level changes to *sostenuto* or *una corda* pedal lines.

PREREQUISITE

You have input a sustain pedal line.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want the retake or pedal level change to apply.
 2. Press **Shift-P** to open the playing techniques popover.
 3. Enter the appropriate entry for the retake or pedal level change you want into the popover. For example, enter ^ or retake for a retake.
 4. Press **Return** to close the popover.
-

RESULT

The retake or pedal level change is input at the selected rhythmic position.

RELATED LINKS

[Sustain pedal retakes and pedal level changes](#) on page 772

[Playing techniques popover](#) on page 238


Inputting pedal lines, retakes, and pedal level changes with the panel

You can input pedal lines, retakes, and pedal level changes using the Playing Techniques panel.

NOTE

- When using the panel, you cannot input pedal lines, retakes, or pedal level changes during step input.
 - These steps describe inputting with the default mouse input preference **Create item at selection**.
-

PROCEDURE

1. In Write mode, select the notes to which you want the pedal line to apply.
 2. In the Notations toolbox, click **Playing Techniques** to show the Playing Techniques panel.

 3. In the Playing Techniques panel, click the pedal line you want in the **Keyboard** section. Alternatively, with nothing selected, click the pedal line you want in the **Keyboard** section of the Playing Techniques panel, then click and drag in the score to create a pedal line and extend it to the duration you want.
 4. Optional: Select an item at the rhythmic position where you want to input a retake or pedal level change.
 5. Optional: In the Playing Techniques panel, click the retake or pedal level change you want in the **Keyboard** section.
-

RESULT

The pedal line is input across the selected range.

RELATED LINKS

[Sustain pedal retakes and pedal level changes](#) on page 772

[Adding retakes and pedal level changes to existing pedal lines with the panel](#) on page 245

[Mouse input settings](#) on page 143

Adding retakes and pedal level changes to existing pedal lines with the panel

You can add retakes and pedal level changes to existing sustain pedal lines using the Playing Techniques panel.

NOTE

You cannot add retakes and pedal level changes to *sostenuto* or *una corda* pedal lines.

PREREQUISITE

You have input a sustain pedal line.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want the retake or pedal level change to apply.
2. Input the retake or pedal level change you want in one of the following ways:
 - Click the retake or pedal level change you want in the **Keyboard** section of the Playing Techniques panel.

- Choose **Edit > Pedal Lines > [Retake or pedal level change]**. You can also choose this option from the context menu.
-

RESULT

The retake or pedal level change is input at the selected rhythmic position.

TIP

Alternatively, if nothing is selected in the score, you can click a retake or pedal level change in the **Keyboard** section of the Playing Techniques panel, and then click at the rhythmic position where you want to input the retake or pedal level change.

RELATED LINKS

[Sustain pedal retakes and pedal level changes](#) on page 772

[Input methods for playing techniques and pedal lines](#) on page 238

Inputting lyrics

You can input lyrics by entering text into the lyrics popover, and you can advance the lyrics popover to the next note on the staff without closing and reopening it for every note.

PROCEDURE

1. In Write mode, select the first note to which you want to input lyrics.
 2. Press **Shift-L** to open the lyrics popover.
By default, the lyrics popover opens with lyric line input selected.
 3. Optional: Change the type of lyric in one of the following ways:
 - To change the lyric line number, press **Down Arrow**.
 - To input lyrics above the staff, press **Shift-Up Arrow**.
 - To input chorus lines, press **Up Arrow**.
 - To input lyric line translations, press **Alt-Down Arrow**.
 4. Enter the word or syllable you want to add to the selected note into the popover.
 - To enter multiple words on a single note, press **Shift-Alt-Space**.
 - To include a hyphen within a single word or syllable, press **Alt--** (hyphen).
 - To include an elision in a lyric, press **_** (underscore).
 5. Advance the popover to the next note in one of the following ways:
 - If you entered a complete word, or the final syllable in a multi-syllabic word, press **Space**.
 - If you entered one syllable of a multi-syllabic word that is not the final syllable, press **-** (hyphen).
 - If you do not want the syllable to be followed by an extension line or hyphen, press **Right Arrow**.
 6. Continue entering words and syllables into the popover for the rest of the notes to which you want to add lyrics.
 7. Press **Return** or **Esc** to close the popover.
The popover closes automatically when you reach the last note on the staff.
-

RESULT

The text you entered into the popover is input as lyrics of the type indicated by the icon on the left-hand side of the popover.

If you advanced the popover to the next note by pressing **-**, a hyphen appears after the last entered lyric. This is used for multi-syllabic words across multiple notes.

If you advance the popover by pressing **Space**, a gap appears after the last entered lyric. This is used for single-syllable words or for the final syllable in multi-syllabic words.

NOTE

You can later change whether a gap or a hyphen appears between lyrics by changing their syllable type.

RELATED LINKS

[Lyrics on page 690](#)

[Navigation during lyric input on page 248](#)

[Types of lyrics on page 692](#)

[Types of syllables in lyrics on page 694](#)

[Lyric line numbers on page 701](#)

[Lyric hyphens and lyric extender lines on page 698](#)

Lyrics popover

You can input lyrics, including chorus lines and lyric line translations, using the lyrics popover. You can use key commands to change the type of lyric being input at any time.

You can open the lyrics popover in Write mode in any of the following ways when either an item is selected or the caret is active:

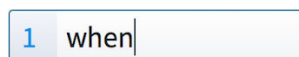
- Press **Shift-L**.
- Select an existing lyric and press **Return**.
- Choose **Write > Create Lyrics**.
- Click **Lyrics** in the Notations toolbox.



Lyric lines

The popover automatically opens ready to input lyrics into Line 1, except if you are changing an existing lyric.

The number shown on the left-hand side of the lyrics popover indicates the lyric line into which the lyric is input.



The lyrics popover with an example entry for Line 1

You can change the lyric line number by pressing **Down Arrow** when the lyrics popover is open.



The lyrics popover with an example entry for Line 2

Lyric lines above the staff

You can input lyrics into lines above the staff by pressing **Shift-Up Arrow** when the lyrics popover is open.

You can then press **Up Arrow** and **Down Arrow** to change the lyric line number above the staff.

Chorus lines

You can input chorus lines by pressing **Up Arrow** when the lyrics popover is open. You can do this when inputting lyrics below the staff and above the staff.

A **c**, for “chorus lines”, is shown on the left-hand side of the popover.

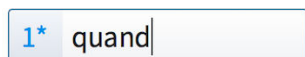


The lyrics popover with an example entry for a chorus line

Lyric line translations

You can input lyric line translations by pressing **Alt-Down Arrow** when the lyrics popover is open.

An asterisk (*) is shown beside the lyric line number to which you want to add a lyric line translation on the left-hand side of the popover.



The lyrics popover with an example entry for a lyric line translation

RELATED LINKS

[Inputting lyrics](#) on page 246

[Lyrics](#) on page 690

[Types of lyrics](#) on page 692

Navigation during lyric input

You can move the lyrics popover to input new lyrics and edit existing lyrics without having to close and reopen the lyrics popover.

Popover navigation	Key command
Finish the current word and advance the popover to the next note or chord.	Space
Finish the current syllable and advance the popover to the next note or chord.	- (hyphen)
Advance the popover to the next note without showing an extension line or hyphen.	Right Arrow
Move the cursor to the next/previous letter. If the next/previous letter is in another lyric, the popover advances to that lyric.	Right Arrow/Left Arrow
Move the popover forwards/backwards from syllable to syllable within lines of lyrics.	Alt-Right Arrow/Alt-Left Arrow
Add spaces within a word or syllable, without advancing the popover.	Shift-Alt-Space
Add a hyphen within a single word or syllable without advancing the popover.	Alt-- (hyphen)
Add an elision slur within a word or syllable.	_ (underscore)

RELATED LINKS

[Lyrics](#) on page 690

[Inputting lyrics](#) on page 246

Inputting rehearsal marks

You can input rehearsal marks with the mouse and the keyboard. You can input rehearsal marks during step input and later by adding them to existing music.

NOTE

These steps describe inputting with the default mouse input preference **Create item at selection**.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an item at the rhythmic position where you want to input a rehearsal mark. For example, a barline or a note.

NOTE

You can only input one rehearsal mark at a time, even if multiple items are selected.

2. Press **Shift-A**.
Alternatively, you can click **Rehearsal Marks** in the Notations toolbox.



RESULT

A rehearsal mark is input at the selected barline, or at the rhythmic position of the start of a note, a rest, or an object.

The order of rehearsal marks is updated automatically, meaning you can input them in any order, including before and between existing rehearsal marks.

RELATED LINKS

[Rehearsal marks](#) on page 805

[Mouse input settings](#) on page 143

Inputting markers/timecodes

You can input markers at specific positions in time. Depending on your project-wide settings, timecodes can also be shown alongside markers.

PROCEDURE

1. In Write mode, move the playhead to the time position where you want to input a marker.
 2. Press **Shift-Alt-M**.
-

RESULT

A marker is input at the position of the playhead. It shows the default text "Marker" and includes a timecode reflecting that position if you have chosen to show timecodes in markers.

TIP

You can also input markers by clicking **Add Marker** in the Markers section of the Video panel. This method allows you to enter a timecode directly into the **Add Marker** dialog, rather than input a marker at the playhead position, so it can be useful if, for example, you already know the timecodes for each marker.

Additionally, you can input markers in the **Markers** track in Play mode.

AFTER COMPLETING THIS TASK

You can change the text shown in the marker.

RELATED LINKS

[Markers](#) on page 814

[Timecodes](#) on page 819

[Moving the playhead](#) on page 431

[Hiding/Showing timecodes in markers](#) on page 821

[Changing the text shown in markers](#) on page 815

[Markers track](#) on page 427

[Inputting markers in the Markers track](#) on page 428

Markers section of the Video panel

In the **Markers** section of the Video panel in Write mode, you can input and edit markers and timecodes, and also define markers as important.

- You can hide/show the Video panel by clicking **Video** in the Notations toolbox.

The **Markers** section of the Video panel contains a table of markers, divided into the following columns:

Timecode

Shows the timecode of the marker. You can edit the timecode by double-clicking in the field.

Text

Shows the text of the marker. You can edit the text by double-clicking in the field.

Imp.

Stands for “important”, allows you to define markers as important by activating their checkbox in this column.

When markers are defined as important, their entry uses a bold font in the table and they are considered when finding a suitable tempo in the **Find Tempo** dialog.

RELATED LINKS

[Markers](#) on page 814

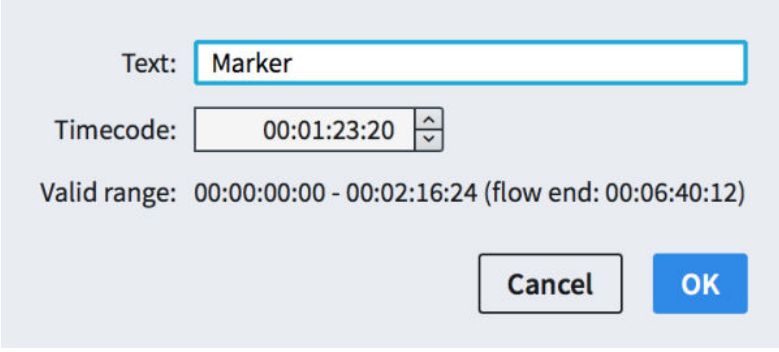
[Timecodes](#) on page 819

Add Marker dialog

The **Add Marker** dialog allows you to input markers with custom text at specific timecodes.

- You can open the **Add Marker** dialog in Write mode by clicking **Add Marker** in the **Markers** section of the Video panel.





Text:

Timecode:

Valid range: 00:00:00:00 - 00:02:16:24 (flow end: 00:06:40:12)

Add Marker dialog

The **Add Marker** dialog contains the following options:

Text

Allows you to enter custom text that is shown in the marker.

Timecode

Allows you to specify the timecode at which you want to input the marker.

Valid range

Displays the timecode range of the flow.

RELATED LINKS

[Markers](#) on page 814

[Timecodes](#) on page 819

[Inputting markers/timecodes](#) on page 249

[Markers section of the Video panel](#) on page 250

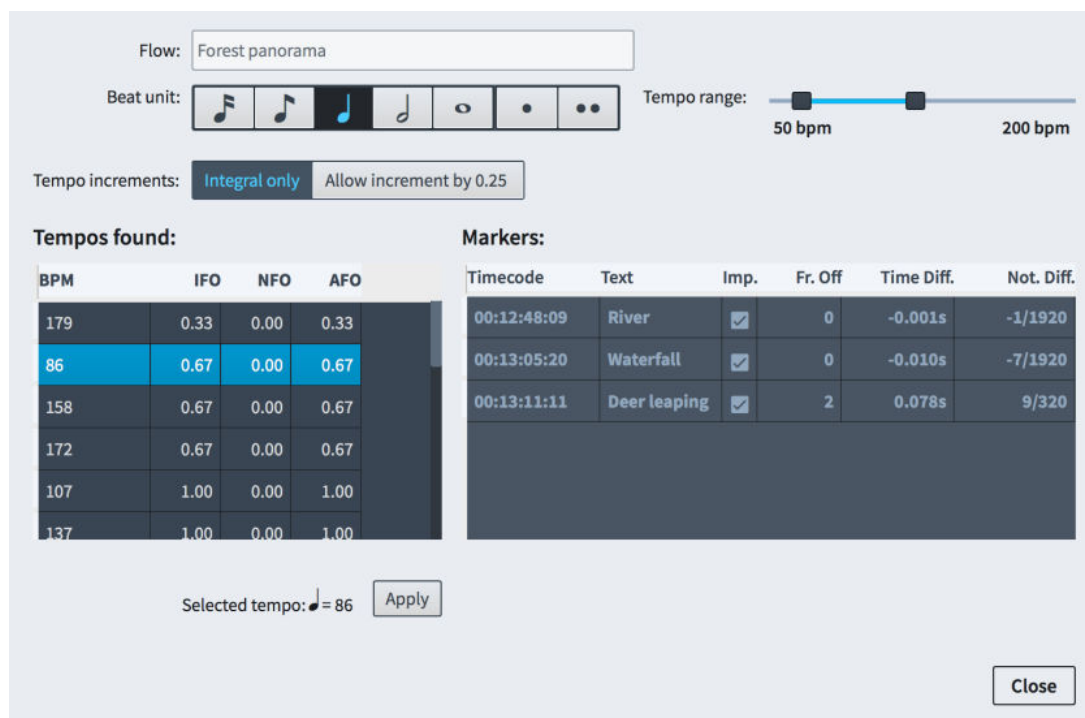
Find Tempo dialog

The **Find Tempo** dialog allows you to calculate tempos that best accommodate your important markers, for example, by identifying which tempos cause markers to coincide as closely as possible with strong beats.

- You can open the **Find Tempo** dialog in Write mode by clicking **Find Tempo** in the **Markers** section of the Video panel.

NOTE

- The **Find Tempo** dialog only considers markers in a single flow. You can change which flow by selecting an item in the flow whose tempo you want to determine and then opening the dialog.
 - The **Find Tempo** dialog is only available if you have input at least one marker in the flow whose tempo you want to determine and defined at least one marker as important.
-



Find Tempo dialog

The **Find Tempo** dialog contains the following options and sections:

Flow

Shows the name of the flow whose tempo you are determining. This field is read-only.

Beat unit

Allows you to change the beat unit considered for the tempo. For example, if the time signature for the flow is 6/8, you might want to change the beat unit to a dotted quarter note.

Tempo range

Allows you to set the minimum/maximum tempos you want to consider.

Tempo increments

Allows you to filter the suggested tempos according to their precision.

- **Integral only**
Only whole number tempos, that is, tempos without decimal places, are suggested.
- **Allow increment by 0.25**
Allows tempos with decimal places of .25, .5, and .75 to be suggested.

Tempos found

Contains a list of possible tempos that you can select to see how they affect the position of your markers relative to beats. The list is updated automatically when you change options such as **Tempo range** and **Beat unit**.

The list contains columns for the following information:

- **BPM**
Stands for "beats per minute". Lists different possible tempos according to their metronome mark value.
- **IFO**

Stands for “important frames off”. Indicates the average number of frames by which important markers miss significant beats, either before or after.

- **NFO**
Stands for “non-important frames off”. Indicates the average number of frames by which non-important markers miss significant beats, either before or after.
- **AFO**
Stands for “all frames off”. Indicates the average number of frames by which all markers in the flow miss significant beats, either before or after.

Found tempos are listed in descending order of average frames off for important markers.

Markers

Shows the impact that the tempo currently selected in the **Tempos found** list would have on each marker in the flow in more detail.

- **Timecode**
Shows the exact timecode of each marker.
- **Text**
Shows the marker text of each marker to help you identify them.
- **Imp.**
Indicates whether a marker has been defined as important.
- **Fr. Off**
Stands for “frames off”. Shows the average number of frames by which each marker misses being aligned to beats.
- **Time Diff.**
Stands for “time difference”. Shows the time difference between the position of the marker and the position of the nearest beat, expressed in fractions of a second.
- **Not. Diff.**
Stands for “notated difference”. Shows the notated difference between the position of the marker and the position of the nearest beat, expressed in fractions of a whole note.

Selected tempo

Displays the currently selected tempo for the flow.

Apply

Applies the selected tempo to the flow by inputting it as a tempo mark at the beginning of the flow. Any other tempo marks in the flow are automatically deleted.

RELATED LINKS

[Defining markers as important](#) on page 818

[Metronome marks](#) on page 960

Input methods for repeats and tremolos

You can input repeats and tremolos, including repeat endings, repeat markers, and rhythm slashes, with the keyboard by using the repeats popover, and with the mouse by using the Repeat Structures panel.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

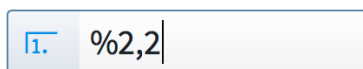
Repeats popover

The following tables contain the entries for the repeats popover that you can use to input the different tremolos, bar repeats, rhythm slash regions, repeat markers, and repeat endings available.

You can open the repeats popover in Write mode in any of the following ways when either an item is selected or the caret is active:

- Press **Shift-R**.
- Select an existing repeat marker, slash region, or bar repeat and press **Return**.
- Choose **Write > Create Repeat**.

The icon on the left-hand side of the popover matches the corresponding button in the Notations toolbox on the right of the window.



Repeats popover with an example entry



Repeat Structures button in the Notations toolbox

Repeat endings

Part of repeat ending	Popover entry
Whole repeat ending	end or ending
Additional repeat ending segment	add

Repeat markers

Type of repeat marker	Popover entry
D.C.	dc, D.C., da capo, and so on
D.C. al Fine	dcalf, DC al Fine, D.C. al Fine, and so on
D.C. al Coda	dcalc, DC al Coda, D.C. al Coda, and so on
D.S.	ds, D.S., dal segno, and so on
D.S. al Fine	dsalf, DS al Fine, D.S. al Fine, and so on
D.S. al Coda	dsalc, DS al Coda, D.S. al Coda, and so on
to Coda	toc, tc, to coda, To Coda, and so on
Segno	s, seg, segno, and so on
Fine	f, fin, fine, and so on
Coda	c, co, coda, and so on

The list of entries for repeat markers is not comprehensive, as the flexibility of the popover means you can enter any reasonable version or abbreviation of the type of repeat marker you want and the popover recognizes it in most cases.

Single-note tremolos

Type of tremolo	Popover entry
One stroke	/, \, or 1
Two strokes	//, \\, or 2
Three strokes	///, \\, or 3
Four strokes	////, \\, or 4
Z on stem (buzz roll)	z or zonstem
Remove all tremolos	0 or clear

Multi-note tremolos

Type of tremolo	Popover entry
One stroke	/2, \2, or 12
Two strokes	//2, \\2, or 22
Three strokes	///2, \\2, or 32
Four strokes	////2, \\2, or 42
Z on stem (buzz roll)	z or zonstem
Remove all tremolos	0 or clear

Slash regions

Slash region	Popover entry
New slash region	slash

Bar repeats

Type of bar repeat	Popover entry
Repeat last bar	% or %1
Repeat last 2 bars	%2
Repeat last 4 bars	%4

Type of bar repeat	Popover entry
Repeat last bar, group in 2	%1,2
Repeat last bar, group in 4	%1,4
Repeat last 2 bars, group in 2	%2,2
Repeat last 4 bars, group in 4	%4,4

RELATED LINKS

[Inputting repeat markers with the popover](#) on page 260

[Inputting tremolos with the popover](#) on page 261

[Inputting slash regions](#) on page 263

[Inputting bar repeats](#) on page 264

[Repeat endings](#) on page 823

[Tremolos](#) on page 999

[Rhythm slashes](#) on page 849

[Bar repeats](#) on page 839

Repeat Structures panel

The Repeat Structures panel contains all the different types of repeat notations, including repeat endings, repeat markers, tremolos, rhythm slashes, and bar repeats.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

- You can hide/show the Repeat Structures panel by clicking **Repeat Structures** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Repeat Structures panel contains the following sections:

Repeat Endings

Contains options that allow you to input new repeat endings and add additional endings to existing repeat endings.

Repeat Jumps

Contains different types of repeat markers that instruct players to jump to a specific point in the piece, such as "D.S. al Coda".

Repeat Sections

Contains different sections used in conjunction with repeat jumps, such as "Coda".

Tremolos

Contains different types of single-note and multi-note tremolos.

Rhythm Slashes

Allows you to input a region that displays rhythm slashes that are automatically formatted to be compatible with the prevailing time signature.

Bar Repeats

Allows you to input a region that indicates a set number of bars is repeated without re-notating those bars.

Inputting repeat endings with the popover

You can input repeat endings using the repeats popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select at least one item in each bar that you want to include in the first ending.

2. Press **Shift-R** to open the repeats popover.
 3. Enter end or ending into the popover.
 4. Press **Return** to close the popover.
-

RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected notes, and a second ending segment created automatically in the following bar.

An end repeat barline is created at the end of the first ending if none exists already.

RELATED LINKS

[Repeats popover](#) on page 254

[Repeat endings](#) on page 823

Adding additional repeat endings with the popover

You can have more than two possible endings in each repeat ending structure by adding repeats using the repeats popover. You can add additional endings both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select the bars that you want to include in the additional ending.

NOTE

Your selection must start from the first bar following the previous repeat ending segment.

2. Press **Shift-R** to open the repeats popover.
3. Enter add into the popover.

4. Press **Return** to close the popover.
 5. Optional: Repeat these steps as many times as required for the number of additional endings you want.
-

RESULT

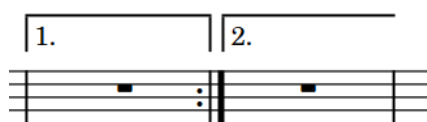
A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

TIP

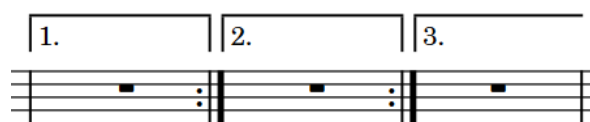
You can also add additional repeat ending segments by selecting the repeat ending and changing the value for **No. endings** in the **Repeat Endings** group of the Properties panel.

However, **No. endings** only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE



Default repeat ending structure with two endings



Repeat ending structure with additional third ending

RELATED LINKS

[Repeat endings](#) on page 823

[Repeats popover](#) on page 254

Inputting repeat endings with the panel

You can input repeat endings using the Repeat Structures panel, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select at least one item in each bar that you want to include in the first ending.

2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.



3. In the Repeat Structures panel, click **Create Repeat Ending** in the **Repeat Endings** section.



RESULT

The repeat ending is input, with the first ending segment covering the bars in which you selected notes, and a second ending segment created automatically in the following bar.

An end repeat barline is created at the end of the first ending if none exists already.

RELATED LINKS

[Repeat endings](#) on page 823

Adding additional repeat endings with the panel

You can have more than two possible endings in each repeat ending structure by adding repeats using the Repeat Structures panel. You can add additional endings both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select the bars that you want to include in the additional ending.

NOTE

Your selection must start from the first bar following the previous repeat ending segment.

2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.



3. In the Repeat Structures panel, click **Add Section To Repeat Ending** in the **Repeat Endings** section.



NOTE

If increasing the number of endings makes the repeat ending collide with any part of another repeat ending, the other repeat ending is deleted. However, its repeat barlines are not deleted.

4. Optional: Repeat these steps as many times as required for the number of additional endings you want.

RESULT

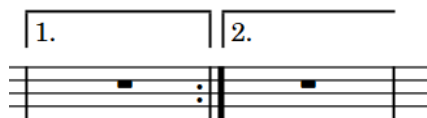
A new repeat ending segment is added. The existing previous repeat ending segment now ends with a closed line, with an end repeat barline created if necessary.

TIP

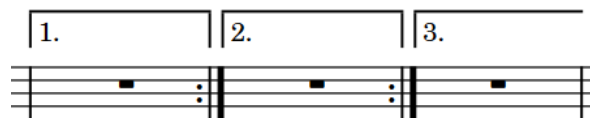
You can also add additional repeat ending segments by selecting the repeat ending and changing the value for **No. endings** in the **Repeat Endings** group of the Properties panel.

However, **No. endings** only adds additional repeat ending segments that contain one bar, and does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.

EXAMPLE



Default repeat ending structure with two endings



Repeat ending structure with additional third ending

RELATED LINKS

[Repeat endings](#) on page 823

Inputting repeat markers with the popover

You can input repeat markers, including repeat jumps and repeat sections, using the repeats popover, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select an item at the rhythmic position where you want to input a repeat marker. For repeat jumps, we recommend that you select the barline with which you want the end of the jump instruction to align. For repeat sections, we recommend that you select the barline with which you want the start of the section marker to align.
2. Press **Shift-R** to open the repeats popover.
 3. Enter the appropriate entry for the type of repeat marker you want into the popover. For example, enter **coda** to input a coda section or enter **\$** to input a segno.
 4. Press **Return** to close the popover.
-

RESULT

During step input, repeat markers are input at the caret position. Coda sections are automatically formatted so that there is a gap between the coda and the preceding material.

When adding repeat markers to existing music, repeat markers are input at the rhythmic position of the selected note or item.

Repeat markers that indicate the end of a section, such as Fine and D.C. al Coda, are right-aligned with the selected rhythmic position.

RELATED LINKS

[Repeats popover](#) on page 254

[Repeat markers](#) on page 830

Inputting repeat markers with the panel

You can input repeat markers using the Repeat Structures panel, both during step input and by adding them to existing music.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select an item at the rhythmic position where you want to input a repeat marker. For repeat jumps, we recommend that you select the barline with which you want the end of the jump instruction to align. For repeat sections, we recommend that you select the barline with which you want the start of the section marker to align.

2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.



3. In the Repeat Structures panel, click the repeat marker you want to input in any of the following sections:

- **Repeat Jumps**
 - **Repeat Sections**
-

RESULT

During step input, repeat markers are input at the caret position. Coda sections are automatically formatted so that there is a gap between the coda and the preceding material.

When adding repeat markers to existing music, repeat markers are input at the rhythmic position of the selected note or item.

Repeat markers that indicate the end of a section, such as Fine and D.C. al Coda, are right-aligned with the selected rhythmic position.

RELATED LINKS

[Repeat markers](#) on page 830

Inputting tremolos with the popover

You can input both single-note and multi-note tremolos using the repeats popover, both during step input and by adding them to existing notes.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select the notes to which you want to add tremolos.

NOTE

If you want to input multi-note tremolos, you must select at least two notes, which can also be tuplets.

2. Press **Shift-R** to open the repeats popover.
 3. Enter the appropriate entry for the type of tremolo you want into the popover. For example, to input a three-stroke multi-note tremolo, enter `///2`.
 4. Press **Return** to close the popover.
 5. Optional: Repeat steps 2 to 3 to input other tremolos on the selected notes. For example, if you want notes to have both single-stem and multi-stem tremolos.
-

RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified.

Multi-note tremolos with the number of tremolo strokes specified are input between selected individual notes and the notes immediately after them, or between selected pairs of notes.

When tuplets are selected, multi-note tremolos are input across the selected tuplets, with the tremolo strokes positioned in the center of all notes in the tuplet. The tuplet bracket is hidden, and a signpost is shown at the start of each tuplet indicating its ratio.

NOTE

The appearance of stems in multi-note half note tremolos depends on your setting on the **Tremolos** page in **Engrave > Engraving Options**.

EXAMPLE



Multi-note tremolos with three tremolo strokes across tuplets

RELATED LINKS

[Repeats popover](#) on page 254

[Tremolos](#) on page 999

Inputting tremolos with the panel

You can input both single-note and multi-note tremolos using the Repeat Structures panel, both during step input and by adding them to existing notes.

Tremolos are included in the Repeat Structures panel because they indicate that notes are repeated, either individually as single-note tremolos or in sequences as multi-note tremolos.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.

TIP

During note input, you can select additional notes before/after the last input note without deactivating the caret by pressing **Shift-Right Arrow/Left Arrow**.

- Select the notes to which you want to add tremolos.

NOTE

If you want to input multi-note tremolos, you must select at least two notes, which can also be tuplets.

2. In the Notations toolbox, click **Repeat Structures** to show the Repeat Structures panel.



3. In the Repeat Structures panel, click the button with the number of single-note or multi-note tremolo strokes you want in the **Tremolos** section.

For example, click **Two Strokes Single-note Tremolo** to input single-note tremolos with two strokes or click **Three Strokes Multi-note Tremolo** to input multi-note tremolos with three strokes.



Two Strokes Single-note Tremolo button



Three Strokes Multi-note Tremolo button

RESULT

Single-note tremolos are input on the selected notes with the number of tremolo strokes specified.

Multi-note tremolos with the number of tremolo strokes specified are input between selected individual notes and the notes immediately after them, or between selected pairs of notes.

When tuplets are selected, multi-note tremolos are input across the selected tuplets, with the tremolo strokes positioned in the center of all notes in the tuplet. The tuplet bracket is hidden, and a signpost is shown at the start of each tuplet indicating its ratio.

NOTE

The appearance of stems in multi-note half note tremolos depends on your setting on the **Tremolos** page in **Engrave > Engraving Options**.

EXAMPLE



Multi-note tremolos with three tremolo strokes across tuplets

RELATED LINKS

[Tremolos on page 999](#)

[Deleting tremolos on page 1002](#)

[Changing the appearance of multi-note half note tremolos project-wide on page 1004](#)

Inputting slash regions

You can input slash regions using the repeats popover.

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.

- Select the region in which you want to show rhythm slashes.
2. Press **Shift-R** to open the repeats popover.
 3. Enter slash into the popover.
 4. Press **Return** to close the popover.
-

RESULT

During step input, slash regions are input spanning the duration of the selected note or item, which is usually the last input note. When adding slash regions to existing music, they span the selected duration.

Slash regions are automatically formatted as appropriate for the meter. If you later change the time signature, slash regions retain their duration but the appearance of slashes within them automatically updates.

TIP

You can also input slash regions by clicking **Create Slash Region** in the **Rhythm Slashes** group of the Repeat Structures panel.

RELATED LINKS

[Repeats popover](#) on page 254

[Rhythm slashes](#) on page 849

[Slash regions](#) on page 849

[Slash voices](#) on page 1044

Inputting bar repeats

You can input bar repeat regions when at least one bar before the region contains notes.

PROCEDURE

1. In Write mode, select the bars you want to show as a bar repeat.

NOTE

- You cannot input bar repeat regions in the first bar of a flow.
 - You can only input bar repeat regions on one staff at a time.
-

2. Press **Shift-R** to open the repeats popover.
 3. Enter the appropriate entry for the type of bar repeat region you want into the popover. For example, enter %2,2 to repeat the previous two bars, grouped in two.
 4. Press **Return** to close the popover.
-

RESULT

A region of the selected duration is input, in which the specified type of bar repeat symbol is shown in the staff at the intervals specified.

NOTE

- You can also input bar repeat regions during step input; however, this inputs bar repeat regions from the bar containing the currently selected note. As bar repeats are mostly shown in empty bars, this is likely to produce unintended results.
 - You can also input bar repeat regions by clicking **Create Bar Repeat Region** in the **Bar Repeats** group of the Repeat Structures panel. However, this only inputs a bar repeat region containing single-bar repeats.
-

RELATED LINKS

[Repeats popover](#) on page 254

[Bar repeats](#) on page 839

Inputting slurs

You can input slurs, both during step input and by adding them to existing notes. You can also add slurs to existing notes in multiple staves at the same time.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.
- Select the notes to which you want to add slurs.

TIP

- You can select notes in multiple staves and input slurs on them at the same time.
- If you only select a single note, the slur connects that note to the next note on the staff.

2. Press **S**.

TIP

Alternatively, click **Slur** in the Notes panel, and then click and drag to input a slur and extend it to your preferred length.

3. Optional: During step input, input the notes you want.

The slur extends automatically, even if there are rests between the notes you input.

4. Optional: During step input, press **Shift-S** to end the slur on the currently selected note.

RESULT

During step input, a slur begins from the currently selected note, not from the caret position. The slur extends automatically as you input notes, and ends on the currently selected note.

When adding slurs to existing notes, the selected notes are connected by slurs. For example, if you select two notes in one staff and two notes in another staff, two slurs are input. They connect the notes on each selected staff.

RELATED LINKS

[Slurs](#) on page 868

[Inputting notes](#) on page 149

Inputting text


You can input text at specific rhythmic positions in the score. You can input text for single staves or input system text that applies to all staves.

NOTE

If you want to insert text that is independent of rhythmic positions and attached to a particular page, you can use text frames.

PROCEDURE

1. In Write mode, do one of the following:

- Start note input.
 - Select a note or item at the position where you want to input text.
2. Open the text editor in any of the following ways:
 - To input staff text, press **Shift-X** or click **Text** in the Notations toolbox.

 - To input staff text with a specific paragraph style, choose **Write > Create Text > [Paragraph style]**.
 - To input system text, press **Shift-Alt-X**.
 - To input system text with a specific paragraph style, choose **Write > Create System Text > [Paragraph style]**.
 3. Enter the text you want.
 4. Optional: Press **Return** to insert a line break.
 5. Optional: Format the text using the text editor options.
 6. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.

RESULT

During step input, the text you entered into the text editor is input at the caret position. It is automatically placed above the staves to which it applies, using the default paragraph style, and follows your project-wide settings for the vertical position of text.

When adding text to existing music, it is input at the position of the earliest selected item.

NOTE

- In Dorico Pro, system text is categorized as a system object. Therefore, system text follows your per-layout settings for the visibility and positioning of system objects.
- You can change the default position of all text items outside of the staff and other items, and whether text items avoid collisions by default, on the **Text** page in **Engrave > Engraving Options**.
- You can assign key commands for inputting text with specific paragraph styles, for both **Create Text** and **Create System Text**, on the **Key Commands** page in **Preferences**.

RELATED LINKS

[Text frames](#) on page 331

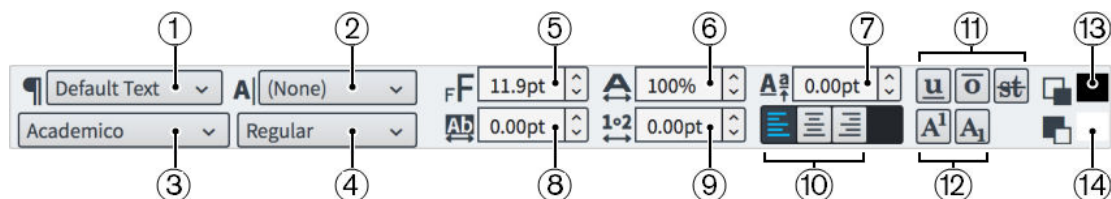
[Changing the placement of text objects relative to the staff](#) on page 374

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

Text editor options in Write mode

The text editor allows you to add and format text. In Write mode, it opens when you add or change staff text or system text.



Text editor in Write mode

The text editor provides the following options:

1 Paragraph Style

Allows you to change the paragraph style applied to the whole paragraph, which can change the appearance, formatting, and alignment of the text.

Staff text and system text are always treated as single paragraphs.

2 Character Style

Allows you to change the appearance of selected text within paragraphs. This overrides the paragraph style applied to the corresponding paragraph.

3 Font

Allows you to change the font family of selected text.

4 Font Style

Allows you to change the font style of selected text.

5 Font Size

Allows you to change the size of selected text.

6 Font Stretch

Allows you to make selected text wider or narrower.

7 Baseline Shift

Allows you to shift the baseline of selected text gradually up or down.

8 Letter Spacing

Allows you to increase/decrease the space between the characters of selected text.

9 Word Spacing

Allows you to increase/decrease the space between the words of selected text.

10 Alignment

Allows you to choose the alignment of selected text relative to the rhythmic position of the text in the score. For text in a text frame, the text is aligned along the left margin of a text frame.

You can choose from the following alignments:

- **Align Left**
- **Align Center**
- **Align Right**

11 Line Types

Allows you to show any of the following types of lines, in any combination, on selected text:

- **Underline**
- **Overline**
- **Strikethrough**

12 Script Types

Allows you to position selected text in one of the following positions relative to the text on the baseline:

- **Superscript**
- **Subscript**

13 Foreground Color

Allows you to change the color of selected text.

14 Background Color

Allows you to change the background color of selected text.

RELATED LINKS

[Entering text in text frames](#) on page 337

[Paragraph Styles dialog](#) on page 366

[Character Styles dialog](#) on page 369

Editing text

You can edit text objects added to staves or text displayed in text frames at any time, including changing the text and changing its formatting.

PROCEDURE

1. Double-click the text you want to edit to open the text editor.

TIP

You can also select text/system text objects and press **Return**.

2. Optional: Change the text in the text frame/object.
 3. Optional: Use the text editor options to format the text.
 4. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.
-

RELATED LINKS

[Text objects vs. text in text frames](#) on page 371

Inputting cues

You can input cues by using the cues popover.

PROCEDURE

1. On the staff where you want to input a cue, select multiple notes/rests spanning the duration you want the cue to last.
2. Press **Shift-U** to open the cues popover.
3. Start entering the name of the instrument whose music you want to show in the cue. The candidate instrument menu appears below the popover and shows possible source instruments.
4. Select the instrument whose music you want to show in the cue from the candidate instrument menu.

NOTE

- If you do not enter the name of an instrument that exists in your project, no cue is created.
 - If you enter the full name of an instrument into the popover yourself, you must press **Return** twice to input a cue using that instrument.
 - If multiple instruments of the same type exist in your project, music from the first player is input as the cue if you do not specify the number you want. For example, if you have Violin I and Violin II in your project and enter violin into the cues popover, music from the Violin I staff is shown in the cue.
-

RESULT

A cue is input on the selected staff, showing the music of the instrument selected in the cues popover.

If you are inputting cues in a full score layout in page view, the cue appears as a signpost by default, showing the name of the source instrument. This is because cues are hidden in full score

layouts and shown in part layouts by default, but you can choose to hide/show cues in any layout.

RELATED LINKS

[Cues](#) on page 595

[Hiding/Showing cues in layouts](#) on page 606

[Lengthening/Shortening cues](#) on page 600

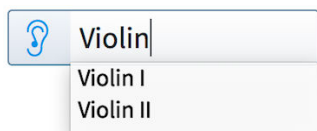
[Moving cues](#) on page 599

[Switching between layouts](#) on page 46

Cues popover

The cues popover allows you to input cues that refer to other instruments in the project, using the names of instruments as they are set in your project and language.

When you start entering the name of an instrument that exists in your project into the cues popover, a candidate menu appears that shows source instruments that you can select to show in the cue, excluding the destination instrument.



The cues popover with an example entry showing the menu of candidate instruments.

Each staff of grand staff and multi-staff instruments is listed separately, for example, **Piano (a)** and **Piano (b)**.

Each unpitched percussion instrument is listed separately. If you have a drum set in your project, each individual instrument in the drum set appears as a candidate for cueing. For example, you can show just the kick drum in a cue.

NOTE

- You cannot use entire percussion kits in cues, you must select an individual instrument from the kit.
- If you directly input a cue at the same position as an existing cue, the new cue overrides the existing cue, which is deleted. However, you can have multiple cues at the same rhythmic position if you create them in separate bars and move them or lengthen/shorten them later.

Cues panel

The Cues panel allows you to input cues and find suitable places to input cues.

- You can hide/show the Cues panel by clicking **Cues** in the Notations toolbox on the right of the window in Write mode.



You can also hide/show the panel whose icon is currently selected in the Notations toolbox by pressing **Ctrl/Cmd-9** or clicking the disclosure arrow on the right of the window.

The Cues panel contains the following sections:

Create Cue

Contains the **Create Cue** button which you can click to open the cues popover with the mouse.

Suggest Cues

Allows you to generate suggested locations for cues based on how long players have been resting.

RELATED LINKS

[Cues](#) on page 595

Cue suggestions

Cue suggestions are places in the current flow that Dorico Pro has identified as useful locations to input cues, based on a set span of time during which players have not played.

The **Suggest Cues** section of the Cues panel is divided into the following sections that help you find useful places to input cues:

Resting for

Allows you to specify the resting period for players after which you want to input cues.

The resting period is specified in absolute time rather than in bars or beats. This is because meters and tempos can change many times throughout a flow, and music can be partially or completely meterless, whereas one second always has the same duration. Dorico Pro calculates time using metronome marks in the project.

Specifying an absolute time ensures consistency in the approach to finding places where cues might be appropriate.

Rehearsal marks

Allows you to consider/ignore rehearsal marks when determining the resting period.

Rehearsal marks often coincide with new sections or other landmarks in the music, which can be obvious to players without needing extra cues. By default, rehearsal marks are ignored as they do not always act as signposts for the musical structure.

Cues

Allows you to consider/ignore cues that already exist between notes played by the destination player when determining the resting period.

A cue that occurs immediately before an entry in the destination instrument is always ignored and is never included as a suggested location, even if you choose to consider cues.

However, orientation cues which serve to help the player keep their place during extended rests, but do not immediately precede an entry, reset the timer if you choose to consider cues.

Update

Allows you to recalculate cue suggestions based on your **Resting for** duration and inclusion choices for rehearsal marks and cues after you have changed values.

The names of the flow and layout that were active when you last updated the list of cue suggestions are shown below the **Update** button. This allows you to see at a glance to which flow and layout the suggestions shown in the table apply.

Cue suggestions table

Suggested cues are presented in a table, which contains the following columns:

- **Instr.:** The destination instrument that has been resting for more than your minimum specified duration. Click to show instruments with suggested cues in the order in which they appear in the score.
- **Bar:** The bar containing the first entry of the destination instrument after its rest period. Click to show entries in ascending order, earlier bars down to later bars.

- **Sec.:** The length of time in seconds the destination instrument has been resting before the entry shown in the **Bar** column. Click to show the length of resting period in descending order, longest period down to shortest period.

Click rows in the cue suggestions table to navigate directly to that location. By default, an area with an equivalent rhythmic duration of 5 to 10 seconds prior to the entry in the destination instrument is highlighted. The highlighted area is not a specific recommendation for cue length, but it can be a good indication depending on the musical context.

If you create a cue at a location suggested in the cue suggestions table, that suggestion is automatically removed from the list.

You can click **Ignore** in the action bar at the bottom of the table to hide suggestions where you do not think a cue is appropriate.

NOTE

If you later click **Update** and regenerate the list, hidden suggestions can reappear.

Highlight suggestions

Highlighted areas before entries in source instruments are shown when **Highlight suggestions** is activated, and are hidden when it is deactivated.

Playing instruments list

Contains the instruments that are playing in the 5 to 10 seconds prior to the entry in the destination instrument currently selected in the cue suggestions table, to help you determine which instrument to use as the source instrument of cues.


RELATED LINKS

[Cues](#) on page 595

Inputting cues using cue suggestions

You can use the **Suggest Cues** section of the Cues panel in Write mode to find suitable places to input cues. You can then input cues using the cues popover.

PROCEDURE

1. In Write mode, open the layout in the music area in which you want to find suitable locations for cues.
For example, suitable locations for cues are suggested for all instruments when the full score layout is open in the music area, but only suitable locations for individual instruments are suggested when a single part layout is open.
2. In the Notations toolbox, click **Cues** to show the Cues panel.

3. In the **Suggest Cues** section of the Cues panel, specify the resting period after which you want to input cues by changing the value for **Resting for**.
4. Choose one of the following options for **Rehearsal marks**:
 - **Consider**
 - **Ignore**
5. Choose one of the following options for **Cues**:
 - **Consider**
 - **Ignore**
6. Click **Update**.

7. Optional: To check the context of the cue suggestion, click a row in the cue suggestions table to navigate directly to that position in the layout.
Cue suggestions are highlighted for the equivalent rhythmic duration of 5-10 seconds. You can choose not to see highlighted areas by deactivating **Highlight suggestions**.
8. On the staff where you want to input a cue, select multiple notes/rests spanning the duration you want the cue to last.
9. Press **Shift-U** to open the cues popover.
10. In the popover, start entering the name of the instrument whose music you want to show in the cue.
The candidate instrument menu appears below the popover. You can use the **Playing instruments** list in the Cues panel to help select an appropriate source instrument for your cue.
11. Select the instrument whose music you want to show in the cue from the candidate instrument menu.

NOTE

- If you do not enter the name of an instrument that exists in your project, no cue is created.
- If you enter the full name of an instrument into the popover yourself, you must press **Return** twice to input a cue using that instrument.
- If multiple instruments of the same type exist in your project, music from the first player is input as the cue if you do not specify the number you want. For example, if you have Violin I and Violin II in your project and enter violin into the cues popover, music from the Violin I staff is shown in the cue.

RESULT

A cue is input in the selected staff, showing the music of the instrument selected in the cues popover.

If you are inputting cues in a full score layout in page view, the cue appears as a signpost by default, showing the name of the source instrument. This is because cues are hidden in full score layouts and shown in part layouts by default, but you can choose to hide/show cues in any layout.

RELATED LINKS

[Cues](#) on page 595

[Switching between layouts](#) on page 46

Editing and selecting

In Dorico Pro, there are multiple different ways you can select and edit the items in your project, from selecting items individually to making large selections covering multiple staves.

RELATED LINKS

[Filters](#) on page 278

[Selection tools](#) on page 42

Selecting/Deselecting notes and items individually

You can select/deselect existing notes and other notation items individually in the music area, for example, if you want to add articulations to a selection of notes or delete a short passage of music.

NOTE

If you want to select a large number of notes/items, we recommend that you use one of the larger selection methods.

PROCEDURE

1. Select individual notes/items in the music area in any of the following ways:
 - **Ctrl/Cmd**-click individual notes/items.
 - **Shift**-click adjacent notes/items.
 - Click a single note/item.
 - Make a marquee selection around multiple notes/items.
 2. Deselect all currently selected items in any of the following ways:
 - Press **Ctrl/Cmd-D**.
 - Click outside of the staves within the music area.
-

RELATED LINKS

[Selecting multiple items using marquee selections](#) on page 43
[Playing/Muting notes during note input/selection](#) on page 278

Selecting more items of the same type

You can incrementally extend your current selection to more items of the same type and notes in the same voices, which is particularly helpful if you want to select multiple different items at once, such as dynamics and lyrics.

PROCEDURE

1. Select the notes and items you want to select more of. You can do this in Write mode and Engrave mode.

TIP

You can select notes and items on multiple staves and in specific voices, for example, if you only want to select notes in up-stem voices on four staves.

2. Press **Ctrl/Cmd-Shift-A** to expand your selection.
 3. Optional: Continue pressing **Ctrl/Cmd-Shift-A** to extend your selection further.
-

RESULT

More of the same types of items and notes in the same voices as your original selection are selected, with the range of selected items expanding each time you press the key command: firstly to the boundaries of the bar, secondly to the boundaries of the system, and finally to the rest of the flow. If there are no other items available in the bar, Dorico Pro automatically advances to the second expansion. In galley view, the second expansion is to the entire flow directly as there is only a single system in galley view.

For items that span multiple bars and systems, they are selected in the earliest bar/system in which they exist.

NOTE

Dorico Pro selects the following items differently if you select only a single one of them:

- **Lyrics:** The selection expands only to other lyrics with the same line number, placement, and line type as the originally selected lyric.
- **Dynamics:** The first expansion is to all other dynamics in the same group and on the same staves as the original selection, with further expansions selecting other dynamics in other groups.
- **Playing techniques:** The selection expands only to playing techniques of the same category, such as **Strings** or **Choral**. Additionally, if you select either an up bow or down bow playing technique, the selection expands only to other up bow and down bow playing techniques. It does not select any other playing techniques.

Large selections

You can make large selections, including selecting the contents of whole staves or the whole flow.

Select everything in a specific area

You can use the **Marquee Tool** to specify an area in which you want to select everything.

Select everything in the whole flow

- Press **Ctrl/Cmd-A**.
- Choose **Edit > Select All**.

Select everything on a single staff

- Select the first note on the staff, hold down **Shift**, and select the last note on the staff.
- Select the first note on the staff and choose **Edit > Select To End Of System** or **Edit > Select To End Of Flow**.
- Make a marquee selection that includes the staff you want to select.

Select everything on multiple adjacent staves

- Select one whole staff at the top/bottom of the range of staves you want to select and press **Shift-Up Arrow** or **Shift-Down Arrow** until all the staves you want are selected.
- Select one whole staff at the top/bottom of the range of staves you want to select and **Shift-click** the staff at the other end of the range of staves you want to select.
- Make a marquee selection that includes the staves you want to select.

Select more of the currently selected types of items

You can use **Edit > Select More (Ctrl/Cmd-Shift-A)** to expand your current selection horizontally and incrementally to other items of the same types and in the selected voices and staves in both Write mode and Engrave mode. For items that span multiple bars and systems, they are selected in the earliest bar/system in which they exist.

- 1 The first expansion is to the boundaries of the current bar, both to the left and right. If there is nothing to select within the bar, such as if you selected a whole note in a 4/4 bar, Dorico Pro automatically advances to the second expansion.

- 2 The second expansion in page view is to the boundaries of the current system, both to the left and right. In galley view, the second expansion is to the rest of the flow, as there is only a single system in galley view.
- 3 In page view, the third expansion is to the entire flow.

Select everything in the system within a range of beats/bars

You can use the system track to select a region of beats/bars and then select everything on all staves in the system within that region.

TIP

If you want to select only a certain type of item, such as lyrics or dynamics, you can then use the corresponding filters.

RELATED LINKS

[Filters](#) on page 278

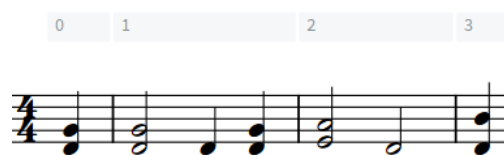
[Selecting/Deselecting notes and items individually](#) on page 273

[Selecting multiple items using marquee selections](#) on page 43

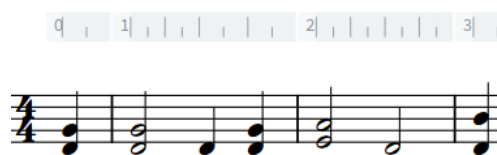
[Selecting more items of the same type](#) on page 273

System track

The system track is a translucent line above the top of each system in Write mode. It allows you to add and delete bars and beats, and to select everything on all staves in the system.



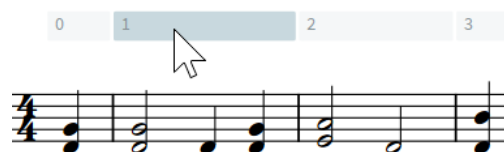
The system track above a staff, showing bars



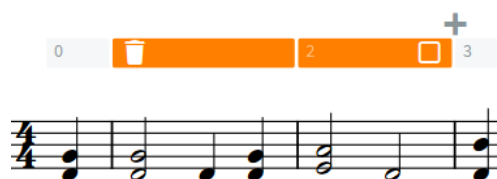
The system track above a staff, showing beat units reflecting the current rhythmic grid resolution

The color of the system track changes depending on how you are interacting with it.

- When you hover the mouse over it, it becomes opaque.
- When you select a region in the system track, it appears highlighted.



The system track when the mouse pointer hovers over it



The system track with a region selected

When you have selected a region in the system track, the following options are available:



1 **Delete**

Allows you to delete the selected region.

NOTE

When you hover over **Delete**, the highlight color of the selected region changes.

2 **System Track Select**

Allows you to select all items on all staves in the system across the selected region.

3 **Add**

Allows you to add bars or beats of the same duration as the selection in the system track. The extra time is inserted immediately after the end of the selection.

NOTE

Selections on the system track are cleared whenever you make any other kind of selection, or when you switch layouts. However, selections on the system track are retained when switching between page and galley view.

RELATED LINKS

[Inputting bars/beats with the system track](#) on page 205

[Deleting bars/beats with the system track](#) on page 505

Hiding/Showing the system track

The system track is shown by default in new projects, but you can hide/show it at any time.

PROCEDURE

- Hide/Show the system track in any of the following ways:
 - Press **Alt-T**.
 - Choose **View > System Track**.
-

RESULT

The system track is shown when a tick appears beside **System Track** in the **View** menu, and hidden when no tick appears.

TIP

If you do not want the system track to be shown in all future projects by default, deactivate **Show system track in new projects** in the **View** section of the **General** page in **Preferences**.

RELATED LINKS

[Preferences dialog](#) on page 51

Selecting bars with the system track

The system track allows you to select all staves in the system across the selected bars.

PREREQUISITE

The system track is shown.

PROCEDURE

1. Click a bar in the system track.
2. Optional: Select multiple bars to the right/left of the first selected bar in any of the following ways:

- **Shift**-click bars to the right/left along the system track.
 - Click and drag to the right/left along the system track.
3. Click **System Track Select** in the system track. It can also appear above the system track if your selection is narrow.



System Track Select button in the system track



The **System Track Select** button appears filled in when you hover over it

RESULT

Everything on all staves in the selected bars is selected and highlighted, including notations and signposts.

NOTE

If you then delete your selection, any signposts included are also deleted. This can affect the page layout, for example, by removing ossia staves whose signposts were included in the selection.

RELATED LINKS

[Hiding/Showing the system track](#) on page 276

[Deleting the contents of bars](#) on page 506

[Deleting bars/beats with the system track](#) on page 505

Selecting beats with the system track

The system track allows you to select all staves in the system across the selected beats.

PREREQUISITE

The system track is shown.

PROCEDURE

1. Press and hold **Alt**.
Grid lines that match the current rhythmic grid resolution appear in the system track.
2. Without releasing **Alt**, click and drag to the right/left along the system track.

NOTE

You cannot **Shift**-click when selecting beats.

3. Click **System Track Select** in the system track. It can also appear above the system track if your selection is narrow.



System Track Select button in the system track



The **System Track Select** button appears filled in when you hover over it

RESULT

Everything on all staves in the selected beats is selected and highlighted, including notations and signposts.

NOTE

If you then delete your selection, any signposts included are also deleted. This can affect the page layout, for example, by removing ossia staves whose signposts were included in the selection.

RELATED LINKS

[Hiding/Showing the system track](#) on page 276

[Deleting the contents of bars](#) on page 506

[Deleting bars/beats with the system track](#) on page 505

Filters

Filters in Dorico Pro allow you to select only a specific type of item from a larger selection. Dorico Pro includes a filter for every notation item.

- You can find the available filters by choosing **Edit > Filter > [Item] > [Item type]**. You can also choose filters from the context menu.

All significant notation items have their own filter, for example, arpeggio signs, chord symbols, key signatures, and playing techniques. You can also filter for note spacing changes.

The following items have multiple filters because they have multiple types:

Notes

Allows you to filter notes, grace notes, and chords. You can also filter notes according to their accidental, pitch, and position in chords.

Voices

Allows you to filter voices according to their stem-direction. You can also filter slash voices.

Dynamics

Allows you to filter all dynamics, or just gradual or immediate dynamics.

Tempos

Allows you to filter all tempo marks, or just absolute, relative, or gradual tempo changes.

Lyrics

Allows you to filter all lyrics, or just lyrics with a specific line number, type, or staff-relative placement.

NOTE

There is no filter for barlines. You also cannot filter fingerings, beams, articulations, or tremolos, as they are considered part of the notes to which they apply.

RELATED LINKS

[Filters for lyrics](#) on page 691

Playing/Muting notes during note input/selection

You can change your default setting for whether notes are played back as you input them or not.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.

2. Click **Note Input and Editing** in the page list.
 3. In the **Note Input** section, activate/deactivate **Play notes during note input and selection** in the **Auditioning** subsection.
 4. Click **Apply**, then **Close**.
-

RESULT

When the option is activated, notes play back as you input them during note input and when you select them. When it is deactivated, notes do not play back.

RELATED LINKS

[Inputting notes](#) on page 149

[Selecting/Deselecting notes and items individually](#) on page 273

Playing all/individual notes in chords during note input/selection

You can change your default setting for whether all notes in chords are played when you select any note in the chord or whether only the selected notes are played.

PREREQUISITE

Notes are played during note input/selection.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Note Input and Editing** in the page list.
 3. In the **Note Input** section, activate/deactivate **Play all notes in chord when any is selected** in the **Auditioning** subsection.
 4. Click **Apply**, then **Close**.
-

RESULT

When the option is activated, all notes in chords are played when any note in the chord is selected. When it is deactivated, only the selected notes are played.

Disabling automatic linking of dynamics and slurs when pasting

By default, slurs and dynamics are automatically linked when you copy them to other staves at the same rhythmic position. You can disable this behavior so slurs are not linked by default.

PROCEDURE

1. Press **Ctrl/Cmd-**, (comma) to open **Preferences**.
 2. Click **Note Input and Editing** in the page list.
 3. In the **Editing** section, deactivate **Link dynamics and slurs to existing items when pasting**.
 4. Click **Apply**, then **Close**.
-

RELATED LINKS

[Dynamics linked across multiple staves](#) on page 633

[Slurs linked across multiple staves](#) on page 876

Changing existing items

You can change all items that have an associated popover, rather than deleting them and inputting new ones. For example, if you want to change an 8va octave line into a 15va octave line or change a short fermata into a long fermata.

PROCEDURE

1. Select the item or the signpost of the item you want to change.
 2. Press **Return** to open the popover for that item.
 3. Change the existing entry in the popover.
For chord symbols, you can also play the new chord on your MIDI keyboard.
 4. Press **Return** to close the popover.
-

RESULT

The selected item is changed according to the new entry in the popover. This changes different parameters for different items, such as the duration of a hold or pause or the volume of a dynamic.

NOTE

- If you change a fermata to a breath mark, only the fermata on the top staff is changed to a breath mark. If you change a caesura to a breath mark, a breath mark is input on the top staff at the end of the bar to which the caesura is attached. However, the existing caesura also remains on all staves.
 - If you open the playing techniques popover in this way, Dorico Pro inputs your new entry as a separate playing technique and does not delete the previous one.
 - If you change an immediate dynamic to a combined dynamic, such as *f* to *fp*, or vice versa, Dorico Pro inputs your new entry as a separate dynamic and does not delete the previous one.
-

RELATED LINKS

[Changing the text of existing lyrics](#) on page 695

Changing the staff-relative placement of items

You can flip any item that can be placed both above/below the staff to change their staff-relative placement, for example, if you want to change the stem direction of notes quickly.

PROCEDURE

1. Select the items you want to flip. You can do this in Write mode and Engrave mode.

NOTE

- You cannot flip items during note input.
 - If you want to select parts of items, such as a single notehead within a tie chain or articulations, you must be in Engrave mode.
-

2. Press **F**.
-

RESULT

The staff-relative placement of the selected items is changed by setting **Placement** or **Direction** properties appropriately in the corresponding groups of the Properties panel.

Deactivating these properties resets items to their default placement.

NOTE

If you flipped multiple multi-segment slurs or tuplet brackets with different hook directions at the same time, all selected items are set to either above or below the staff, unless they all originally had compatible directions set.

Resetting the appearance of items

You can reset all changes you have made to the appearance of individual items, which returns them to the default settings. Properties relating to the appearance of items include those that change their style, type, and some additions, such as *poco a poco* text for dynamics.

PROCEDURE

1. Select the items whose appearance you want to reset. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Reset Appearance**.
-

RESULT

All properties that affect the appearance of the selected items are reset to their default settings. For properties that are layout-specific and frame chain-specific, this only resets the appearance of the selected items in the current layout and frame chain.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Notation Options dialog](#) on page 139

[Copying property settings to other layouts](#) on page 363

Resetting the position of items

You can reset the position of individual items you have moved graphically, which returns them to their default position. Properties relating to the position of items include horizontal and vertical offsets, beat-relative position, and staff-relative placement.

PROCEDURE

1. Select the items whose position you want to reset. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Reset Position**.
-

RESULT

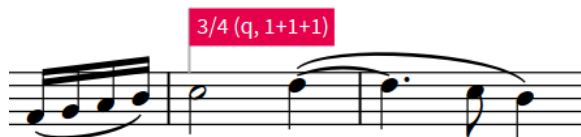
All properties that affect the position of the selected items are reset to their default settings. For properties that are layout-specific and frame chain-specific, this only resets the position of the selected items in the current layout and frame chain.

Signposts

In Dorico Pro, signposts indicate the positions of important items or changes that cannot be seen in the score, such as key signatures with no accidentals, hidden items, and note spacing changes.

Signposts have different colors depending on the item they mark because many items can show signposts, such as hidden bar numbers and time signatures. They are selectable, meaning you can use signposts to change properties of hidden/invisible items, for example, by selecting system break signposts in order to change the staff size from that position.

Signposts include a text summary of the hidden/invisible item to help you identify it. For example, time signature signposts include the time signature, expressed as a fraction, and its beat subdivision.

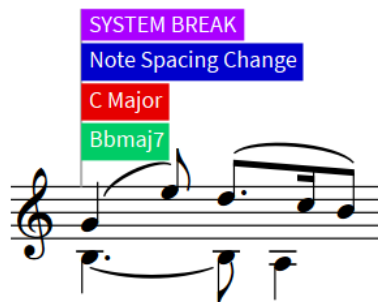


The signpost of a hidden time signature

You can hide/show signposts for the following items:

- Accidentals
- Chord symbols
- Bracket and barline changes
- Clefs
- Cues
- Dynamics
- Frame breaks
- Key signatures
- Note spacing changes input using the **Note Spacing Change** dialog
- Pedal lines
- System breaks
- Tempo marks
- Text, both system and staff
- Percussion legends
- Time signatures
- Tuplets

When multiple signposts can exist at a single rhythmic position, they stack vertically so that they do not overlap and remain legible.



Multiple signposts for different items at the same rhythmic position

NOTE

By default, signposts are not printed or included when you export graphics files.

RELATED LINKS

[Annotations](#) on page 485

Hiding/Showing signposts

You can hide/show all signposts or only hide/show signposts for specific items at any time in Setup, Write, and Engrave modes.

PROCEDURE

- Hide/Show signposts in any of the following ways:
 - To hide/show all signposts, choose **View > Signposts > Hide Signposts**.
 - To hide/show signposts for specific items, choose **View > Signposts > [Type of item]**.
-

RESULT

Signposts for individual items are shown when a tick appears beside the corresponding item in the menu, and hidden when no tick appears.

All signposts are shown when no tick appears beside **Hide Signposts** in the menu, and hidden when a tick appears.

Arranging tools

Arranging tools in Dorico Pro allow you to allocate notes to different staves and voices quickly and efficiently.

These tools include copying notes and items to multiple staves at the same time, and multiple times within a selected range, moving notes between staves, changing the voices of notes, expanding notes onto more staves, and reducing notes onto fewer staves.

Deleting notes and items

You can delete any notes/items you have input into your project independently of each other, such as deleting repeat endings without deleting the notes in them. However, you must be in Write mode. You cannot delete notes and items in Setup, Engrave, or Print modes.

You can also delete notes in Play mode, but not other notation items.

PROCEDURE

1. In Write mode, select the notes/items you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

All selected notes/items are deleted from your project. Deleted notes are replaced by implicit rests as appropriate. Dorico Pro moves your selection to the most logical and nearby item to the deleted items. For example, if you deleted a note, Dorico Pro's first choice is the nearest note in the same voice.

If a slur began or ended on a deleted note, the slur is automatically repositioned to the next/previous notehead. If only one note is left under a slur, the slur is automatically deleted.

Holds and pauses are not automatically deleted if they are not selected when you delete notes. They are positioned above the note/rest closest to their rhythmic position, or over whole bar rests if you delete all notes in a bar.

Any repeat barlines input as part of repeat endings are not deleted automatically when you delete repeat endings.

TIP

You can also delete markers by selecting them in the **Markers** section of the Video panel and clicking **Delete** in the action bar.

RELATED LINKS

[Deleting barlines](#) on page 513

Copying and pasting items

You can copy and paste items, including notes and notations, to other rhythmic positions in different ways.

PROCEDURE

1. In Write mode, select the items you want to copy.
 2. Copy the selected items to other rhythmic positions in any of the following ways:
 - **Alt**-click each position to which you want to paste them.
 - Press **Ctrl/Cmd-C**, select the position to which you want to paste them, and press **Ctrl/Cmd-V**.
 - To copy items into a specific voice, including a slash voice, choose **Edit > Copy**, select the position to which you want to paste them, and choose **Edit > Paste Special > Paste Into Voice > [Voice]**.
 - To copy items to the staff above, select them and choose **Edit > Paste Special > Duplicate to Staff Above**.
 - To copy items to the staff below, select them and choose **Edit > Paste Special > Duplicate to Staff Below**.
-

RESULT

The selected items are copied to other staves without deleting them from their original positions.

RELATED LINKS

[Large selections](#) on page 274

[Selecting/Deselecting notes and items individually](#) on page 273

[Moving notes to other staves](#) on page 286

[Disabling automatic linking of dynamics and slurs when pasting](#) on page 279

Copying and pasting notes into different voices

You can copy and paste notes into voices that are different to their original voices, including into slash voices. For example, you can copy notes from an up-stem voice on one staff into a down-stem voice on another staff.

PROCEDURE

1. In Write mode, select the notes you want to copy.
 2. Press **Ctrl/Cmd-C** to copy the selected notes.
 3. Select the staff to which you want to paste the notes, at the position where you want the selection to start.
 4. Choose **Edit > Paste Special > Paste Into Voice > [Existing or new voice]**. You can also choose this option from the context menu.
-

RESULT

The selected notes are copied to the selected staff and into the selected voice.

Copying and pasting items to multiple staves

You can copy and paste notes and other items to multiple staves at once, for example, to copy a single phrase to all the woodwind staves when they are playing in unison.

PROCEDURE

1. In Write mode, select the items you want to copy to multiple staves.
2. Press **Ctrl/Cmd-C** to copy the selected items.
3. Select an item on each staff to which you want to paste the selected items.
4. Press **Ctrl/Cmd-V** to paste the selected items.

RESULT

The selected items are copied to all of the selected staves.

TIP

If you selected a range of items on each staff, the selected items are also pasted multiple times to fill the selected range.

RELATED LINKS

[Large selections](#) on page 274

[Disabling automatic linking of dynamics and slurs when pasting](#) on page 279

Copying and pasting items to fill a selected range

You can copy and paste items, including notes and notations, multiple times within a selected range at once, for example, if you want to fill multiple bars with the same phrase.

NOTE

You can only copy and paste items that have a duration to fill a selection. For example, you can copy and paste gradual dynamics to fill a selection but not immediate dynamics.

PROCEDURE

1. In Write mode, select the items you want to copy throughout a range.
2. Press **Ctrl/Cmd-C** to copy the selected items.
3. Select the range throughout which you want to paste the selected items.
4. Press **Ctrl/Cmd-V** to paste the selected items.

RESULT

The selected items are copied as many times as will fit within the selected range without extending beyond it.

TIP

If you selected a range on multiple staves, the selected items are also pasted to multiple staves.

RELATED LINKS

[Large selections](#) on page 274

Moving notes to other staves

You can move notes to other staves of any type, for example, if you want to move individual notes from one keyboard staff to another after importing a keyboard part from a MIDI file.

PROCEDURE

1. In Write mode, select the notes you want to move to another staff.
2. Move the notes to another staff in one of the following ways:
 - To move notes to the staff above, press **Alt-N**.
 - To move notes to the staff below, press **Alt-M**.

RESULT

The selected notes are moved to another staff by cutting them from their original staff and pasting them to the new staff. By default, they are pasted into the first voice active on that staff.

NOTE

When moving notes within tuplets to other staves, those notes do not remain tuplets unless you have also selected the tuplet bracket, tuplet number/ratio, or tuplet signpost.

RELATED LINKS

[Creating cross-staff beams](#) on page 544

[Copying and pasting items to multiple staves](#) on page 285

Swapping the contents of staves

You can swap the contents of two staves for a selected range, for example, if you want to change quickly the default voicing in two particular bars that was achieved by exploding a chord.

PROCEDURE

1. In Write mode, select the range of music on two staves that you want to swap.
2. Choose **Edit > Paste Special > Swap**. You can also choose this option from the context menu.

RESULT

The contents of the selected staves for the selected duration are swapped.

RELATED LINKS

[Swapping the contents of voices](#) on page 288

Reducing music onto fewer staves

You can reduce music onto fewer staves than it was originally notated across, for example, to create a piano reduction of a choral piece.

PROCEDURE

1. In Write mode, select the music you want to reduce.
 2. Press **Ctrl/Cmd-C** to copy the music.
 3. Select the staves onto which you want to reduce the selected music.
 4. Choose **Edit > Paste Special > Reduce**. You can also choose this option from the context menu.
-

RESULT

The selected music is reduced onto the selected staves.

If the rhythms match, Dorico Pro merges the music into a single voice. Unison notes are removed so that only a single note of the same pitch is pasted at a single rhythmic position, and clef changes, octave lines, and cues are also deleted.

Each destination staff receives the music of at least one instrument, and the division of the music to be reduced is calculated from the top selected staff downwards. For example, if you copy material from five instruments and reduce it to three, the top selected staff is assigned the music from the first and second instruments, the second selected staff is assigned music from the third and fourth instruments, and the third selected staff is assigned music from the fifth instrument.

RELATED LINKS

[Moving notes to other staves](#) on page 286

Exploding music onto multiple staves

You can explode music onto more staves than it was originally notated for, for example, to get notes in dense piano chords onto all the woodwind staves quickly.

PROCEDURE

1. In Write mode, select the music you want to explode.
2. Press **Ctrl/Cmd-C** to copy the music.
3. Select the staves onto which you want to explode the selected music.
4. Choose **Edit > Paste Special > Explode**. You can also choose this option from the context menu.

RESULT

The selected music is exploded onto the selected staves. Each destination staff receives at least one of the notes in the source chords, allocated from the top selected instrument staff downwards.

- If the number of notes in the chord matches the number of destination staves, each instrument receives one note.
- If the number of notes in the chord is less than the number of destination staves, then the same note is allocated to multiple staves. Notations, such as slurs and dynamics, are duplicated to each destination staff.
- If the number of notes in the chord is more than the number of destination staves, then the notes are spread as equally as possible across the destination staves. If the chord contained an odd number of notes, Dorico Pro prefers to allocate extra notes to the upper staves.

Changing the voice of existing notes

You can change the voice of notes after they have been input, including notes in slash voices. For example, you can change notes in an up-stem voice to a down-stem voice.

PROCEDURE

1. In Write mode, select the notes whose voice you want to change.

TIP

You can use large selections and filters to select many notes in the same voice quickly.

2. Change the voice in any of the following ways:

- Choose **Edit > Voices > Change Voice > [Voice]**.
- Choose **Edit > Voices > Change Voice > [Slash Voice]**.

TIP

- You can also choose these options from the context menu.
 - If there is only one voice on the staff, you can create a new voice for your selected notes.
-

RESULT

The voice of the selected notes is changed, which might cause Dorico Pro to change the stem directions of the selected notes and other notes on the staff, and add implicit rests to ensure correct notation based on convention.

AFTER COMPLETING THIS TASK

You can later delete or hide rests and change the stem direction of notes manually.
You can also change whole voices into slash voices.

RELATED LINKS

[Showing voice colors](#) on page 1041

[Large selections](#) on page 274

[Filters](#) on page 278

[Implicit rests in multiple-voice contexts](#) on page 861

[Deleting rests](#) on page 863

[Changing the stem direction of notes](#) on page 946

[Changing the slash voice type](#) on page 1044

Swapping the contents of voices

You can swap the contents of two voices that contain musical material.

PROCEDURE

1. In Write mode, select the notes in two voices that you want to swap.
 2. Choose **Edit > Voices > Swap Voice Contents**. You can also choose this option from the context menu.
-

RESULT

The contents of the voices are swapped. For example, the notes previously in an up-stem voice are now in a down-stem voice, and the notes previously in a down-stem voice are now in an up-stem voice.

NOTE

Depending on the pitches involved in the swap and their stem directions, the notes might overlap. Dorico Pro automatically positions notes with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and maintain the clarity of the rhythm. However, if you want to change this arrangement, you can change the order of voices or change the voice column index.

EXAMPLE



An E is in the up-stem voice, an F in the down-stem voice.



After swapping their voice contents, the E is in the down-stem voice, and the F is in the up-stem voice.

RELATED LINKS

[Swapping the order of voices](#) on page 1042

[Voice column index](#) on page 1042

Splitting flows

You can split flows at specific rhythmic positions. Flows in Dorico Pro are independent of each other, meaning they can contain different players and have different options for notations, including note grouping and accidental duration rules.

PROCEDURE

1. In Write mode, select a note or item at the position where you want to split the flow.
 2. Choose **Write > Split Flow**.
-

RESULT

The flow is split into two flows: the existing flow and a new flow that begins from the position of the item you selected. By default, new flows start on a new page in page view and are shown on a separate background in galley view.

AFTER COMPLETING THIS TASK

You can choose different options for each flow in the **Notation Options** dialog.

RELATED LINKS

[Flows](#) on page 117

[Adding flows](#) on page 118

[Deleting flows](#) on page 120

[Notation Options dialog](#) on page 139

[Deleting empty bars at the end of flows](#) on page 505

Engrave mode

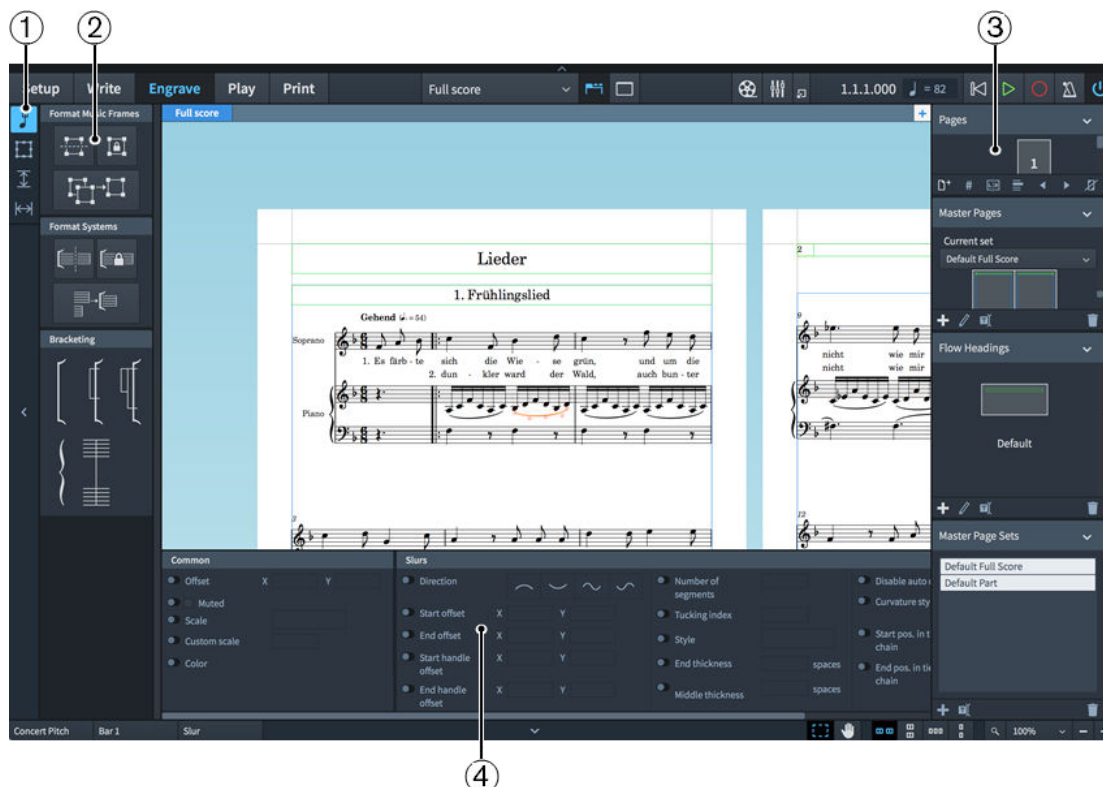
Engrave mode allows you to manipulate and modify every item in your project, but without deleting them or changing the pitch of notes. You can also determine how the pages of your project are formatted for printing or exporting.

Project window in Engrave mode

The project window in Engrave mode contains the default toolbar, the music area, and the status bar. It provides panels with all the tools and functions that allow you to format the pages, systems, and properties of individual notations in your score.

You can switch to Engrave mode in any of the following ways:

- Press **Ctrl/Cmd-3**.
- Click **Engrave** in the toolbar.
- Choose **Window > Engrave**.



Toolbox and panels in Engrave mode

The project window in Engrave mode contains the following:

1 Engrave toolbox

Contains options that allow you to determine which formatting options are shown in the Formatting panel, and to activate **Note Spacing** and **Staff Spacing**.

2 Formatting panel

Contains formatting options that allow you to control how music is arranged into systems and frames, to insert frames, and edit frame constraints. Your current selection in the Engrave toolbox determines which formatting options are shown, and the panel is hidden automatically when either **Note Spacing** or **Staff Spacing** are activated.

3 Pages panel

Allows you to specify how the notation is formatted on pages. The way this is done is based on the typical techniques used in desktop publishing programs.

4 Properties panel

Contains quick access properties that allow you to make specific modifications to individual parts of notes and notations.

RELATED LINKS

[Windows](#) on page 33

Engrave toolbox

The Engrave toolbox allows you to change the options available in the Formatting panel and to activate note and staff spacing. The Engrave toolbox is located on the left of the window in Engrave mode.

Graphic Editing



Allows you to select and edit items in the music area or master page editor, and opens sections in the Formatting panel that allow you to edit the formatting of systems, frames, brackets, braces, and barline joins.

Frames



Allows you to select and edit frames in the music area or master page editor, and opens sections in the Formatting panel that allow you to insert frames and edit their constraints.

Staff Spacing



Allows you to move individual staves and systems vertically.

Note Spacing



Allows you to edit the graphical horizontal positions of individual notes and other items, such as clefs and key signatures.

RELATED LINKS

[Frames](#) on page 322

[Frame constraints](#) on page 340

[Staff spacing](#) on page 391

[Note spacing](#) on page 381

Formatting panel

The Formatting panel in Engrave mode allows you to insert different kinds of frames into pages and to specify how these are aligned on a page. It also allows you to make changes to how systems and frames are formatted on pages, including manually adding brackets and braces.

The Formatting panel is located on the left of the window in Engrave mode. You can hide/show the Formatting panel in any of the following ways:

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window > Show Left Panel**.

Depending on your selection in the Engrave toolbox, different formatting options are available in the Formatting panel.

The following sections are available when **Graphic Editing** is selected in the Engrave toolbox:

Format Music Frames

The **Format Music Frames** section allows you to change how the music in the layout currently open in the music area is arranged into frames.

Insert Frame Break



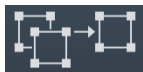
Forces music from the selected item onwards onto the next frame, which is often on the next page. This allows you to control what music appears on each page.

Lock Frame



Fixes the formatting of the selected frames, even if you change the formatting of surrounding frames.

Make into Frame



Forces all music between the selected items into the same frame. You can use this option to force music onto a single page.

Format Systems

The **Format Systems** section allows you to change how the music in the layout currently open in the music area is arranged into systems.

Insert System Break



Forces music from the selected item onwards onto the next system. Depending on your staff size and other settings, this may mean the music is forced onto the next page.

Lock System



Fixes the formatting of the selected systems, even if you change the formatting of surrounding musical material and other systems.

Make into System



Forces all music between the selected items into the same system.

Bracketing

The **Bracketing** section allows you to change how the staves in the layout currently open in the music area are bracketed and braced together, and change which staves are joined by barlines, in each system individually.

Insert bracket



Joins the staves on which you have selected items with a bracket. By default, this also causes barlines to be drawn across the bracketed group.

Insert sub-bracket



Joins the staves on which you have selected items with a sub-bracket.

NOTE

The selected staves must be within a bracket.

Insert sub-sub-bracket



Joins the staves on which you have selected items with a sub-sub-bracket.

NOTE

The selected staves must be within a bracket and sub-bracket.

Insert brace



Joins the staves on which you have selected items with a brace.

NOTE

Staves cannot be joined by both a brace and a sub-bracket or sub-sub-bracket simultaneously.

Change barline joins



Joins the barlines across the staves on which you have selected items.

The following sections are available when **Frames** is selected in the Engrave toolbox:

Insert Frames

The **Insert Frames** section allows you to create new frames on pages in layouts as well as on master pages.

Insert Music Frame



Allows you to insert a music frame. On pages in layouts, this inserts a music frame in a layout frame chain. On master pages in the master page editor, this inserts a frame in a master page frame chain.

Insert Text Frame



Allows you to insert a frame into which you can enter text and text tokens.

Insert Graphics Frame



Allows you to insert a frame that can contain an image or an illustration.

Constraints

Allows you to specify which sides of the frame you want to lock to the page margin.

RELATED LINKS

[Frames](#) on page 322

[Music frames](#) on page 325

[Text frames](#) on page 331

[Graphics frames](#) on page 340

[Master pages](#) on page 301

[Music frame chains](#) on page 326

[Brackets and braces](#) on page 555

[Frame constraints](#) on page 340

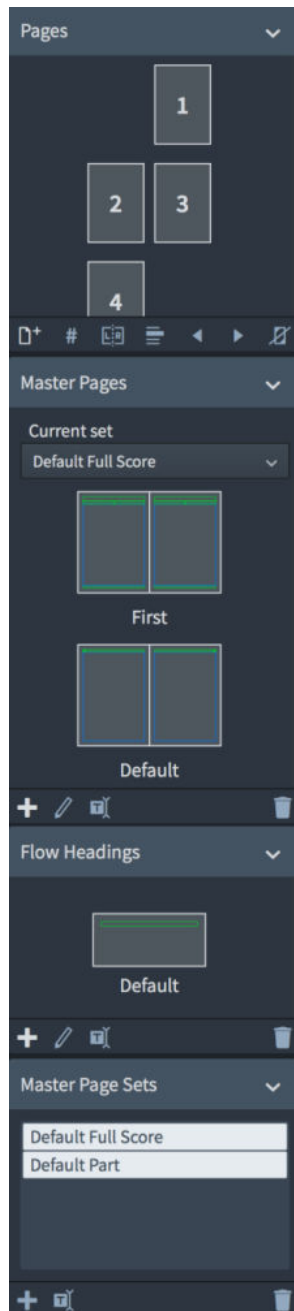
[Frame breaks](#) on page 356

Pages panel

The Pages panel in Engrave mode provides several sections that allow you to specify how the pages of your notation are formatted. The way this is done is based on the typical techniques as they are used in desktop publishing programs.

The Pages panel is located on the right of the window in Engrave mode. You can hide/show the Pages panel in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click the disclosure arrow on the right edge of the main window.
- Choose **Window > Show Right Panel**.









Pages panel in Engrave mode

The Pages panel is divided into the following sections:

Pages

Shows the pages in your layout with their page number in the middle. A highlighted page frame indicates the currently selected page. Markings in the top left and the bottom right corner of the pages indicate that a page has overrides. Additional frames at the top or left frames of the page indicate that master page changes have been applied.

The action bar at the bottom of the section contains the following options:




- **Insert Pages**

Allows you to insert pages into your layout before or after existing pages, based on a selected master page.
- **Insert Page Number Change**

Allows you to change the page numbers for pages in your layout.
- **Insert Master Page Change**

Allows you to assign a different master page to the selected page.
- **Swap with Previous Page**

Swaps the arrangement of the selected page with the previous page.
- **Swap with Next Page**

Swaps the arrangement of the selected page with the next page.
- **Remove Overrides**

Removes all overrides from the selected pages.

Master Pages

Shows the master page pairs that are used in your layout. A highlighted frame indicates the currently selected master page. If you select a page in the **Pages** display, the master pages display highlights the master page pair that is used for this page.

The **Current set** menu allows you to view and change the master page set used in the layout currently open in the music area.

The action bar at the bottom of the section contains the following options:

- **New Master Page**

Allows you to add a new master page to a master page set.
- **Edit Master Page**

Opens the master page editor in which you can change the formatting of the master page. You can also open the master page editor by double-clicking a master page in the **Flow Headings** section.
- **Rename Master Page**


- Allows you to rename the selected master page.
- **Delete Master Page**



Deletes the selected master page.

Flow Headings

Shows the flow headings available in the currently selected master page set. A highlighted frame indicates the currently selected flow heading.

The action bar at the bottom of the section contains the following options:

- **New Flow Heading**



Allows you to add a new flow heading to a master page set.

- **Edit Flow Heading**



Opens the flow heading editor in which you can change the formatting of the flow heading. You can also open the flow heading editor by double-clicking a flow heading in the **Flow Headings** section.

- **Rename Flow Heading**



Allows you to rename the selected flow heading.

- **Delete Flow Heading**



Deletes the selected flow heading.

Master Page Sets

Contains a list of available master page sets in the project.

The action bar at the bottom of the section contains the following options:

- **New Master Page Set**



Creates a new master page set based on the master page set that is selected in the list. The new master page set is automatically added to the **Current set** menu in the **Master Pages** section.

- **Rename Master Page Set**



Allows you to rename the selected master page set.

- **Delete Master Page Set**



Deletes a selected master page set from the list.

RELATED LINKS

[Master pages](#) on page 301

[Master page editor](#) on page 306

[Flow headings](#) on page 318

[Flow heading editor](#) on page 318

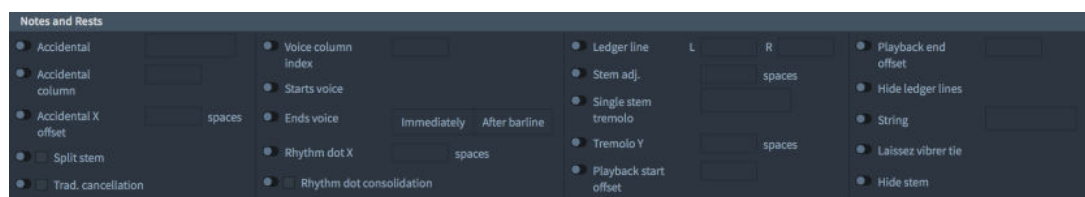
Properties panel (Engrave mode)

The Properties panel in Engrave mode provides options that allow you to edit individual notes and notations. All the properties that are available in the Properties panel in Write mode are also available in Engrave mode, but additional properties in Engrave mode allow you to edit items in more detail.

You can hide/show the Properties panel in Write mode and Engrave mode in any of the following ways:

- Press **Ctrl/Cmd-8**.
- Click the disclosure arrow at the bottom of the main window.
- Choose **Window > Show Bottom Panel**.

The Properties panel contains a group of properties for each notation item. When you select a note or item in the music area, the Properties panel displays the groups and options that you might require to edit the selected note or item.



Notes and Rests group of the Properties panel in Engrave mode

NOTE

- If you select multiple different types of notation items, only the groups that they have in common are displayed. For example, if you select a slur, the **Common** and **Slurs** groups are displayed in the Properties panel. However, if you select a slur and a note, only the **Common** group is displayed.
- Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts. However, you can copy property changes to other layouts.

RELATED LINKS

[Changing the properties of individual notes and items](#) on page 136

[Copying property settings to other layouts](#) on page 363

[Resetting the appearance of items](#) on page 281

[Resetting the position of items](#) on page 281

Selecting handles on items

In Engrave mode, you can select individual handles on items, for example, if you want to move the graphical end of a gradual dynamic without moving its start.

NOTE

These steps do not apply to frame, note spacing, or staff spacing handles.

PROCEDURE

1. Select a handle in any of the following ways:
 - Select the whole item and press **Tab** until the handle you want is selected.
 - Click the handle you want.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

- Optional: Select handles on other items as well by **Ctrl/Cmd**-clicking them.

NOTE

You cannot select subsequent handles on other items by selecting the items and pressing **Tab**.

Engraving Options dialog

The **Engraving Options** dialog provides multiple options that allow you to make project-wide changes to your project by changing the graphical appearance and position of items.

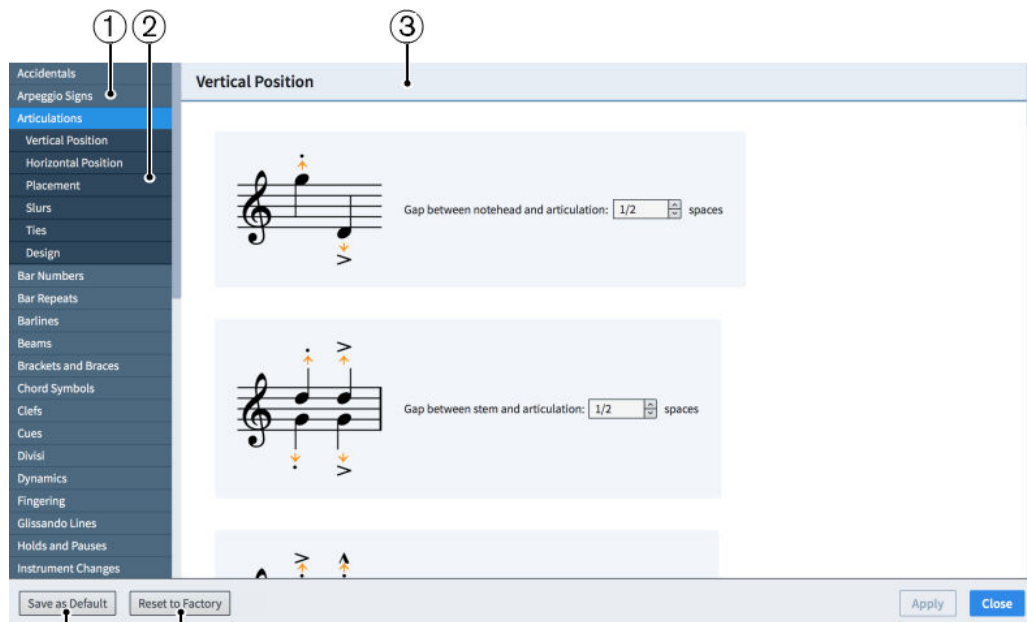
You can make changes to, for example, the line thickness of notation items, their continuation style, their default staff-relative placement, and their minimum distance from the staff and other items.

TIP

- You can save all options that you set in **Engraving Options** as the default for new projects by clicking **Save as Default**.
- If you want to make changes to individual notes and notations, you can use properties in the Properties panel.

You can open **Engraving Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-E** in any mode.
- Choose **Engrave > Engraving Options** in Engrave mode.



Engraving Options

The **Engraving Options** dialog contains the following:

1 Page list

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 Section titles

Shows the titles of any sections on the selected page. You can click these section titles to navigate directly to that section of the page.

3 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the current setting is highlighted.

4 Save as Default/Remove Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- **Save as Default** saves all options currently set in the dialog as the default for new projects.
- **Remove Saved Defaults** deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all future projects start with the default factory settings. If you have existing saved defaults, you can access **Remove Saved Defaults** by pressing **Alt** (macOS)/**Ctrl** (Windows).

5 Reset to Factory/Reset to Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- If you have no saved defaults, **Reset to Factory** resets all the options in the dialog back to the default factory settings.
- If you have existing saved defaults, **Reset to Saved Defaults** resets all the options in the dialog back to your saved defaults. You can access **Reset to Factory** instead by pressing **Alt** (macOS)/**Ctrl** (Windows). Resetting options back to the default factory settings only affects the current project and does not delete your saved defaults, meaning future projects start with your saved defaults.

RELATED LINKS

[Options dialogs in Dorico Pro](#) on page 30

[Resetting the appearance of items](#) on page 281

[Resetting the position of items](#) on page 281

Making project-wide changes in Engraving Options

You can make project-wide changes to the appearance, placement, and default position of notes and notations in **Engraving Options**.

PROCEDURE

1. Open **Engraving Options** in any of the following ways:
 - Press **Ctrl/Cmd-Shift-E** in any mode.
 - Choose **Engrave > Engraving Options** in Engrave mode.
2. Click a page in the page list.
3. Look through the available options, and change the settings as required.
4. Click **Apply**, then **Close**.

NOTE

If you make changes and close the dialog without clicking **Apply**, you are prompted to save or discard your changes.

RESULT

The changes are applied to all music in your project, including in all layouts and flows.

Master pages

Master pages function like templates in Dorico Pro, allowing the same page formatting to be applied to multiple different pages in different layouts.

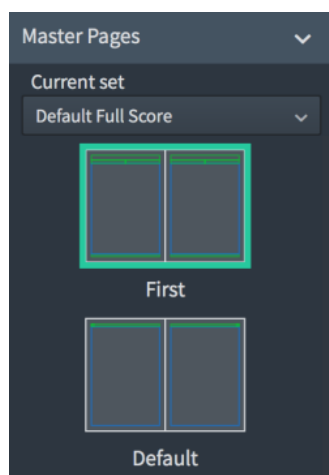
NOTE

Page size and margins, page orientation, and staff size for full score and part layouts are specified in **Setup > Layout Options**.

All pages in your score and parts inherit their layout formats from master pages. Whenever you create or change anything on master pages, this is automatically reflected on the pages that use these master pages. For example, if you insert a new frame on a master page, a corresponding frame appears on all the pages that use that master frame, so long as those pages do not have master page overrides.

In Dorico Pro, master pages consist of page pairs. Every page pair has a left and a right master page, so that if a page in your project falls on a left page, the formatting of the left page of the master page pair is used, and if a page falls on a right page, the formatting of the right page of the master page pair is used. In both the **Master Pages** section of the Pages panel and the master page editor, page pairs appear side-by-side.

Dorico Pro provides default master pages for first (**First**) and subsequent (**Default**) pages. This enables you to format first pages differently compared to subsequent pages. Master pages are contained in master page sets for full score and part layouts. Master page sets are automatically applied to every layout that you create.



The **Master Pages** section of the Pages panel in Engrave mode, showing the two default master pages in the **Default Full Score** master page set.

If you want to change the master page sets or to change the format of the master pages, you can do so in any of the following ways:

- Create new master pages and master page sets.
- Edit the default master pages in the master page sets using the master page editor.

You can also make overrides to individual pages in layouts, but this does not affect the formatting of master pages.

RELATED LINKS

- [Pages panel](#) on page 295
- [Master page editor](#) on page 306
- [Master page overrides](#) on page 308
- [Layout Options dialog](#) on page 90

Master page sets

In Dorico Pro, master pages are provided as parts of master page sets. Master page sets group master page formats together, so there is a master page for all possible situations in your project.

The default master page sets contain predefined master pages for first page pairs (**First**) and subsequent page pairs (**Default**). This ensures there is a master page format for the first page in each flow, whether that is on a right page or a left page, and a master page format for subsequent pages in each flow on both right and left pages.

For every new project, the following default master page sets are available:

- **Default Full Score** is the default master page set used for full score layouts.
- **Default Part** is the default master page set used for part layouts.

Master page sets also contain flow headings that allow you to format how the titles of flows appear when they start on the same page as a previous flow. The default master page sets contain a single flow heading each.

You do not need to create or customize master page sets initially, as the default sets are applied automatically when you create your project. If you find that you want or need to change the sets, you can do so in any of the following ways:

- Create new custom master page sets based on the default sets.
- Change the default sets according to your requirements for the current project.

RELATED LINKS

- [Flow headings](#) on page 318

Creating master page sets

You can create new master page sets. They can be based on the sets provided by Dorico Pro and on existing custom master page sets you have created.

PROCEDURE

1. In the **Master Page Sets** section of the Pages panel, click the master page set on which you want to base a new master page set.
2. In the action bar, click **New Master Page Set**.



RESULT

A new master page set is created based on the selected default master page set. It appears immediately in the list of master page sets.

AFTER COMPLETING THIS TASK

You can rename your new master page set and add new master pages to it.

RELATED LINKS

[Adding master pages](#) on page 304

Renaming master page sets

You can edit the names of master page sets that you have created. You cannot rename the default master page sets.

PROCEDURE

1. In the **Master Page Sets** section of the Pages panel, double-click the master page set that you want to rename.
Alternatively, you can select the master page set and click **Rename Master Page Set** in the action bar.



2. Enter the new name you want.
3. Press **Return**.

Deleting master page sets

You can delete master page sets that you no longer need, including the default master page sets.

PROCEDURE

1. In the **Master Page Sets** section of the Pages panel, click the master page set that you want to delete.
2. In the action bar, click **Delete Master Page Set**.



Applying master page sets to layouts

You can apply a different master page set to each layout in your project.

PROCEDURE

1. In the music area, open the layout to which you want to apply a master page set.
2. In the **Master Pages** section of the Pages panel, select a master page set from the **Current set** menu.

RESULT

The selected master page set is applied to the layout.

AFTER COMPLETING THIS TASK

You can make further changes to the layout, such as assigning different master pages in the master page set to individual pages. You can also make individual master page overrides that only apply to pages in the current layout, for example, if you need the frame padding on the first page to be different to the master page setting.

RELATED LINKS

[Assigning master pages to pages](#) on page 314

[Master page overrides](#) on page 308

Master page types

If you add a new master page to a master page set, you must specify the type of master page that you want to add.

You can add the following types of master pages:

First

A page pair that is usually used for the first page of music in a layout. By default, **First** master pages contain tokens to display the project title, composer, and lyricist in addition to the music.

NOTE

If you create no **First** page pair, the first page in your layout uses the **Default** page pair.

Default

A page pair that is usually used for pages after the first page in a layout. By default, Default master pages contain tokens to display the flow title and page number in addition to the music.

Every master page set must contain a single **Default** master page.

Custom

A page pair that can have any layout. Custom master pages allow you to create layouts that you want to apply to multiple pages but not all pages, for example, if you want to show an image at the same position on only the final pages in each part layout.

NOTE

If you insert a page to a layout using a custom master page, you create an override. This means that if you insert a page in the middle or at the end of the layout using a custom master page and then remove the override, that page is automatically assigned the **Default** master page.

RELATED LINKS

[Master page sets](#) on page 302

[Master page overrides](#) on page 308

[Changing when the First master page is used](#) on page 345

Adding master pages

You can add new master pages to master page sets. Each master page set can have multiple custom master pages, but only a single first master page and single default master page.

PROCEDURE

1. In the music area, open a layout that uses the master page set to which you want to add master pages.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the Pages panel, click **New Master Page** in the **Master Pages** action bar to open the **New Master Page** dialog.



3. In the **New Master Page** dialog, enter a name for the new master page into the **Name** field.
4. Select the existing master page on which you want to base the new master page from the **Based on** menu.

NOTE

- Master pages based on existing master pages retain a link to the **Based on** master page. This means some changes you make to the **Based on** master page, such as changing the font size of text in text frames, also affect the new master page and vice versa.
- Selecting **(None)** always creates a master page without any formatting but the page margins.

5. Choose one of the following master page types for your new master page:

- **First**
- **Default**
- **Custom**

NOTE

If you select **First** or **Default**, the new master page replaces that existing master page, as each master page set can only have a single first and default master page.

If you want to create a new master page without replacing any existing master pages, choose **Custom**.

6. Click **OK** to save your changes and close the dialog.

RESULT

A new master page of the selected type is added to the selected master page set.

AFTER COMPLETING THIS TASK

You can apply master pages to individual pages in layouts that use the master page set to which they belong.

RELATED LINKS

[Master page sets](#) on page 302

[Applying master page sets to layouts](#) on page 303

[Assigning master pages to pages](#) on page 314

Renaming master pages


You can change the names of master pages, including the default master pages and your own custom master pages.

PROCEDURE

1. In the music area, open a layout that uses the master page set containing the master page you want to rename.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the **Master Pages** section of the Pages panel, click the master page pair that you want to rename.
 3. In the action bar, click **Rename Master Page** to open the **Rename Master Page** dialog.

 4. Enter the name you want in the **Name** field.
 5. Click **OK** to save your changes and close the dialog.
-

Deleting master pages

You can delete master pages from master page sets.

NOTE

You cannot delete **Default** master pages. Every master page set must contain at least a **Default** master page. You can replace **Default** master pages by adding a master page and setting its type to **Default**.

PROCEDURE

1. In the music area, open a layout that uses the master page set containing the master page you want to delete.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the **Master Pages** section of the Pages panel, click the master page pair that you want to delete.
3. In the action bar, click **Delete Master Page**.



RESULT

The selected master page pair is deleted. You can undo this action if you deleted a master page in error.

Master page editor

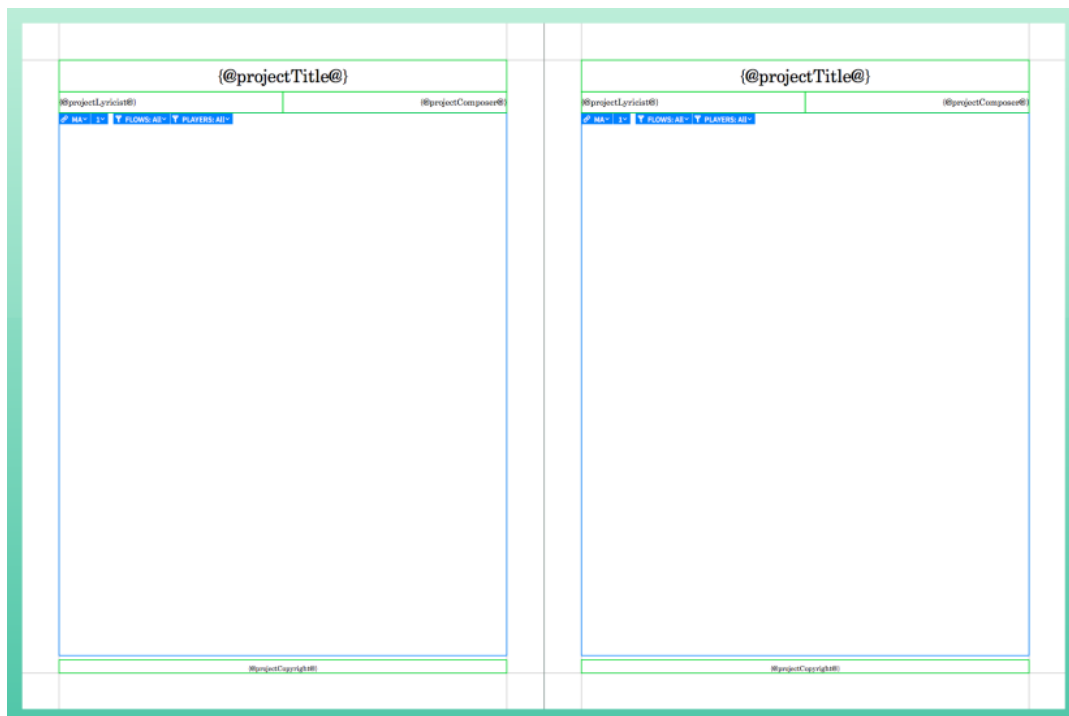
The master page editor allows you to view and change the format of the master pages.

You can open the master page editor in any of the following ways:

- Double-click a page pair in the **Master Pages** section of the Pages panel.
- Select a page pair in the **Master Pages** section of the Pages panel and click **Edit Master Page**.



You can customize master pages in the master page editor to suit your requirements, including inserting extra frames and editing/moving existing frames. You can also change the frame chains to which frames are assigned, and change which flows and players are assigned to frames.



A master page pair open in the master page editor

RELATED LINKS

[Pages panel](#) on page 295

Customizing master pages

You can customize master pages according to your needs in the master page editor. Changing a master page affects the appearance of all layouts that use that master page.

NOTE

You must specify the page size, margins, page orientation, and staff size of layouts on the **Page Setup** page in **Setup > Layout Options**.

PROCEDURE

1. In the Pages panel, double-click a master page pair in the **Master Pages** section. The master page editor opens in the music area.
2. In the master page editor, change the layout of one of the pages of the selected master page pair. For example, you can change the size and shape of frames.
3. Optional: If you want both the left and right pages to be the same, click one of the following **Copy Page Layout** buttons at the top of the music area, depending on which page you changed:

- **Left to Right**



- **Right to Left**



NOTE

This copies the master page layout exactly from one page to the other, not as a mirror. For example, text frames for page numbers are not kept on the outside edge automatically.

4. Click **Apply**, then **Close**.
-

RESULT

The selected master page pair is changed.

RELATED LINKS

- [Inputting frames](#) on page 322
- [Moving frames](#) on page 323
- [Changing the size/shape of frames](#) on page 323
- [Master page editor](#) on page 306

Master page overrides

All pages of a project inherit their format from the master pages that are specified in the appropriate master page sets. In some cases, it is also possible to change the format of individual pages without affecting the underlying master pages or master page sets.

In Dorico Pro, you can override the format of an individual page, for example, if you want to do one of the following:

- Change the size of a music frame on an individual page.
- Insert an empty page.
- Change the page numbering.
- Add comments in the form of footnotes.
- Include small excerpts of music to show how a passage was reproduced in another source.

If you override the pages, they no longer automatically inherit changes that are made to the master page. Pages that have been overridden are shown with a marking on them in the **Pages** section of the Pages panel.

- Master page overrides: marking shown in top left corner.
- Page number changes: marking shown in bottom right corner.

To return overridden pages to following their master page format, you must remove the overrides that you made.

NOTE

If you inserted a page in the middle or at the end of your layout using a custom master page and remove the override, that page is automatically assigned the **Default** master page of the master page set.

You can also change the master page used for individual pages. For example, you might want to change the master page used for the last page in parts because it contains fewer staves and you want the music frame to be shorter. Or you might want to change the master page used for a score where the instrumentation is significantly different for one flow and you want the format of those pages to be different.

Pages whose master page has been changed are shown with a marking on them in the **Pages** section of the Pages panel.

- Master page changes on the current page only: marking shown along top edge.

- Master page changes from the page onwards: marking shown along left and top edges.

Additionally, you can change the flow heading use for individual pages. For example, if you want the margins above and below flow headings to be smaller on pages with more staves.

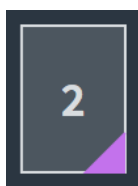
Pages whose flow heading has been changed are shown with a marking on them in the **Pages** section of the Pages panel.

- Flow heading changes on the current page only: marking shown along bottom edge.
- Flow heading changes from the page onwards: marking shown along left and bottom edges.

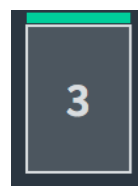
The table shows examples of how the different overrides you can make to individual pages in layouts are shown in the **Pages** section of the Pages panel in Engrave mode.



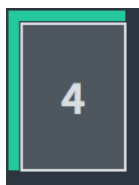
Master page override



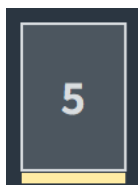
Page number change



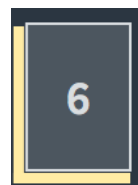
Master page change to single page only



Master page change from selected page onwards



Flow heading change to single page only



Flow heading change from selected page onwards


Removing master page overrides

You can remove overrides that you have made to individual pages and return them to the master page format.

Any pages in your layout that contain overrides are shown with a colored triangle in their top left corner in the **Pages** section of the Pages panel. Master page overrides include changing the size/shape of frames inherited from the master page or flow heading format, inputting extra frames on the page, and inputting a new empty page.

Removing overrides from empty pages deletes them from the layout.

PROCEDURE

1. In the music area, open the layout whose master page overrides you want to remove.
 2. Optional: If you want to remove overrides from individual pages, **Ctrl/Cmd**-click those pages in the **Pages** section of the Pages panel.
 3. Remove master page overrides in one of the following ways:
 - To remove overrides from selected pages only, click **Remove Overrides** in the **Pages** section action bar.

 - To remove overrides from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Page Overrides** from the context menu.
-

RESULT

Any overrides you made to the master page format are removed from either the selected pages only or from all pages in the layout currently open in the music area. Empty pages that are considered overrides are deleted.

If you removed overrides from selected pages only, any other pages with overrides in the layout are unaffected.


RELATED LINKS

[Frames](#) on page 322

Inserting pages

You can insert empty pages or pages that use a different master page into each layout in your project.

PROCEDURE

1. In the Pages panel, click **Insert Pages** in the **Pages** section action bar to open the **Insert Pages** dialog.

2. Enter the number of pages you want to insert into the **Number of pages to insert** field.
3. Select where you want to insert pages. For example, select **After page** and enter 8 to insert pages after page 8.
4. Optional: Select the master page that you want to assign to the inserted pages from the **Use master page** menu.
5. Click **OK** to save your changes and close the dialog.

RESULT

The number of pages specified are added at the selected position. They are empty, have no master page assigned by default, and are shown in the Pages panel with a colored triangle in their top left corner.

Deleting pages

You can delete empty pages and any extra pages you have added to layouts.

Dorico Pro automatically changes the number of pages in each layout according to the length of the flows they contain. If you want to delete pages because you do not want to show certain flows, you can instead remove the flows from the layout.

You only need to delete pages manually if you inserted them as a blank page or made an override to a page in a layout that is no longer required and now appears blank. For example, an override on the final page in a layout prevents that page and all previous pages being automatically deleted if the layout becomes shorter.

PROCEDURE

1. In the music area, open the layout from which you want to delete pages.
2. In the **Pages** section of the Pages panel, **Ctrl/Cmd**-click the pages you want to delete.

NOTE

You can only delete pages that are considered master page overrides.

3. Delete the selected pages by removing all their master page overrides.
 - If any pages in your selection have colored triangles in their top left corner, click **Remove Overrides** in the **Pages** section action bar.



- If any pages in your selection have colored triangles in their bottom right corner, right-click a page and choose **Remove Page Number Change(s)** from the context menu.
 - If any pages in your selection have colored markings on their top/top and left edges, right-click a page and choose **Remove Master Page Change(s)** from the context menu.
 - If any pages in your selection have colored markings on their bottom/bottom and right edges, right-click a page and choose **Remove Flow Heading Change(s)** from the context menu.
-

RESULT

Once you have removed all overrides from all the pages you want to delete, they are deleted if they are empty. If they are not empty, removing all their overrides reverts them back to following their default master page.

RELATED LINKS

[Master pages](#) on page 301

[Changing the flows assigned to layouts](#) on page 122

Inserting page number changes

You can change the page numbers of pages in each layout in your project. Inserting page number changes allows you to change the page number shown, the page number style, and also affects whether the first page in layouts is a left or right page.

For example, you can use Roman numerals such as ii and iv for front matter pages, and numbers such as 1 and 3 for music pages.

NOTE

- If you change the first page in the layout to an even number, it automatically becomes a left-hand page. This is because convention dictates that even numbered pages are always on the left-hand page, and odd numbered pages are always on the right-hand page. Similarly, if the first page in the layout is on the left-hand page, it cannot show as page 1, it can only show as page 2.
 - If you want to start a layout on the left-hand page, we do not recommend that you insert a page number change, as there is a dedicated option in **Setup > Layout Options** for this.
-

PROCEDURE

1. In the music area, open the layout whose page numbers you want to change.
2. In the **Pages** section of the Pages panel, select the page from which you want to change the page numbers.
3. In the action bar, click **Insert Page Number Change** to open the **Page Number Change** dialog.



4. In the **Page Number Change** dialog, enter the number of the page from which you want the page number change to start in the **From page** field.
For example, if you want to change the page number of your current page 3, enter 3.
5. Enter the new page number that you want the selected page to have in the **First page number** field. For example, if you want to change your current page 3 to page 5, enter 5.
6. Select one of the following numeral styles for **Sequence type**:

- **Number**
- **Roman numeral**

7. Click **OK** to save your changes and close the dialog.

RESULT

The page number of the selected page is changed. All subsequent pages are changed correspondingly until the next page number change or the end of the project, whichever comes first.

TIP

You can also change other aspects of the appearance of page numbers in the **Page Number Change** dialog. For example, you can show subordinate numbers as uppercase letters or lowercase letters.

RELATED LINKS

[Starting layouts on left-hand pages](#) on page 344

Page Number Change dialog

The **Page Number Change** dialog allows you to change the page numbers shown on existing pages in each layout. You can choose to show pages without page numbers or with different numbering.

For example, you can change the number type to one of the available types:

- **Roman numeral:** such as iii and iv
- **Number:** such as 5 and 19

You can also change the visibility of page numbers. For example, you can hide page numbers on introductory pages by setting their visibility to **Not on first page**.

You can open the **Page Number Change** dialog when a page is selected in the **Pages** section of the Pages panel in any of the following ways:

- Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.
- Click **Insert Page Number Change**.



The **Page Number Change** dialog contains the following options:

From page

Allows you to select the page from which you want to change page numbers. The number indicates its position within the layout.

The **Displayed** option shows you the number that the selected page currently has, and how that number appears.

First page number

Allows you to specify the new page number you want for the selected page. Subsequent pages follow the new sequence until the next page number change or end of the project.

Sequence type

Allows you to select the type of number that the selected page and subsequent pages have.

Visibility

Allows you to specify if a page number is hidden or shown. You can additionally specify that the page number is also hidden on the page where the page number change occurs.

Subordinate number type

Allows you to add a subordinate number to the page number and to specify a type.

Subordinate number

Allows you to specify the number from which you want the subordinate numbers to start.

When you insert page number changes, a marking is shown in the bottom right corner of the page in the **Pages** section of the Pages panel. The new page number is also shown in each page in the **Pages** section of the Pages panel, in the appropriate numeral style.

RELATED LINKS

[Page numbers](#) on page 765

Removing page number changes

You can remove page number changes you have made to individual pages, which reverts pages to their default page numbers.

Any pages whose page number has been changed are shown with a colored triangle in their bottom right corner in the **Pages** section of the Pages panel.

PROCEDURE

1. In the music area, open the layout whose page number changes you want to remove.
2. Optional: If you want to remove page number changes from individual pages, **Ctrl/Cmd**-click those pages in the **Pages** section of the Pages panel.
3. Remove page number changes in one of the following ways:
 - To remove page number changes from selected pages only, right-click a page and choose **Remove Page Number Change(s)** from the context menu.
 - To remove page number changes from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Page Number Changes** from the context menu.

RESULT

Page number changes are removed from either the selected pages only or from all pages in the layout currently open in the music area.

If you removed page number changes from all pages, all pages are restored to the default page number sequence.

If you removed page number changes from selected pages only, the default page number is restored from the selected pages until the next page number change or the end of the project, whichever comes first. Any other pages with page number changes in the layout are unaffected.

RELATED LINKS

[Page Number Change dialog](#) on page 312

[Inserting page number changes](#) on page 311

Assigning master pages to pages

You can assign different master pages in the master page set to each page in each layout in your project. You can assign them to individual pages and to every page after a selected page.

PROCEDURE

1. In the music area, open the layout in which you want to change the master pages assigned to pages.
2. In the **Pages** section of the Pages panel, click the page whose master page assignment you want to change.
3. In the action bar, click **Insert Master Page Change** to open the **Insert Master Page Change** dialog.



4. Optional: Change the start page for the master page change using the **From page** option.
5. Select the master page that you want to assign from the **Use master page** menu.
6. Choose one of the following options for **Range**:
 - **Current Page Only**
Only the selected page is assigned a different master page.
 - **From This Page Onwards**
The selected page and all subsequent pages are assigned a different master page.
7. Click **OK** to save your changes and close the dialog.

RESULT

If you selected **Current Page Only**, the selected master page is assigned to the selected page only.

If you selected **From This Page Onwards**, the selected master page is assigned to the selected page and all subsequent pages in the layout or until the next existing master page change.

Removing master page changes

You can remove master page changes you have assigned to individual pages, which reverts them to the overall master page format applied to the layout.

Any pages whose master page has been changed are shown with a marking along their top edge, or along their top and left edges, in the **Pages** section of the Pages panel.

PROCEDURE

1. In the music area, open the layout whose master page changes you want to remove.
2. Optional: If you want to remove master page changes from individual pages, **Ctrl/Cmd**-click those pages in the **Pages** section of the Pages panel.
3. Remove master page changes in one of the following ways:
 - To remove master page changes from selected pages only, right-click a page and choose **Remove Master Page Change(s)** from the context menu.
 - To remove master page changes from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Master Page Changes** from the context menu.

RESULT

All master page changes are removed from either the selected pages only or from all pages in the layout currently open in the music area. Pages return to the overall master page format applied to the layout.

If you removed master page changes from selected pages only, any other pages with master page changes in the layout are unaffected.


RELATED LINKS

[Master page overrides](#) on page 308

Inserting flow heading changes

Inserting flow heading changes allows you to change the margins above/below flow headings in addition to changing the flow heading format used. You can insert flow heading changes on each page in each layout independently.

PROCEDURE

1. In the music area, open the layout whose flow headings you want to change.
2. In the **Pages** section of the Pages panel, click the page on/from which you want to insert a flow heading change.
3. In the action bar, click **Insert Flow Heading Change** to open the **Insert Flow Heading Change** dialog.

4. Optional: Change the start page for the flow heading change using the **From page** option.
5. Select the flow heading that you want to insert from the **Use flow heading** menu.
6. Choose one of the following options for **Range**:
 - **Current Page Only**
 - **From This Page Onwards**
7. Optional: Activate **Heading Top Margin** and/or **Heading Bottom Margin** and change their values to change the margins above/below flow headings on the selected pages.
8. Click **OK** to save your changes and close the dialog.

RESULT

If you selected **Current Page Only**, the selected flow heading is applied to all flow headings on the selected page only.

If you selected **From This Page Onwards**, the selected flow heading is applied to all flow headings on the selected page and all subsequent pages in the layout or until the next existing flow heading change.

RELATED LINKS

[Flow headings](#) on page 318

[Allowing/Disallowing multiple flows on the same page](#) on page 344

Insert Flow Heading Change dialog

The **Insert Flow Heading Change** dialog allows you to change the formats used for all flow headings on specified pages in each layout. You can apply flow heading changes only to individual pages or to all subsequent pages.

You can open the **Insert Flow Heading Change** dialog when a page is selected in the **Pages** section of the Pages panel in any of the following ways:

- Right-click in the **Pages** section and choose **Insert Flow Heading Change** from the context menu.
- Click **Insert Flow Heading Change**.



From page: 2 ↑ ↓ Displayed: 2

Use flow heading: custom_fh_image ▾

Range: Current Page Only From This Page Onwards

Current Value

Heading Top Margin: 0mm 15.0mm

Heading Bottom Margin: 0mm 12.0mm

Cancel OK

The **Insert Flow Heading Change** dialog contains the following options:

From page

Allows you to select the page from which you want to change the flow heading format. The number indicates its position within the layout.

The **Displayed** preview shows the current page number of the selected page, and how that number appears. If you have inserted page number changes in the layout, this might be different to **From page**.

Use flow heading

Allows you to specify the flow heading design you want to apply. The menu contains all available flow headings in the current master page set.

Range

Allows you to specify the range to which you want to apply the flow heading change.

- **Current Page Only** applies the flow heading change only to the selected page.
- **From This Page Onwards** applies the flow heading change to the selected page and all subsequent pages in the layout or until the next existing flow heading change.

Heading Top Margin

Allows you to set the gap between the top of affected flow headings and the end of the preceding flow, independently of the default setting for the layout.

Heading Bottom Margin

Allows you to set the gap between the bottom of affected flow headings and the start of the next flow, independently of the default setting for the layout.

When you insert flow heading changes, a marking is shown on the bottom or bottom and left edges of the page in the **Pages** section of the Pages panel.

RELATED LINKS

[Changing the margins above/below flow headings](#) on page 346

Removing flow heading changes

You can remove flow heading changes you have assigned to individual pages to revert to the **Default** flow heading.

Any pages whose flow heading has been changed are shown with a marking along their bottom edge, or along their bottom and left edges, in the **Pages** section of the Pages panel.

PROCEDURE

1. In the music area, open the layout whose flow heading changes you want to remove.
 2. Optional: If you want to remove flow heading changes from individual pages, **Ctrl/Cmd**-click those pages in the **Pages** section of the Pages panel.
 3. Remove flow heading changes in one of the following ways:
 - To remove flow heading changes from selected pages only, right-click a page and choose **Remove Flow Heading Change(s)** from the context menu.
 - To remove flow heading changes from all pages, right-click in the **Pages** section of the Pages panel and choose **Remove All Flow Heading Changes** from the context menu.
-

RESULT

All flow heading changes are removed from either the selected pages or from all pages in the layout currently open in the music area. Pages return to using the **Default** flow heading in the master page set applied to the layout.

If you removed flow heading changes from selected pages only, any other pages with flow heading changes in the layout are unaffected.



RELATED LINKS

[Flow headings](#) on page 318

Swapping pages

You can swap pages that have overrides with adjacent pages.

PROCEDURE

1. In the music area, open the layout in which you want to swap pages.
 2. In the **Pages** section of the Pages panel, select the overridden page whose overrides you want to swap with another page.
Pages with overrides have markings in their top left corners.
 3. Swap the selected page with another page in any of the following ways:
 - In the action bar, click **Swap with Previous Page**.

 - In the action bar, click **Swap with Next Page**.

-

RESULT

The selected page exchanges the position with the previous or next page within the sequence of pages in the layout.

Flow headings

Flow headings allow you to show the titles of flows immediately above their first system automatically. They function like templates, in much the same way as master pages.

Flow headings exist as part of master page sets. By default, Dorico Pro provides one flow heading in each master page set, which contains tokens to display the flow number and flow title. This is the default for all flow headings, but you can insert flow heading changes to individual pages and ranges of pages.

Flow headings are automatically inserted above the first system of the flow to which they apply, meaning they do not have a fixed vertical position on the page like other frames. They also occupy vertical space within music frames. You can change the margins for the space above and below flow headings on a per-layout and on a per-page basis by inserting flow heading changes.

Frames in flow headings appear with dashed lines instead of solid lines to help you identify them. You can move flow heading frames in the same ways as moving any other frames, but this creates a master page override.



The image shows a musical score snippet for a piece titled "3. Menuetto". The score is written for F. Hn in G 2, in 3/4 time, with a key signature of one flat (F major). The tempo is marked "Allegretto" and the dynamics are marked "f". The score is enclosed in a dashed green rectangular frame, which is the flow heading text frame.

Dashed lines showing the edges of a flow heading text frame

RELATED LINKS

- [Tacets on page 352](#)
- [Hiding/Showing flow headings on page 346](#)
- [Master page sets on page 302](#)
- [Master page overrides on page 308](#)
- [Text tokens on page 332](#)
- [Inserting flow heading changes on page 315](#)

Flow heading editor

The flow heading editor allows you to view and change the format of flow headings.

It functions similarly to the master page editor; however, the background of the flow heading editor is a different color to help you identify what you are editing.

You can open the flow heading editor in the following ways:

- Double-click a flow heading in the **Flow Headings** section of the Pages panel.
- Select a flow heading in the **Flow Headings** section of the Pages panel and click **Edit Flow Heading**.



You can customize flow headings in the master page editor, including inputting extra frames and editing/moving existing text and graphics frames. You can also change the vertical alignment of text in text frames and use text editor options to format the appearance and horizontal alignment of text in text frames.

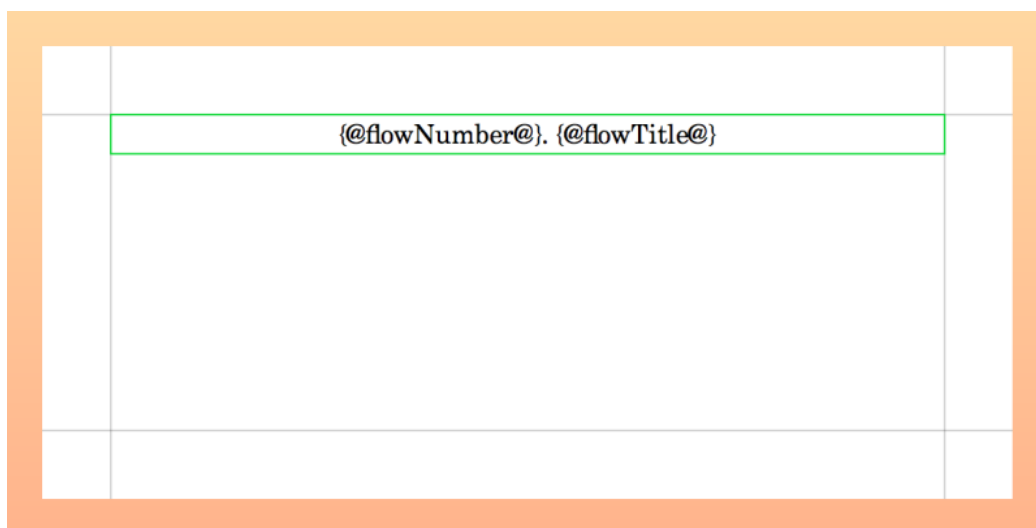
NOTE

- You cannot input music frames in flow headings.

- Frames in flow headings can only have right and left edge constraints, they cannot have top or bottom constraints. This is because flow headings have no fixed vertical position.
-

You can position frames anywhere in the flow heading editor, as Dorico Pro always uses the top of the highest frame and bottom of the lowest frame on the page in the editor to determine the dimensions of the flow heading. However, we recommend that you keep the overall height of flow headings as small as possible to reduce the amount of music they consequently displace in music frames.

Unlike master pages, flow headings appear the same whether they are on left-hand or right-hand pages, so only a single page is shown in the flow heading editor.



A flow heading in the flow heading editor

RELATED LINKS

[Pages panel](#) on page 295

[Text editor options in Engrave mode](#) on page 371

[Changing the horizontal alignment of text in text frames](#) on page 339

Customizing flow headings

You can customize flow headings according to your needs in the flow heading editor. Changing a flow heading affects the appearance of flow headings in all layouts that use that flow heading.

PROCEDURE

1. In the Pages panel, double-click a flow heading in the **Flow Headings** section.
The flow heading editor opens in the music area.
 2. In the flow heading editor, change the layout of the flow heading. For example, you can input a graphics frame or change the vertical alignment of text in the text frame.
 3. Click **Apply**, then **Close**.
-

RELATED LINKS

[Inputting frames](#) on page 322

[Moving frames](#) on page 323

[Changing the size/shape of frames](#) on page 323

[Paragraph Styles dialog](#) on page 366

Adding flow headings

You can add new flow headings to master page sets. Each master page set can have multiple custom flow headings, but only a single default flow heading.

PROCEDURE

1. In the music area, open a layout that uses the master page set to which you want to add flow headings.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the Pages panel, click **New Flow Heading** in the **Flow Headings** action bar to open the **New Flow Heading** dialog.



3. In the **New Flow Heading** dialog, enter a name for the new flow heading into the **Name** field.
4. Select the existing flow heading on which you want to base the new flow heading from the **Based on** menu.

NOTE

- Flow headings based on existing flow headings retain a link to the **Based on** flow heading. This means some changes you make to the **Based on** flow heading, such as changing the font size of text in text frames, also affect the new flow heading and vice versa.
 - Selecting **(None)** always creates a flow heading without any formatting but the page margins.
-

5. Choose one of the following flow heading types for your new flow heading:

- **Default**
- **Custom**

NOTE

If you select **Default**, the new flow heading replaces that existing default flow heading, as each master page set can only have a single default flow heading.

If you want to create a new flow heading without replacing any existing flow headings, choose **Custom**.

6. Click **OK** to save your changes and close the dialog.
-

RESULT

A new flow heading of the selected type is added to the selected master page set.

AFTER COMPLETING THIS TASK

You can apply flow headings to individual pages in layouts that use the master page set to which they belong.

RELATED LINKS

[Master page sets](#) on page 302

[Inserting flow heading changes](#) on page 315

[Hiding/Showing flow headings](#) on page 346

Renaming flow headings


You can change the names of flow headings, including default flow headings and your own custom flow headings.

PROCEDURE

1. In the music area, open a layout that uses the master page set containing the flow heading you want to rename.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the **Flow Headings** section of the Pages panel, click the flow heading pair that you want to rename.
 3. In the action bar, click **Rename Flow Heading** to open the **Rename Flow Heading** dialog.

 4. Enter the name you want in the **Name** field.
 5. Click **OK** to save your changes and close the dialog.
-

Deleting flow headings

You can delete flow headings from master page sets.

NOTE

You cannot delete **Default** flow headings. Every master page set must contain at least a **Default** flow heading. You can replace **Default** flow headings by adding a new flow heading and setting its type to **Default**.

PROCEDURE

1. In the music area, open a layout that uses the master page set containing the flow heading you want to delete.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the **Flow Headings** section of the Pages panel, click the flow heading that you want to delete.
3. In the action bar, click **Delete Flow Heading**.



RESULT

The selected flow heading is deleted. You can undo this action if you deleted a flow heading in error.

Frames

Frames allow you to position your music, additional text, and graphics anywhere inside the margins of a page.

Frames are rectangular boxes that can be positioned inside the page margins that have been defined for a layout. In Engrave mode, you can see and adjust frames according to your needs. In Dorico Pro, there are the following types of frames:

- Music frames that show the music of selected players and flows
- Text frames that allow you to enter text and text tokens
- Graphics frames that allow you to load images or illustrations in a variety of formats

For every frame, you can specify constraints that define the relationship between the sides of the frame and the corresponding page margins.

RELATED LINKS

[Flows in Dorico Pro](#) on page 31

[Layouts in Dorico Pro](#) on page 32

[Frame constraints](#) on page 340

[Music frames](#) on page 325

[Text frames](#) on page 331

[Graphics frames](#) on page 340

[Frame breaks](#) on page 356

[Text tokens](#) on page 332




Inputting frames

You can input frames on pages manually, including on both individual pages and on master pages in the master page editor. You can input music frames, text frames, and graphics frames.

PREREQUISITE

If you want to input frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. In the Engrave toolbox, click **Frames** to show the Formatting panel.
2. In the **Insert Frames** section, choose one of the following types of frames:
 - **Insert Music Frame**

 - **Insert Text Frame**

 - **Insert Graphics Frame**

3. Click and drag in the music area to input the selected frame type.
You can draw a frame of any size and shape, as long as it fits within the page margins.

RESULT

When you release the mouse, the type of frame you chose is input on the page.

AFTER COMPLETING THIS TASK

You can change the size of the frame or define its constraints. If you inserted a music frame, you can determine which parts of your score you want to display in the frame. If you inserted a text frame, you can enter text. If you inserted a graphics frame, you can load a graphics file.

RELATED LINKS

[Frame constraints](#) on page 340

[Music frames](#) on page 325

[Text frames](#) on page 331

[Graphics frames](#) on page 340

[Music frame selectors](#) on page 328

[Master page editor](#) on page 306

Moving frames

You can move individual frames around pages, including master pages, after they have been inserted. However, you cannot move frames beyond page margins.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to move frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Select the frames you want to move.
2. Move the frames in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

-
- Click and drag them in any direction.
-

Changing the size/shape of frames

You can change the size and shape of individual frames on pages, including on master pages, after they have been inserted.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to change the size/shape of frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Select the middle handle on an edge of the frame whose size or shape you want to change.

NOTE

You can only select a single handle on a single frame at a time.

2. Move the handle in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.
 - Press **Alt-Up Arrow** to move it upwards.
 - Press **Alt-Down Arrow** to move it downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag the handle to the right/left or upwards/downwards.

NOTE

You can only move handles on the right/left edges of frames to the right/left. You can only move handles on the top/bottom edges of frames upwards/downwards. For example, if you want to make a frame wider, you can select the middle handle on the right edge of the frame and move it to the right.

3. Optional: Repeat steps 1 and 2 for any other edge of the frame you want to move to achieve the size and shape you want.
-

RELATED LINKS

[Master page editor](#) on page 306

Selecting frame handles

You can select an individual handle on a frame, and you can switch between having a handle selected and having the whole frame selected.

PREREQUISITE

Frames is selected in the Engrave toolbox.

PROCEDURE

1. Select a frame handle in any of the following ways:
 - Select any handle on the frame and press **Right Arrow/Left Arrow/Up Arrow/Down Arrow** to select other handles around the edge of the frame.
 - Select the frame, press **Tab** to switch to having the handle in the top left corner selected, then press **Right Arrow/Left Arrow/Up Arrow/Down Arrow** to select other handles around the edge of the frame.
 - Click a handle on the frame.

NOTE

You can only select a single handle on a single frame at a time.

2. Optional: Switch back to having the whole frame selected at any time by pressing **Tab**.
-

Copying frames

You can copy individual frames from one page to other pages in layouts, for example, if you want the same frame to appear on multiple pages at exactly the same position. You can also copy frames to the same page, for example, if you want to duplicate a frame on a page.

NOTE

This does not apply to frames on master pages. You can copy frames on master pages when customizing the master page.

PREREQUISITE

Frames is selected in the Engrave toolbox.

PROCEDURE

1. In the music area, open the layout in which you want to copy frames to other pages.
2. Select the frames you want to copy, which can be on multiple pages.
3. In the **Pages** section of the Pages panel, **Ctrl/Cmd**-click the pages to which you want to copy the selected frames.
4. Right-click in the **Pages** section and choose **Copy Selected Frames to Selected Pages** from the context menu.

RESULT

All selected frames are copied to the selected pages at the same positions on the page. If you copied frames to their original page, they overlay their original exactly.

Music frames

Music frames display the music in your project in a specified order. You can control which parts of the project are displayed using master page music frames and layout music frames.

Both types of music frames display the music and notations you have input into the project according to their music frame selectors, such as filtering only selected players or flows.



A master page music frame

Master page music frames

Master page music frames exist only on master pages, meaning you can only input and edit master page music frames in the master page editor. They can only have master page frame chains assigned to them.

By default, the master pages in the master page sets provided by Dorico Pro include master page music frames with a single master page frame chain assigned to them. This frame chain is set to display all players in all flows in each layout. These master pages are set to apply to all pages in all layouts in your project by default according to the layout type.

You can input multiple master page music frames on a single master page, and change their size and shape to whatever you want. If you want to connect separate master page music frames on the same page, you can assign the same frame chain to them.

Layout music frames

Layout music frames exist only on individual pages in layouts, meaning you can only input and edit layout music frames in individual layouts in the music area. Layout music frames can have both master page and layout frame chains assigned to them. However, assigning a master page frame chain to a layout frame does not affect the master page.

You can input multiple layout music frames on a single page, and change their size and shape to whatever you want. For example, layout music frames allow you to insert small musical excerpts from a different flow within footnotes or in an index.

If you want to connect separate layout music frames on the same page, you can assign the same frame chain to them.

IMPORTANT

Layout music frames are considered overrides to master pages. If you remove all overrides on layout pages, all your layout music frames are also removed.

Identifying master page music frames and layout music frames

To differentiate between master page music frames and layout music frames, you can check the following:

- Flow and player selectors: On individual pages in layouts, master page music frames never allow you to change the selection of flows or players. Those selectors are grayed out because they can only be edited on master pages in the master page editor.



Flow and player selectors grayed out on a master page music frame

- Frame chains: Frame chains assigned to layout music frames start with an “L” by default. Frame chains assigned to master page music frames start with an “M” by default.

RELATED LINKS

[Music frame selectors](#) on page 328

[Master pages](#) on page 301

[Master page overrides](#) on page 308

[Master page editor](#) on page 306

[Changing the size/shape of frames](#) on page 323

Music frame chains

A music frame chain is a collection of music frames that show the same selection of music in a set order, often in sequence. Music frame chains are automatically created when you create a music frame on a page, and can include any number of frames, including only a single music frame.

You can control the music shown in each music frame chain by player and by flow using music frame selectors.

In Dorico Pro, there are different types of frame chains.

Master page frame chains

Master page frame chains can be created and fully edited only on master pages in the master page editor; you cannot change the flow and player filters for master page frame chains in

individual layouts. Whenever you create a music frame on a master page, you automatically start a frame chain.

Frame chains that start with an “M”, such as “MA”, are master page frame chains. You can have multiple master page frame chains on each page, such as “MA” and “MH”.

The default master pages contain a single frame chain that is set to display all flows and all players in the layout. Therefore, Dorico Pro automatically creates enough pages and frames to display all flows in all the layouts that use those master pages.

NOTE

- To ensure that a score continues automatically on subsequent pages, the music frame must be created at least on the **First** and **Default** master pages.
- All frames in the same music frame chain must display the same flows and players. For example, you cannot have the first frame in a frame chain show just the violin but have the second frame show all players.
- Dorico Pro shows flows in layouts as many times as you want, not only once. Therefore, if you want to change the formatting of some flows in a particular layout, such as showing them in layout frame chains instead of the master page frame chain, but do not want those flows to appear more than once, you must remove those flows from the **Filter by Flows** list on the master page frame chain. As this affects which flows are automatically displayed in all layouts that use the same master page, we recommend that in such cases you create a separate master page for the layout in which you want to change the formatting.

Layout frame chains

Layout frame chains can only be created and edited on pages in individual layouts. If you create a music frame and assign it to a layout frame chain in a layout, it is only displayed on that page in that layout and starts its own frame chain. If you want the music frame to be continued on subsequent pages, you must create music frames on all the pages in the layout on which you want the chain to appear and assign all of these frames to the same layout frame chain.

Frame chains that start with an “L”, such as “LA”, are layout frame chains. You can have multiple layout frame chains on each page, such as “LA” and “LB”.

NOTE

- All frames in the same music frame chain must display the same flows and players. For example, you cannot have the first frame in a frame chain show just the violin but have the second frame show all players.
- Assigning flows to layout frame chains does not stop those flows also appearing in the master page frame chain, if the frame chain in the master page applied to the layout is set to include those flows; by default, master page frame chains are set to display all flows in the project.

RELATED LINKS

[Master pages](#) on page 301

[Master page editor](#) on page 306

[Layouts in Dorico Pro](#) on page 32

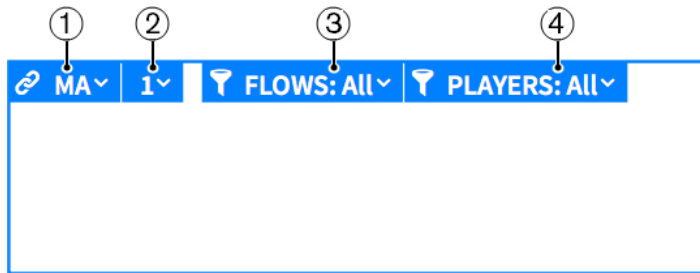
[Music frame selectors](#) on page 328

Music frame selectors

When **Frames** is selected in the Engrave toolbox, music frames show selectors that allow you to change the music displayed, for example, changing which flows and players are displayed in each frame chain.

Selectors on music frames allow you to control which flows and players are displayed in frame chains, and the order in which the selected music is shown in frames on the page. Frame chains can include any number of frames, including only a single music frame.

Every music frame shows the following selectors:



1 Frame Chain

Allows you to select which frame chain the music frame follows. Frames that start with an “M” have master page frame chains assigned to them; frames that start with an “L” have layout frame chains assigned to them.

The second letter allows you to identify different frame chains of the same type. It is automatically generated and reflects the order in which you created the frame chains, for example, “LA” is the first layout frame chain you create in the layout and “LB” is the second.

2 Frame Order

If you have two or more music frames in the same frame chain on the same page, you can use this option to specify the order in which music flows through the frames. For example, when the **Frame Order** is **1**, that frame is the first frame in the frame chain.

3 Filter by Flow

If you have several flows in your project, you can specify which flows you want to display in this frame chain. For example, you can show only a single flow, a selection of flows, or all flows.

4 Filter by Player

If you have several players in your project, you can specify which players you want to display in this frame chain. For example, you can show only a single player, multiple players, or all players.

NOTE

You can only edit the **Filter by Flow** and **Filter by Player** selectors of master page music frames on master pages in the master page editor.

RELATED LINKS

[Frame constraints](#) on page 340

[Changing the size/shape of frames](#) on page 323

Assigning frame chains to music frames

You can assign existing music frame chains to new music frames and change the frame chain of an existing music frame. This applies to both master page and layout music frames.

NOTE

New music frames on a page always start a new frame chain, regardless of their type.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
 - If you want to assign music frame chains to frames on a master page, you have opened the master page in the master page editor.
-

PROCEDURE

1. In the music frame whose frame chain you want to change, click **Frame Chain**.



2. Select the frame chain that you want to assign to the music frame.

NOTE

- You cannot select layout frame chains for frames in the master page editor.
 - If you do not want to use any of the available frame chains, click **Unlink**.
-

3. Click outside of the selector to close it.
-

RESULT

The selected frame chain is assigned to the music frame. All settings from the frame chain are applied to the frame, such as the players and flows displayed.

RELATED LINKS

[Master page editor](#) on page 306

Unlinking music frames from frame chains

You can unlink music frames from music frame chains, for example, if you want to change the music frame to a new frame chain without deleting it.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
 - If you want to unlink frames from music frame chains on a master page, you have opened the master page in the master page editor.
-

PROCEDURE

1. In the music frame you want to unlink, click **Frame Chain**.



2. Click **Unlink**.
-

RESULT

The music frame is unlinked from its previous frame chain. A new frame chain is automatically created for the unlinked frame.

- Unlinking a layout music frame from a layout frame chain changes it to a new layout frame chain.
- Unlinking a layout music frame from a master page frame chain changes it to a new layout frame.
- Unlinking a master page music frame from a master page frame chain changes it to a new master page frame chain.


Changing the order of music frames

If you have at least two music frames of the same type in the same frame chain on a page, you can change the order in which music is displayed across the frames.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to change the order of music frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. In one of the music frames whose order you want to change, click **Frame Order**.

2. Select the ordinal number for this frame from the **Frame Order** menu.
3. Click outside of the selector to close it.

RESULT

The position of the selected frame in the frame chain order is changed by exchanging its order number with the frame previously assigned that number. For example, changing the number of the second frame in a frame chain to **1** causes the frame originally number **1** to become number **2** in the frame chain order.

Assigning flows to frame chains

You can change which flows are shown in each frame chain, for example, if you want to exclude some flows from the master page frame chain because you want to display those flows in layout frame chains instead.

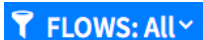
NOTE

- You can assign flows to both master page frame chains and layout frame chains. However, you can only change the flows assigned to layout frame chains in individual layouts, and you can only change the flows assigned to master page frame chains in the master page editor.
- Changing the assigned flows affects all frames in the frame chain.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to change the flows assigned to music frame chains on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. In the music frame whose assigned flows you want to change, click **Flows**.

2. Select the flows you want to be displayed in the frame chain from the **Filter by Flow** menu.

3. Click outside of the selector to close it.
-

RESULT

The music frame shows the selected flows. If you changed the flows assigned to a master page music frame, the number of pages in the layouts to which the master page is applied automatically updates. For example, if you assigned an extra flow to the master page frame chain, enough extra pages and frames to display that flow are added to the corresponding layouts.

Assigning players to frame chains

You can change which players are included in different frame chains, for example, if you are writing a piano duet and only want to show one piano on left pages and the other piano on right pages.


NOTE

- You can assign players to both master page frame chains and layout frame chains. However, you can only change the players assigned to layout frame chains in individual layouts, and you can only change the players assigned to master page frame chains in the master page editor.
 - Changing the assigned players affects all frames in the frame chain.
-

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
 - If you want to change the players assigned to music frame chains on a master page, you have opened the master page in the master page editor.
-

PROCEDURE

1. In the music frame whose assigned players you want to change, click **Players**.

 2. Select the players you want to be displayed in the music frame from the **Filter by Player** menu.
 3. Click outside of the selector to close it.
-

RESULT

Which players are displayed in the frame chain is changed.

NOTE

The staff size is not changed automatically, meaning staves can overlap in small frames in the frame chain.

Text frames

Text frames allow you to add text, including tokens, to your project, independently of rhythmic positions in the score. Adding text frames to pages individually, and not on a master page, is considered a master page override.

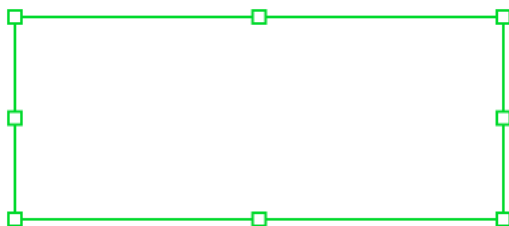
You can open the text editor for individual frames in any of the following ways:

- Activate **Frames** in the Formatting panel, select the text frame, and press **Return**.

TIP

You can switch between selecting a frame handle and the whole frame by pressing **Tab**.

- Double-click within the text frame.



Text frame

RELATED LINKS

[Inputting frames](#) on page 322

[Entering text in text frames](#) on page 337

[Text formatting](#) on page 363

[Changing the default horizontal alignment of text styles](#) on page 368

[Changing the horizontal alignment of text in text frames](#) on page 339

[Master page overrides](#) on page 308

[Changing the size/shape of frames](#) on page 323

Text tokens

Text tokens are codes that you can use as substitutes for information stored in your project, such as titles, composers, and the time and date. This can reduce the risk of mistakes or outdated information appearing in your project. Text tokens are also known as “wildcards” or “text codes”.

For example, if you use a token for the title of your project, you can change the project title in the **Project Info** dialog as often as you want, and the project title in every layout in your project is updated automatically.

Tokens can refer to the project-wide information on the **Project** page in the **Project Info** dialog, or to individual **Flow** pages in the **Project Info** dialog. Tokens can also refer to the current time and date or the time and date the project was last saved.

NOTE

- You can only use text tokens in text frames. You cannot use tokens in text/system text objects.
- Flow tokens refer to the nearest flow below the top edge of their text frame. When the top edge of a text frame containing a flow token is in line with or above the top staff line of the first stave in a system, it then refers to that flow.

You can specify the flow number to which you want flow tokens to refer, such as `{@flow2title@}`. This always shows the specified flow, regardless of the token’s position.

If you want to use tokens that refer to flow information on pages that contain no music, such as title pages, you must specify the flow number in the token. For example, if you use `{@flowtitle@}` on a title page containing no music frames, the token does not display any information, but `{@flow1title@}` displays the title of the first flow in your project.

You can see the flow number of each flow in the **Flows** panel in Setup mode.

The following tokens are available in Dorico Pro:

General tokens

Description	Token
Page number	{@page@}
Player list	{@playerlist@}
Player names	{@playernames@}
Layout name	{@layoutname@}
Layout number, as set in the Layouts panel in Setup mode	{@layoutnumber@}

Project/Flow-specific information tokens

Field in the Project Info dialog	Token for Project page	Token for Flow pages
Title	{@projecttitle@}	{@flowtitle@}
Subtitle	{@projectsubtitle@}	{@flowsubtitle@}
Dedication	{@projectdedication@}	{@flowdedication@}
Composer	{@projectcomposer@}	{@flowcomposer@}
Arranger	{@projectarranger@}	{@flowarranger@}
Lyricist	{@projectlyricist@}	{@flowlyricist@}
Artist	{@projectartist@}	{@flowartist@}
Copyist	{@projectcopyist@}	{@flowcopyist@}
Publisher	{@projectpublisher@}	{@flowpublisher@}
Editor	{@projecteditor@}	{@floweditor@}
Copyright	{@projectcopyright@}	{@flowcopyright@}
Work number	{@projectworknumber@}	{@flowworknumber@}
Composer dates	{@projectcomposerdates@}	{@flowcomposerdates@}
Composition year	{@projectcompositionyear@}	{@flowcompositionyear@}
Other information	{@projectotherinfo@}	{@flowotherinfo@}

Per-flow tokens

Per-flow token function	Token
Flow number of the current flow, according to its position in the Flows panel in Setup mode	{@flownumber@}
Flow number of the current flow shown in lower case Roman numerals, such as iii or xvi	{@flowNumberRomanLower@}
Flow number of the current flow shown in upper case Roman numerals, such as III or XVI	{@flowNumberRomanUpper@}
Number of this page within the current flow, counting from 1	{@flowPage@}
Total number of pages in the current flow	{@flowPageCount@}
The displayed page number on which the specified flow “n” begins, such as {@flow3PageCount@}	{@flownPageCount@}
Duration of the current flow in minutes and seconds	{@flowDuration@}
Duration of the specified flow “n” in minutes and seconds, such as {@flow3Duration@}	{@flownDuration@}

Page number tokens

Page number token function	Token
Total number of pages in the layout	{@pageCount@}
Number of this page within the current flow, counting from 1 for the first page of the flow and including pages with no displayed page number	{@flowPage@}
Total number of pages in the current flow	{@flowPageCount@}
Displayed page number of the page on which the specified flow “n” begins, according to its position in the Flows panel in Setup mode For example, {@flow5FirstPage@}	{@flownFirstPage@}

NOTE

{@flowPage@} and {@flowPageCount@} tokens only consider the flow that is active at the beginning of the first system of the music frame closest to the top left corner of the page on which the tokens are used.

Time/Date tokens to show when the project was last saved

Time/Date description	Time/Date example	Token
Standard date and time string (locale dependent)	Sun Dec 31 11:10:12 2017	{@projectdate@}
Four-digit year	2017	{@projectdateyear@}
Two-digit year	17	{@projectdateyearshort@}
Full month name (locale dependent)	October	{@projectdatemonth@}
Short month name (locale dependent)	Oct	{@projectdatemonthshort@}
Month as a decimal number, range 1-12	10	{@projectdatemonthnum@}
Full weekday name (locale dependent)	Friday	{@projectdateday@}
Abbreviated weekday name (locale dependent)	Fri	{@projectdatedaysshort@}
Day of month as decimal number, range 1-31	24	{@projectdatedaynum@}
ISO 8601 date	2017-12-31	{@projectdateymd@}
Month day, year	December 31, 2017	{@projectdatemdy@}
Day month year	31 December 2017	{@projectdatedmy@}
Time representation (locale dependent)	11:10:12	{@projectdatetime@}
Hours:minutes, hour in 24-hour clock range	23:10	{@projectdatetimeHHMM@}
Hours:minutes:seconds, hour in 24-hour clock range	13:02:24	{@projectdatetimeHHMMSS@}
Hour in 24-hour clock range	23	{@projectdatetimehour24@}
Hour in 12-hour clock range	11	{@projectdatetimehour12@}
Minute as decimal number, range 00-59	10	{@projectdatetimeminute@}
Second as decimal number, range 00-59	44	{@projectdatetimesecond@}

Time/Date tokens to show the current time and date

Time/Date description	Time/Date example	Token
Standard date and time string (locale dependent)	Sun Dec 31 11:10:12 2017	{@date@}
Four-digit year	2017	{@dateyear@}
Two-digit year	17	{@dateyearshort@}
Full month name (locale dependent)	October	{@datemonth@}
Short month name (locale dependent)	Oct	{@datemonthshort@}
Month as a decimal number, range 1-12	10	{@datemonthnum@}
Full weekday name (locale dependent)	Friday	{@dateday@}
Abbreviated weekday name (locale dependent)	Fri	{@datedaysshort@}
Day of month as decimal number, range 1-31	24	{@datedaynum@}
ISO 8601 date	2017-12-31	{@dateymd@}
Month day, year	December 31, 2017	{@datemdy@}
Day month year	31 December 2017	{@datedmy@}
Time representation (locale dependent)	11:10:12	{@datetime@}
Hours:minutes, hour in 24-hour clock range	23:10	{@datetimeHHMM@}
Hours:minutes:seconds, hour in 24-hour clock range	13:02:24	{@datetimeHHMMSS@}
Hour in 24-hour clock range	23	{@datetimehour24@}
Hour in 12-hour clock range	11	{@datetimehour12@}
Minute as decimal number, range 00-59	10	{@datetimeminute@}
Second as decimal number, range 00-59	44	{@datetimesecond@}

RELATED LINKS

- [Project Info dialog](#) on page 90
- [Player, layout, and instrument names](#) on page 96
- [Flow names and flow titles](#) on page 119
- [Renumbering layouts](#) on page 124

Entering text in text frames

You can enter text in text frames, format the text, and insert separate paragraphs and line breaks. You can also edit text in text frames at any time, for example, if you later want text to be italic instead of bold.

PREREQUISITE

If you want to enter text in a text frame on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Double-click the text frame into which you want to enter text to open the text editor.
2. Enter the text you want.
3. Optional: Press **Return** to insert a new paragraph.
4. Optional: Press **Shift-Return** to insert a line break.
5. Optional: Format the text using the text editor options.
6. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.

RESULT

Text is entered into the text frame.

If you insert a new paragraph or line, the cursor jumps to the beginning of the new paragraph or line.

RELATED LINKS

- [Text editor options in Engrave mode](#) on page 371

Adding borders to text frames

You can add borders to individual text frames, for example, if you want to make its boundaries clear.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to add borders to text frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Select the text frames to which you want to add borders.
2. In the Properties panel, activate **Show border** in the **Text** group.

RESULT

Borders are added to the selected text frames.

AFTER COMPLETING THIS TASK

You can change the thickness of text frame borders and you can change the padding between the borders and contents of text frames.

Changing the thickness of text frame borders

You can change the thickness of text frame borders individually. There is no default setting for the thickness of text frame borders.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to change the thickness of text frame borders on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Select the text frames whose border thickness you want to change.
2. In the Properties panel, change the value for **Border thickness** in the **Text** group.

RELATED LINKS

[Changing the thickness of text object borders](#) on page 376

Changing the padding in text frames

You can change the padding of individual text frames, which affects the distance between the edges of frames and the text within them.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to change the padding of text frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Select the text frames whose padding you want to change.
2. In the Properties panel, activate **Padding** in the **Text** group.
3. Change the value in the value field.

RESULT

The padding between all edges of the selected text frames and the text within them is changed.

Changing the vertical alignment of text in text frames

You can change the vertical alignment of text in text frames. You can do this on master pages, which changes the alignment of the selected text on all pages that use the master page format, and on individual pages, which only changes the alignment of the selected text on that page.

PREREQUISITE

- **Frames** is selected in the Engrave toolbox.
- If you want to change the vertical alignment of text on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Select the frames whose text vertical alignment you want to change.
2. In the Properties panel, select one of the following options from the **Vertical alignment** menu in the **Text** group:
 - **Top**

- **Center**
 - **Bottom**
-

RESULT

The vertical alignment of text in the selected text frames is changed.

NOTE

Changing the vertical alignment of text does not override its paragraph style. Any changes you make later to the paragraph styles of text whose vertical alignment has been changed are applied to the text.

RELATED LINKS

[Master page editor](#) on page 306

[Paragraph Styles dialog](#) on page 366

Changing the horizontal alignment of text in text frames

You can change the horizontal alignment of any text style in text frames, independently of the paragraph style for that text.

If you change the alignment of text in text frames on master pages, the horizontal alignment of text is changed on all pages that use those master page formats.

If you change the alignment of text in text frames on individual pages, this change is independent of the paragraph style for that text and also independent of the master page format. You can later remove any overrides made on individual pages and revert them to the master page format.

NOTE

- Changes to text in text frames on master pages cannot be reset.
 - Removing overrides removes all changes made to individual pages, not just changes to the alignment of text in text frames.
-

PREREQUISITE

If you want to change the horizontal alignment of text on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. Double-click a text frame to open the text editor for that frame.
2. Select the text in the text frame whose horizontal alignment you want to change.

TIP

You can apply different paragraph styles to separate paragraphs in the same text frame.

3. Choose the horizontal alignment you want in the text editor.
 4. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.
-

RESULT

The horizontal alignment of the selected text is changed.

TIP

You can change the horizontal alignment of text styles project-wide in the **Paragraph Styles** dialog.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

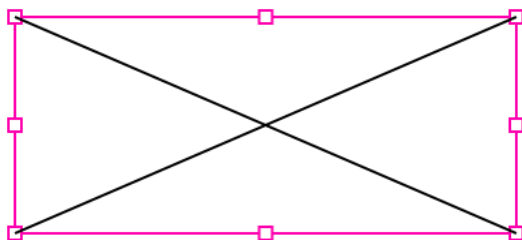
[Paragraph style overrides](#) on page 373

Graphics frames

Graphics frames allow you to load images or illustrations into your score in a variety of formats.

You can load graphics files in the following formats:

- .jpg or .jpeg
- .png
- .svg



Graphics frame

RELATED LINKS

[Changing the size/shape of frames](#) on page 323

Loading images into graphics frames

You can load images from your computer or server into your score.

PREREQUISITE

You have added a graphics frame, either to a master page or an individual layout.

PROCEDURE

1. Double-click in the graphics frame to open the File Explorer/macOS Finder.
 2. In the File Explorer/macOS Finder, locate and select the file you want to load into the graphics frame.
 3. Click **Open**.
-

RESULT

The selected image is loaded into the frame.

Frame constraints

In Dorico Pro, constraints define the relationship between each of the four sides of a frame and the corresponding page margins.

Frame constraints lock each side of frames to the corresponding page margin, meaning you can change the page size, or the area that is defined by the page margin, while keeping the frame in

proportion. For example, a music frame that fills the entire height and width of a page has constraints on all four sides. All sides have an inset of zero, which means that the edges of the frames are in line with the page margins. If you change the size of the page, the frame size changes accordingly so that it always fills the page, whatever the current page size.

NOTE

Page size and margins are set for each layout in **Setup > Layout Options**.

If you remove a constraint from one side of a frame, that unlocks that side of the frame from the page margin, meaning you can determine a fixed width/height that prevents that side of the frame from adjusting, even if the page size changes.

EXAMPLE

If you have set a frame for a header, you might want the left and right sides to be locked to the left and right margins of the page. For the top side of the frame, you might want to lock it to the top margin, but want to keep the height of the header fixed. In this case, you can remove the lock to the bottom margin and specify a fixed height by moving the side of the frame, or by entering a value in one of the value fields in the Properties panel.

In the **Frames** section of the formatting panel, you can define the constraints for all types of frames that are available in Dorico Pro. All new frames have active constraints on all sides by default. You can unlock two sides of a frame to specify a fixed width or height. For example, if you remove the lock to the top margin, you can also remove the lock to the right/left margin.

RELATED LINKS

[Layout Options dialog](#) on page 90

Defining frame constraints

You can determine on which sides of frames you want to apply constraints.

PREREQUISITE

If you want to define the constraints of frames on a master page, you have opened the master page in the master page editor.

PROCEDURE

1. In the Engrave toolbox, click **Frames** to show the Formatting panel.
2. In the music area, select the frame whose constraints you want to define.
3. In the **Constraints** section of the Formatting panel, click the constraint that corresponds to the side of the frame that you want to change.



Locked constraint



Unlocked constraint

4. Move the unlocked side of the frame to the position you want.

TIP

You can also enter fixed values for **Height** or **Width** in the **Frames** group of the Properties panel.

RELATED LINKS

[Formatting panel](#) on page 292

[Master page editor](#) on page 306

[Customizing master pages](#) on page 307

Page layouts

In Dorico Pro, the layout of pages is determined by their margins, the master page applied to them, any casting off values applied to them, system and frame breaks, and frame padding.

Casting off, meaning the process of determining a set number of bars per system and systems per page, allows you to fix a regular appearance across entire layouts.

System and frame breaks allow you to adjust layouts on a local level, by determining which bars are shown on each system and where music is pushed into the next frame.

Frames cannot exceed the boundaries set by the margins of the layout, which you can change on the **Page Setup** page in **Setup > Layout Options**. You can change the size of margins in millimeters on each edge of each page, and choose one of the following styles of margins:

- **Same**
All pages in the selected layouts have the same margins.
- **Different**
Left and right pages in the selected layouts can have completely different margins.
- **Mirrored**
Left and right pages in the selected layouts use the same margin values but they correspond to inside/outside edges of pages.

Music frames in the default master pages have padding that ensures musical material displayed within the frame remains on the page. For example, if music frames have no padding, the top line on the top staff in the frame is positioned at the top of the frame. Any notes that require ledger lines above the staff might then be positioned off the top of the page. You can change the padding of all music frames in each layout in **Layout Options**, and change the padding of individual music frames in Engrave mode using properties in the Properties panel.

Frame constraints are used to lock the edges of frames to edges of pages. This allows a single master page to be applied to layouts with different paper sizes and remain consistently proportioned.

RELATED LINKS

[Frame constraints](#) on page 340
[Master pages](#) on page 301
[Master page editor](#) on page 306
[Casting off](#) on page 355
[Tacets](#) on page 352
[Layouts](#) on page 120
[Flows](#) on page 117
[Players](#) on page 94

Changing page margins

You can change the page margins of each layout independently, for example, if you want wider margins for layouts in your project that will be spiral bound.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the page margins.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Page Setup** in the page list.
 4. In the **Page Margins** section, choose one of the following options for **Page margins**:
 - **Same**
 - **Different**
 - **Mirrored**
 5. Optional: Change the margins by changing the values in the value fields.
 6. Click **Apply**, then **Close**.
-

RESULT

The page margins in the selected layouts are changed. Any frames in the selected layouts with fixed constraints are automatically moved or resized as required.

RELATED LINKS

[Frame constraints](#) on page 340

Changing the page size and orientation

You can change the page size and orientation of each layout independently. For example, you can use a large, landscape page in full score layouts and a small, portrait page for part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the page size and/or orientation.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Page Setup** in the page list.
 4. In the **Page Size** section, select a page size from the **Size** menu.

For example, you can select fixed page sizes, such as **A3** or **Letter**, or select **Custom** to define your own page size.
 5. Optional: If you selected **Custom**, change the **Width** and **Height** of the page by changing the values in the value fields.
 6. Choose one of the following options for **Orientation**:
 - **Portrait**
 - **Landscape**
 7. Optional: Repeat steps 2 to 6 for other layouts whose page size/orientation you want to change.
 8. Click **Apply**, then **Close**.
-

RESULT

The page size is changed for all the selected layouts.

NOTE

Changing the page size of layouts might not change the paper size automatically selected for those layouts in the Print Options panel in Print mode. For example, if your default printer

cannot print the page size selected for layouts, the largest paper size the printer can handle is selected. Similarly, if you had already set options for printing layouts before changing the page size in **Layout Options**, Dorico Pro attempts to preserve your original print options.

Similarly, the page orientation is independent of the paper orientation. We recommend that you check that layouts have the correct paper orientation set for their page orientation in the Print Options panel in Print mode before printing/exporting, as it is possible to print landscape layouts on portrait paper and vice versa.

RELATED LINKS

[Page sizes and paper sizes](#) on page 482

[Paper orientation](#) on page 483

[Paper size and orientation setup](#) on page 483

[Changing the default staff/system spacing](#) on page 393

Starting layouts on left-hand pages

By default, all layouts start on a right-hand page, as convention dictates that odd numbered pages are always on the right-hand page. However, you can set individual layouts to start on a left-hand page, for example, to facilitate page turns better in that layout.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts you want to start on a left-hand page.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Page Setup** in the page list.
 4. In the **Page Numbers** section, change the value for **Initial page number** to an even number.
 5. Click **Apply**, then **Close**.
-

RESULT

The first page in the selected layouts is shown on a left-hand page when the initial page number is even.

Allowing/Disallowing multiple flows on the same page

You can allow/disallow new flows to be shown on the same page as previous flows if there is space, for example, to reduce the number of pages required for parts in works with multiple movements. By default, new flows are allowed on the same page in part layouts and are not allowed in full score layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to allow multiple flows to be shown on each page.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **New flows**:

- **Always start new page**
 - **Allow on existing page**
5. Click **Apply**, then **Close**.
-

RESULT

- When you choose **Always start new page**, flows in the selected layouts always begin at the start of the next page after the end of the previous flow.
- When you choose **Allow on existing page**, flows in the selected layouts continue immediately after each other, including within the same music frame if there is sufficient space. Flow headings are automatically shown above the start of flows if you have chosen to show flow headings in the selected layouts.

NOTE

Flows are not automatically split into separate music frames. You must insert frame breaks manually to divide flows into separate music frames if required.

RELATED LINKS

[Text tokens](#) on page 332

[Inputting frames](#) on page 322

[Casting off](#) on page 355

[Changing the flows assigned to layouts](#) on page 122

[Changing the players assigned to flows](#) on page 118

[Hiding/Showing information in running headers above flow headings](#) on page 348

Changing when the First master page is used

You can change the circumstances when the **First** master page is used in each layout independently, for example, if you want to use it for the start of every flow in the full score but only want to use it for the first flow in part layouts, even when subsequent flows start at the top of the page.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change when the **First** master page is used.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Page Setup** in the page list.
 4. In the **Flows** section, choose one of the following options for **Use 'First' master page**:
 - **Never**
 - **First flow only**
 - **Any flow starting at top of page**
 5. Click **Apply**, then **Close**.
-

RESULT

- Choosing **Never** means the **First** master page is not used for any page in the selected layouts.
- Choosing **First flow only** means the **First** master page is used for the first page in the layout but no other pages, even if some subsequent flows start at the top of a page.

- Choosing **Any flow starting at top of page** means the **First** master page is used for all pages in the layout that begin with the start of a flow.

RELATED LINKS

[Layout Options dialog](#) on page 90

Hiding/Showing flow headings

You can hide/show flow headings in each layout independently, for example, if your project only contains a single flow and you only want to show the project title. You can also hide the heading for the first flow but show flow headings for subsequent flows.

PREREQUISITE

You have allowed multiple flows on the same page in the layouts in which you want to show flow headings.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show flow headings. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **Show flow headings**:
 - **Never**
 - **Not for first flow**
 - **For all flows**
5. Click **Apply**, then **Close**.

RESULT

Flow headings are shown above the first system in each flow in the selected layouts when you choose **For all flows**, hidden when you choose **Never**, and hidden above the first system in the first flow but shown above all other flows when you choose **Not for first flow**.

They are automatically positioned above each flow and below the preceding flow according to the margins set for each layout.

RELATED LINKS

[Allowing/Disallowing multiple flows on the same page](#) on page 344

Changing the margins above/below flow headings

You can change the margins both above and below flow headings, which control the gap between the preceding flow and the flow heading, and the gap between the flow heading and the start of the next flow.

PREREQUISITE

Flow headings are shown in the layouts in which you want to change the margins above/below flow headings.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.

2. In the **Layouts** list, select the layouts in which you want to change the margins above/below flow headings.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Page Setup** in the page list.
 4. In the **Flows** section, change the values for **Flow heading top margin** and/or **Flow heading bottom margin**.
 5. Click **Apply**, then **Close**.
-

RESULT

Changing the value for **Flow heading top margin** increases/decreases the gap between the top of flow headings and the end of the preceding flow.

Changing the value for **Flow heading bottom margin** increases/decreases the gap between the bottom of flow headings and the start of the next flow. For example, when the bottom margin is set to 0, the bottom of the lowest frame in the flow heading aligns with the top staff line of the first system in the flow below the flow heading.

NOTE

- If you want to change the margins above/below an individual flow heading, you can do this by inserting a flow heading change and changing the margins at the change.
 - If you want to move individual flow headings upwards/downwards, you can do this by moving the system handle of the first system of the flow to which the flow headings apply. You can also move the frames in flow headings individually, but this creates a master page override, preventing Dorico Pro from updating the page if, for example, you later change the master page format.
-

EXAMPLE



The image shows a musical score with two systems. The first system is a flow heading in treble clef, 2/4 time, with a key signature of one sharp (F#). It contains a series of chords: a whole rest, a half note chord (F#4, C5), a half note chord (F#4, C5), a half note chord (F#4, C5), and a whole rest. The dynamic marking *ff* is placed below the first chord. The second system is a musical staff in treble clef, 4/4 time, with a key signature of one sharp. It begins with a 4-measure rest, followed by a melodic line starting on G4, moving up stepwise to B4, then down to A4, G4, F#4, E4, and ending on D4. The dynamic marking *p* is placed below the first note.

Flow heading with default margins above/below



This image is identical to the one on the left, showing the same musical score with a flow heading and a subsequent staff. The only difference is the vertical spacing between the two systems, which is significantly reduced compared to the first example.

Flow heading with decreased margins above/below

RELATED LINKS

[Inserting flow heading changes](#) on page 315

[Moving individual staves/systems vertically](#) on page 396

[Master page overrides](#) on page 308

Hiding/Showing information in running headers above flow headings

You can hide/show flow titles, page numbers, and flow page numbers separately when they appear above flow headings at the top of a new page in each layout independently. Hiding such information in running headers is a custom in publishing.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show information in running headers above flow headings.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Flows** section, choose one of the following options for **Flow title in header**:
 - **Show above flow heading**
 - **Hide above flow heading**
5. Choose one of the following options for **Page number in header**:
 - **Show above flow heading**
 - **Hide above flow heading**
6. Choose one of the following options for **Flow page number in header**:
 - **Show above flow heading**
 - **Hide above flow heading**
7. Click **Apply**, then **Close**.

RESULT

The corresponding information is hidden/shown when they appear above flow headings at the top of the page.

NOTE

In order to hide running header information, the top of the music frame containing the flow heading frame must be lower than the top of text frames containing the corresponding information. If the top of the music frame is the same height as a running header text frame, any corresponding information in the text frame is shown, regardless of your setting.

RELATED LINKS

[Frames](#) on page 322

[Master pages](#) on page 301

Changing the music frame margins in layouts

You can change the margins in all music frames in individual layouts, for example, if you want more padding at the top of music frames in part layouts containing lots of notes above the staff.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the music frame margins.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Page Setup** in the page list.
 4. In the **Music Frame Margins** section, change the values for **Top** and/or **Bottom**.
 5. Click **Apply**, then **Close**.
-

RESULT

The margins within all music frames in the selected layouts is changed.

RELATED LINKS

[Changing the default staff/system spacing](#) on page 393

Changing the padding in music frames individually

You can change the padding at the top/bottom of individual music frames, independently of your setting for music frame margins for the layout.

PREREQUISITE

Frames is selected in the Engrave toolbox.

PROCEDURE

1. Select the music frames whose padding you want to change.
 2. In the Properties panel, activate the following properties, individually or together, in the **Music** group:
 - **Top padding**
 - **Bottom padding**
 3. Change the padding by changing the values in the value fields.
For example, entering 0 for **Top padding** aligns the top staff line of the top staff in the frame with the top of the music frame.
-

RESULT

The padding at the top/bottom of the selected music frames is changed. This only applies to the layout currently open in the music area.

Deactivating the properties returns the selected music frames to your settings for music frame margins for the layout.

Changing the justification of final systems

By default in Dorico Pro, the final systems in flows only justify to the full width of the page when they are more than half full. You can change this setting in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the justification of the final systems in flows.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Note Spacing** in the page list.

4. Optional: If you want the final systems in flows to justify fully always, deactivate **Only justify final system in flow when more than [n]% full**.
 5. Optional: If you want to change the minimum fullness of final systems before they justify, change the value for **Only justify final system in flow when more than [n]% full**.
 6. Click **Apply**, then **Close**.
-

RESULT

The automatic justification of the final systems in flows in the selected layouts is changed.

TIP

You can also change the width of individual systems independently of your default settings by changing their start/end positions independently.

RELATED LINKS

[Changing the start/end position of systems](#) on page 390

Changing the vertical justification of staves/systems

You can change the minimum fullness threshold above which Dorico Pro automatically vertically justifies staves and systems, which means they are evenly distributed to fill the height of frames. You can also control whether staves and systems are both justified or only systems are justified.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the automatic vertical justification of staves/systems.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Vertical Spacing** in the page list.
 4. In the **Ideal Gaps** section, choose one of the following options for **Gap to use for divisi staves**:
 - **Staff to staff**
 - **Braced staff to braced staff**
 5. In the **Vertical Justification** section, change the values for the following options, individually or together:
 - **Justify distance between staves and systems when frame is at least [n]% full**
 - **Justify distance only between systems when frame is at least [n]% full**
 6. Activate/Deactivate **Justify staves when frame with single system is above this threshold**.
 7. Click **Apply**, then **Close**.
-

RESULT

The automatic vertical justification of staves and systems in the selected layouts is changed. Braced staves are never vertically justified.

EXAMPLE

A musical score page showing three systems of staves. Each system includes staves for Violin (Vn), Viola (Vc), Soprano (S), and Organ (Org). The staves are justified, meaning they are aligned to the right margin. The lyrics 'u - mor lan - te u - mor lan - te u - mor lan - te' are written below the Soprano staff.

A page with staves and systems both justified

The same musical score page as the first example, but with only the systems justified. The individual staves within each system are not aligned to the right margin.

The same page with only systems justified

RELATED LINKS

[Per-layout vertical spacing options](#) on page 393

[Changing the default staff/system spacing](#) on page 393

Hiding/Showing empty staves

You can hide/show empty staves differently in each layout in your project. For example, you can show all staves, including empty staves, in a full score layout for the conductor but hide empty staves in a full score layout intended for reference only.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show empty staves.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Vertical Spacing** in the page list.
4. In the **Hide Empty Staves** section, choose one of the following options for **Hide empty staves**:
 - **After first system**
 - **All systems**
 - **Never**
5. Activate/Deactivate **Allow individual staves of multi-staff instruments to be hidden**.
6. Optional: For **Players excluded from Hide Empty Staves**, activate the checkbox for each instrument you want to be shown regardless of your choice for **Hide empty staves**.
7. Click **Apply**, then **Close**.

RESULT

Empty staves in the selected layouts are hidden/shown according to your choice. If you activated **All individual staves of multi-staff instruments to be hidden**, any single empty staves in multi-staff instruments, such as piano or harp, can be hidden in the selected layouts.

NOTE

- Instruments that have extra staves added to them are not affected by **All individual staves of multi-staff instruments to be hidden**, even if some of their staves are empty.
- You cannot hide one staff of multi-staff instruments if you have chosen to show chord symbols between the staves, which you can do in the **Position** section of the **Chord Symbols** page in **Engrave > Engraving Options**.

RELATED LINKS

[Extra staves](#) on page 913

[Changing the default staff/system spacing](#) on page 393

[Per-layout vertical spacing options](#) on page 393

Tacets

Tacet is the indication used to show that a player does not play anything in an entire flow, which might be a movement in a symphony or cue in a film score. In Dorico Pro, you can generate tacets automatically.

Dorico Pro shows tacets for flows in part layouts when the following conditions are met:

- You have removed the player from the flows in which they do not play.
- The flows are assigned to the master page frame chain in the part layout.
- Multiple flows are allowed on the same page in the part layout.
- You have chosen to show tacets in the part layout.



2. Andante

Tacet

3. Menuetto

Allegretto

F. Hn in G 2

Musical notation for the Menuetto movement. It features a treble clef, a key signature of two flats (B-flat and E-flat), and a 3/4 time signature. The notation includes a first flow starting with a quarter rest, followed by a dotted half note G4, and a second flow starting with a quarter note G4, a quarter note F4, a quarter note E4, a quarter rest, a quarter note D4, a quarter note C4, and a quarter note B3. A forte (f) dynamic marking is placed below the first flow. The staff ends with a double bar line.

An extract of a part layout where the player is tacet in the second flow

In Engrave mode, tacets behave like systems, meaning they have their own staff spacing handle when **Staff Spacing** is activated. This allows you to move individual tacets and their flow headings upwards/downwards. You can also insert system and frame breaks at the start of tacets.

NOTE

We do not recommend that you use **Copy Staff Spacing** and **Lock Frame** on pages where tacets are the first or last system in frames. Because tacets do not contain any bars, Dorico Pro cannot insert system or frame breaks at the ends of tacets in order to lock the frame contents.

You can change the text shown in tacets and the margin above/below them in each layout independently.

You can further customize the project-wide appearance and design of tacets on the **Tacets** page in **Engrave > Engraving Options**, and by formatting the **Tacet** paragraph style in **Engrave > Paragraph Styles**.

RELATED LINKS

[Changing the players assigned to flows](#) on page 118

[Assigning flows to frame chains](#) on page 330

[Allowing/Disallowing multiple flows on the same page](#) on page 344

[Staff spacing](#) on page 391

[Inserting system breaks](#) on page 359

[Inserting frame breaks](#) on page 357

[Paragraph Styles dialog](#) on page 366

[Engraving Options dialog](#) on page 299

[Flow headings](#) on page 318

Hiding/Showing tacets

You can hide/show tacets in each layout independently, for example, if you want to show empty bars or multi-bar rests in some layouts to allow those players to add in notes on those staves later.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show tacets.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Players** in the page list.
 4. In the **Tacets** section, activate/deactivate **Show tacet for flows where no players are assigned**.
 5. Click **Apply**, then **Close**.
-

RESULT

Tacets are shown in the selected layouts when **Show tacet for flows where no players are assigned** is activated and the player is not assigned to the flows in which they do not play.

When it is deactivated, any flows to which the player is not assigned do not appear in the layout.

When the player is assigned to those flows, all bars in the flow are shown in the part, split into empty bars and multi-bar rests as appropriate for the flow.

TIP

If your project contains many short flows, which appear in part layouts as a single multi-bar rest labelled "Tacet", showing all the bars separately can help make the length of flows clearer. You can do this by increasing the value for **Minimum number of bars in flow to show 'Tacet'** on the **Rests** page in **Engrave > Engraving Options**.

RELATED LINKS

[Tacets](#) on page 352

[Multi-bar rests](#) on page 864

[Changing the players assigned to flows](#) on page 118

[Hiding/Showing multi-bar rests](#) on page 865

Changing the text shown in tacets

You can change the text shown in tacets in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the tacet text shown. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Tacets** section, enter the text you want in the **Tacet text** field.
5. Click **Apply**, then **Close**.

RESULT

The text shown in all tacets in the selected layouts is changed.

TIP

You can change the default padding to the right/left of tacets, show them with/without a border, and change their border thickness project-wide on the **Tacets** page in **Engrave > Engraving Options**.

Changing the margins above/below tacets

You can change the margins both above/below tacets in each layout independently, for example, if you want smaller gaps between flow headings and tacets in some layouts to facilitate page turns better.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the margins above/below tacets. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Tacets** section, change the values for **Margin above tacet** and/or **Margin below tacet**.
5. Click **Apply**, then **Close**.

RESULT

Changing the value for **Margin above tacet** increases/decreases the minimum gap between tacets and whatever precedes them.

Changing the value for **Margin below tacet** increases/decreases the minimum gap between tacets and whatever follows them.

TIP

You can change the default padding to the right/left of tacets, show them with/without a border, and change their border thickness project-wide on the **Tacets** page in **Engrave > Engraving Options**.

RELATED LINKS

[Flow headings](#) on page 318

Casting off

“Casting off” is the term used to encompass fixing the layout of pages of music, such as setting the number of systems per page. In Dorico Pro, you can fix both the number of bars per system and the number of systems per music frame for each layout independently.

RELATED LINKS

[Per-layout vertical spacing options](#) on page 393

Fixing the number of bars per system

You can define a fixed number of bars you want included in each system in each layout in your project.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to fix the number of bars per system.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Casting Off** section, activate **Fixed number of bars per system**.
 5. Change the number of bars you want in each system by changing the value in the value field.
 6. Click **Apply**, then **Close**.
-

RESULT

The number of bars automatically contained in each system in the selected layouts is changed. If any of the layouts contain two-bar or four-bar repeat regions, Dorico Pro automatically adjusts casting off to ensure phrases are not split across systems.

RELATED LINKS

[Bar repeats](#) on page 839

[Inserting system breaks](#) on page 359

[Inserting frame breaks](#) on page 357

Fixing the number of systems per frame

You can define a fixed number of systems you want included in each music frame in each layout in your project. Because the default master pages have a single music frame per page, fixing the number of systems per frame usually fixes the number of systems per page.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to fix the number of systems per frame.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Casting Off** section, activate **Fixed number of systems per frame**.
 5. Change the number of systems you want in each frame by changing the value in the value field.
 6. Activate/Deactivate **Scale number of systems by frame height**.
 7. Click **Apply**, then **Close**.
-

RESULT

The number of systems automatically contained in each music frame in the selected layouts is changed.

If you activated **Scale number of systems by frame height**, the number of systems contained in each frame is adjusted according to the size of the music frame.

Frame breaks

In Dorico Pro, you can use frame breaks to push musical material into the next frame, which is usually on the next page, meaning you can use frame breaks to create page breaks. For example, you can use frame breaks to insert page turns at specific positions in part layouts.

Frame breaks are indicated by signposts, which you can hide/show at any time.

NOTE

- Frame breaks at the start of frames that were created using **Make into Frame** have **Wait for next frame break** activated in the **Format** group of the Properties panel by default. When this property is activated, Dorico Pro creates a frame containing all material between that frame break and the next frame break. If you later delete subsequent frame breaks, this creates very full frames with tightly spaced, or overlapping, systems. For example, if you delete all subsequent frame breaks, all music until the end of the flow is forced into a single frame.
 - You can also control the content of music frames by fixing the number of systems per music frame in each layout.
-

RELATED LINKS

[Per-layout vertical spacing options](#) on page 393

Inserting frame breaks

You can insert frame breaks that allow you to create page turns in particular places in your music.

PROCEDURE

1. Select a note or item at the rhythmic position where you want to insert a frame break.
For example, if you select a clef, the clef is placed at the end of the frame, and the notes are moved to the start of the next music frame.
2. Press **Shift-F**.

RESULT

A frame break is inserted immediately before the rhythmic position of the earliest selected item. All notations after the frame break are moved to the next music frame.

NOTE

If you insert a frame break in the middle of a phrase in a two-bar or four-bar repeat region, Dorico Pro does not automatically move the frame break to before/after the phrase, causing it to be split across the frame break.

RELATED LINKS

[Engrave toolbox](#) on page 291

Making selections into frames

You can make frames that contain all musical material between two selected rhythmic positions.

PROCEDURE

1. Select an item at the rhythmic position that you want to be the start of the frame.

NOTE

We recommend that you select noteheads or barlines. Selecting other items, such as slurs, can cause frame breaks to be inserted earlier/later than you might have intended.

2. **Ctrl/Cmd**-click one of the following:
 - A notehead that you want to be at the end of the frame
 - An item that you want to be at the start of the next frame
3. In the Engrave toolbox, click **Graphic Editing** to show the Formatting panel.
4. In the **Format Music Frames** section, click **Make into Frame**.



RESULT

A fixed frame is created by inserting frame breaks at the start/end of your selection. The frame contains all musical material between the two selected items.

- If you selected items, such as barlines or slurs, the beginning your first selected item is positioned at the start of the frame and the end of your last selected item is positioned at the start of the next frame.
- If you selected noteheads, the last selected notehead is also included in the frame, rather than being positioned at the start of the next frame.

- If you selected ties, all musical material between the first and last notes tie chains is included in the frame, regardless of where in the tie chains you made selections.

NOTE

The frame break inserted at the start of the selection has **Wait for next frame break** activated in the **Format** group of the Properties panel by default. Because this property tells Dorico Pro to include all music in the frame until the next frame break, if you later delete subsequent frame breaks, this can create very full frames with tightly spaced, or overlapping, systems.

Deactivating **Wait for next frame break** allows Dorico Pro to cast off subsequent music as normal.

RELATED LINKS

[Engrave toolbox](#) on page 291

Hiding/Showing frame break signposts

You can hide/show frame break signposts at any time.

PROCEDURE

- Choose **View > Signposts > Frame Breaks**.
-

RESULT

Frame break signposts are shown when a tick appears beside **Frame Breaks** in the menu, and hidden when no tick appears.

Deleting frame breaks

You can delete frame breaks after you have inserted them.

PREREQUISITE

Frame break signposts are shown.

PROCEDURE

1. Select the frame break signposts of the frame breaks you want to delete.
 2. Press **Backspace** or **Delete**.
-

System breaks

System breaks are where musical material must be split across multiple systems or pages in order to fit on the required paper. Dorico Pro automatically arranges music across systems so that notes are correctly spaced and legible, but you can also control system breaks manually.

System breaks are indicated by signposts, which you can hide/show at any time.

NOTE

- System breaks at the start of systems that were created using **Make into System** have **Wait for next system break** activated in the **Format** group of the Properties panel by default. When this property is activated, Dorico Pro creates a system containing all material between that system break and the next system break or the end of the flow, whichever comes first. If you later delete subsequent system breaks, this creates very full, tightly spaced systems. For example, if you delete all subsequent system breaks, all music until the end of the flow is forced into a single system.

- You can also control the content of systems by fixing the number of bars per system in each layout.
-

RELATED LINKS

[Fixing the number of bars per system](#) on page 355

[Per-layout vertical spacing options](#) on page 393

Inserting system breaks

You can insert system breaks at any rhythmic position.

PROCEDURE

1. Select a note or item at the rhythmic position where you want to insert a system break. For example, if you select a clef, the clef is placed at the end of the system, and the notes are moved to the start of the next system.
 2. Press **Shift-S**.
-

RESULT

A system break is inserted immediately before the rhythmic position of the earliest selected item. All notations after the system break are moved to the next system.

NOTE

If you insert a system break in the middle of a phrase in a two-bar or four-bar repeat region, Dorico Pro does not automatically move the system break to before/after the phrase, causing it to be split across the system break.

RELATED LINKS

[Engrave toolbox](#) on page 291

Making selections into systems

You can make systems that contain all musical material between two selected rhythmic positions.

PROCEDURE

1. Select an item at the rhythmic position that you want to be the start of the system.

NOTE

We recommend that you select noteheads or barlines. Selecting other items, such as slurs, can cause system breaks to be inserted earlier/later than you might have intended.

2. **Ctrl/Cmd**-click one of the following:
 - A notehead that you want to be at the end of the system
 - An item that you want to be at the start of the next system
3. In the Engrave toolbox, click **Graphic Editing** to show the Formatting panel.
4. In the **Format Systems** section, click **Make into System**.



RESULT

A fixed system is created by inserting system breaks at the start/end of your selection. The system contains all musical material between the two selected items.

- If you selected items, such as barlines or slurs, the start of your first selected item is positioned at the start of the system and the end of your last selected item is positioned at the start of the next system.
- If you selected noteheads, the last selected notehead is also included in the system, rather than being positioned at the start of the next system.
- If you selected ties, all musical material between the first and last notes tie chains is included in the system, regardless of where in the tie chains you made selections.

NOTE

The system break inserted at the start of the selection has **Wait for next system break** activated in the **Format** group of the Properties panel by default. Because this property tells Dorico Pro to include all music in the system until the next system break or the end of the flow, if you later delete subsequent system breaks, this can create very full, tightly spaced systems.

Deactivating **Wait for next system break** allows Dorico Pro to cast off subsequent music as normal.

RELATED LINKS

[Engrave toolbox](#) on page 291

Hiding/Showing system break signposts

You can hide/show system break signposts at any time.

PROCEDURE

- Choose **View > Signposts > System Breaks**.
-

RESULT

System break signposts are shown when a tick appears beside **System Breaks** in the menu, and hidden when no tick appears.

Deleting system breaks

You can delete system breaks after you have inserted them.

PREREQUISITE

System break signposts are shown.

PROCEDURE

1. Select the system break signposts of the system breaks you want to delete.
 2. Press **Backspace** or **Delete**.
-

Part formatting propagation

The propagation of part formatting involves copying the layout options and system formatting that determine the layouts of pages and applying them to other layouts. This can save time when formatting similar parts.

System formatting includes the positions of system and frame breaks, but also note spacing changes that affect the horizontal space that notes require.

In Dorico Pro, you can copy layout options and system formatting both together and independently of each other from a selected source layout to other destination layouts. For example, for source layouts whose formatting relies primarily on their **Casting Off** settings in

Setup > Layout Options, it is likely that copying only their layout options is sufficient to produce the required formatting in the destination layouts without adding system/frame breaks on every system.

You can also copy the layout-specific property settings from the layout currently open in the music area to all other layouts in which those items appear.

NOTE

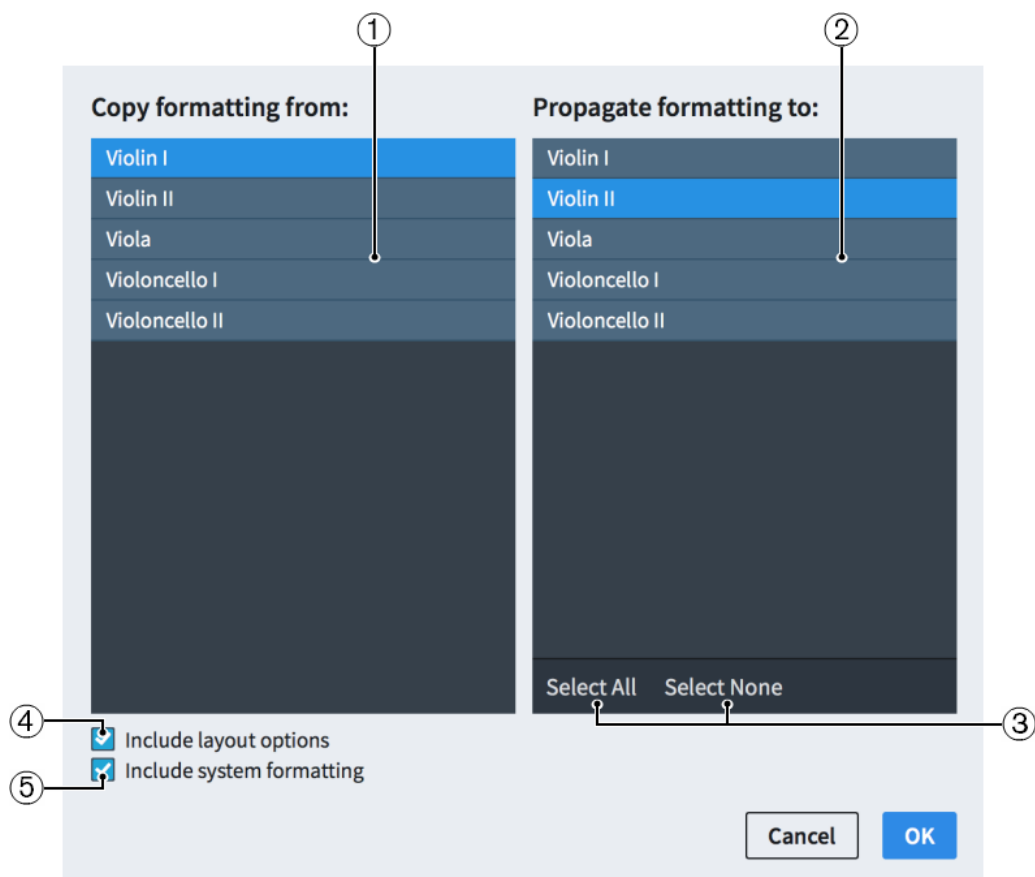
- We do not recommend using layouts with multiple music frame chains as either source or destination layouts as you can get unexpected results.
- Propagating part formatting does not include overrides to individual pages made in Engrave mode.

Propagate Part Formatting dialog

The **Propagate Part Formatting** dialog allows you to copy the page formatting and layout options from a source layout to destination layouts.

You can open the **Propagate Part Formatting** dialog in Setup mode in any of the following ways:

- Right-click a layout in the **Layouts** panel and choose **Propagate Part Formatting** from the context menu. This automatically selects that layout as the source layout in the **Copy formatting from** list.
- Choose **Setup > Propagate Part Formatting**.



Propagate Part Formatting dialog

The **Propagate Part Formatting** dialog contains the following sections and options:

1 Copy formatting from list

Contains a list of all the layouts in the project. You can only select a single layout as the source layout.

2 Propagate formatting to list

Contains a list of all the layouts in the project. You can select multiple layouts as destination layouts.

3 Selection options

Allow you to select/deselect all the layouts in the **Propagate formatting to list**.

4 Include layout options

Allows you to copy layout options relating to part formatting from the source layout to the destination layouts. These options include page size, page margins, the default master page set, space size, vertical spacing, note spacing, casting off, multi-bar rest settings, and staff labels.

5 Include system formatting

Allows you to copy the distribution of bars in systems, systems on pages, and note spacing changes from the source layout to the destination layouts. Dorico Pro achieves this by copying system breaks, frame breaks, and note spacing changes, inputting additional system and frame breaks as required, and deleting any existing system breaks, frame breaks, and note spacing changes in the destination layouts.

Copying part formatting to other layouts

You can copy all the formatting from one layout to other layouts, for example, to save time if multiple part layouts in your project require similar formatting. You can include layout options, such as page size and margins, and other page formatting, such as system and frame breaks.

NOTE

We do not recommend using layouts with multiple music frame chains as either source or destination layouts as you can get unexpected results.

PROCEDURE

1. In the **Layouts** panel in Setup mode, right-click the card of the layout whose part formatting you want to copy and choose **Propagate Part Formatting** from the context menu.
 2. In the **Propagate Part Formatting** dialog, select the layout whose part formatting you want to copy in the **Copy formatting from** list.
By default, the layout whose card you used to open the dialog is selected.
 3. In the **Propagate formatting to** list, select the layouts to which you want to copy part formatting.
You can use the selection options in the action bar, **Shift**-click adjacent layouts, and **Ctrl/Cmd**-click individual layouts.
 4. Activate/Deactivate **Include layout options**.
 5. Activate/Deactivate **Include system formatting**.
 6. Click **OK** to copy part formatting to the selected layouts and close the dialog.
-

RESULT

Part formatting from the selected source layout is copied to the selected destination layouts. However, overrides to individual pages made in Engrave mode are not propagated.

- If you activated **Include layout options**, layout options are copied from the source layout to the destination layouts.

- If you activated **Include system formatting**, Dorico Pro copies the distribution of bars in systems, systems on pages, and note spacing changes from the source layout to the destination layouts.

TIP

If the formatting of the source layout relies primarily on its **Casting Off** settings in **Setup > Layout Options**, it is likely that only activating **Include layout options** is sufficient to produce very similar formatting in the destination layouts without adding system/frame breaks on every system.

Copying property settings to other layouts

Many properties are layout-specific, meaning they only affect the layout currently open in the music area by default. You can copy the properties set on notes and items to all other layouts in which they appear, for example, to show gradual dynamics with the same style in part layouts after changing their style in the full score layout.

PROCEDURE

1. Select the notes or items whose properties you want to copy to other layouts. You can do this in Write mode and Engrave mode.

NOTE

The mode you are in determines which properties are copied. For example, if you are in Write mode, only properties available in Write mode are copied.

2. Choose **Edit > Propagate Properties**.
-

RESULT

All properties set on the selected notes/items that are available in the current mode are copied to all layouts in which those notes/items appear. For example, if you selected slurs in Write mode, their staff-relative placement and design settings are copied. If you selected them in Engrave mode, their slur end and control point positions are also copied.

RELATED LINKS

- [Large selections](#) on page 274
- [Resetting the appearance of items](#) on page 281
- [Resetting the position of items](#) on page 281

Text formatting

Dorico Pro combines different settings for the appearance of text, meaning that you can format fonts and texts in different places depending on their function.

For example, you can change the font family used for all text in your project in the **Edit Font Styles** dialog, and then make specific changes for when that font is used for titles in the **Paragraph Styles** dialog.

Paragraph styles apply to whole text frames or all text within a single text object. Character styles apply to individual selections, meaning you can apply different character styles to each word within the same text frame.

Font styles apply to items that use text but are not text frames or text objects, such as tempo marks and dynamics.

RELATED LINKS

- [Paragraph Styles dialog](#) on page 366

[Character Styles dialog on page 369](#)

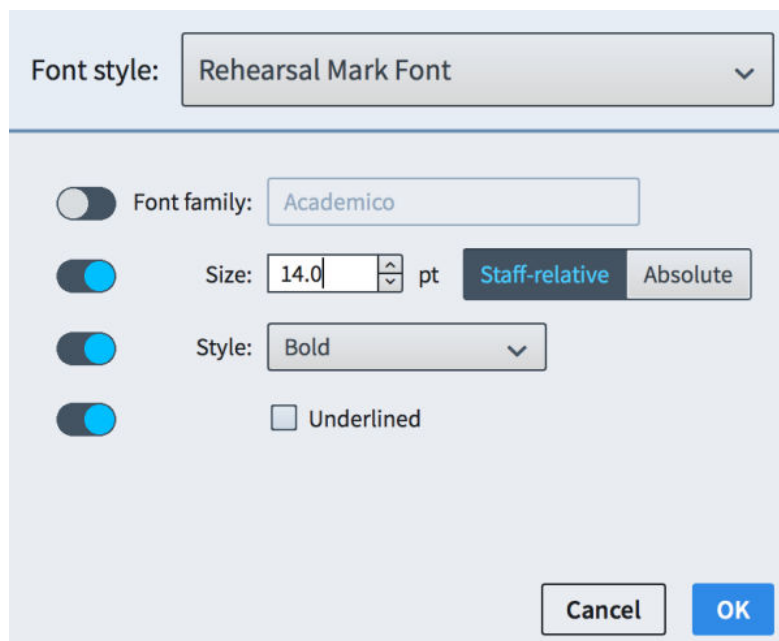
[Text editor options in Engrave mode on page 371](#)

Edit Font Styles dialog

The **Edit Font Styles** dialog allows you to change certain aspects of fonts used for items that you cannot edit using the text editor, such as changing the font size of rehearsal marks.

- You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave > Font Styles**.

The **Edit Font Styles** dialog contains fonts that are used in Dorico Pro that you cannot edit directly in the music area, unlike text in text frames, which you can edit using the text editor.



Edit Font Styles dialog

Font style

Allows you to select different font styles in order to change aspects of the font. If you have previously opened the **Edit Font Styles** dialog in the same session, your previously selected font style is remembered.

Font family

Sets the overall font style.

Size

Sets the size of the font.

Staff-relative/Absolute

Allows you to choose whether the size of the font changes according to the staff size of the layout or whether it is always the set size.

Style

Sets the appearance of the font from the following options:

- **Regular**
- **Italic**
- **Bold**
- **Bold Italic**

Underlined

Fonts appear underlined when **Underlined** and the corresponding checkbox are both activated.

NOTE

- These options must be activated before you can change them.
 - Changes made to font styles apply project-wide, including in part layouts.
 - If you cannot find a particular font style, it might instead be a paragraph style.
-

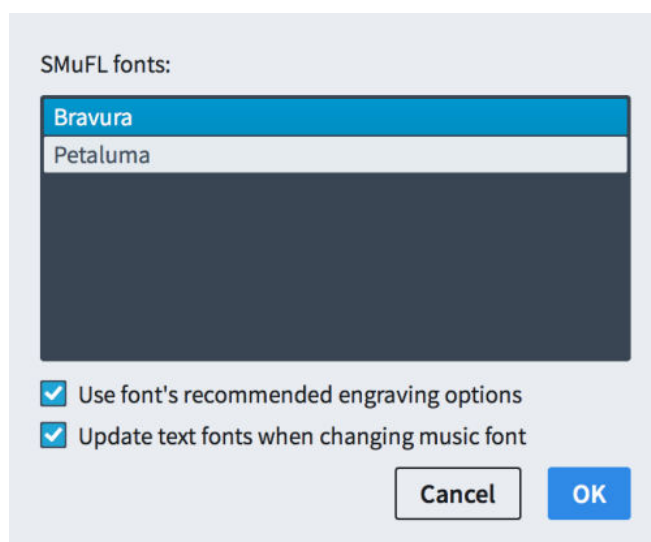
RELATED LINKS

[Paragraph Styles dialog](#) on page 366

Music Fonts dialog

The **Music Fonts** dialog allows you to change the font used for notations and glyphs project-wide. Any font you use for notations and glyphs must be SMuFL-compliant.

- You can open the **Music Fonts** dialog in Engrave mode by choosing **Engrave > Music Fonts**.



Music Fonts dialog

The dialog contains all available SMuFL fonts you have installed on your computer that have the appropriate metadata for Dorico Pro to recognize them. By default, Dorico Pro comes with the following SMuFL-compliant fonts:

- **Bravura**
The default music font, inspired by traditional classical music engraving.
- **Petaluma**
Handwritten music font style, similar to the traditional style used for jazz music.

Changing the music font used in the **Music Fonts** dialog changes the fonts used for notations, glyphs, and other items that are not text, such as clefs, dynamics, and bold tuplet numbers/ratios.

TIP

You can change the fonts used for these items individually by changing the **Default Text Font** style in the **Edit Font Styles** dialog, and the **Default Text** paragraph style in the **Paragraph Styles** dialog.

The **Music Fonts** dialog also contains the following options:

Use font's recommended engraving options

Allows you to import the default settings that come with the font.

Update text fonts when changing music fonts

Allows you to include/exclude text fonts when changing the music font. For example, deactivating this option allows you to change the appearance of notes and notations without affecting the appearance of flow titles and staff labels.

- For the Bravura music font, the equivalent text font is Academico.
- For the Petaluma music font, the equivalent text font is Petaluma Script.

NOTE

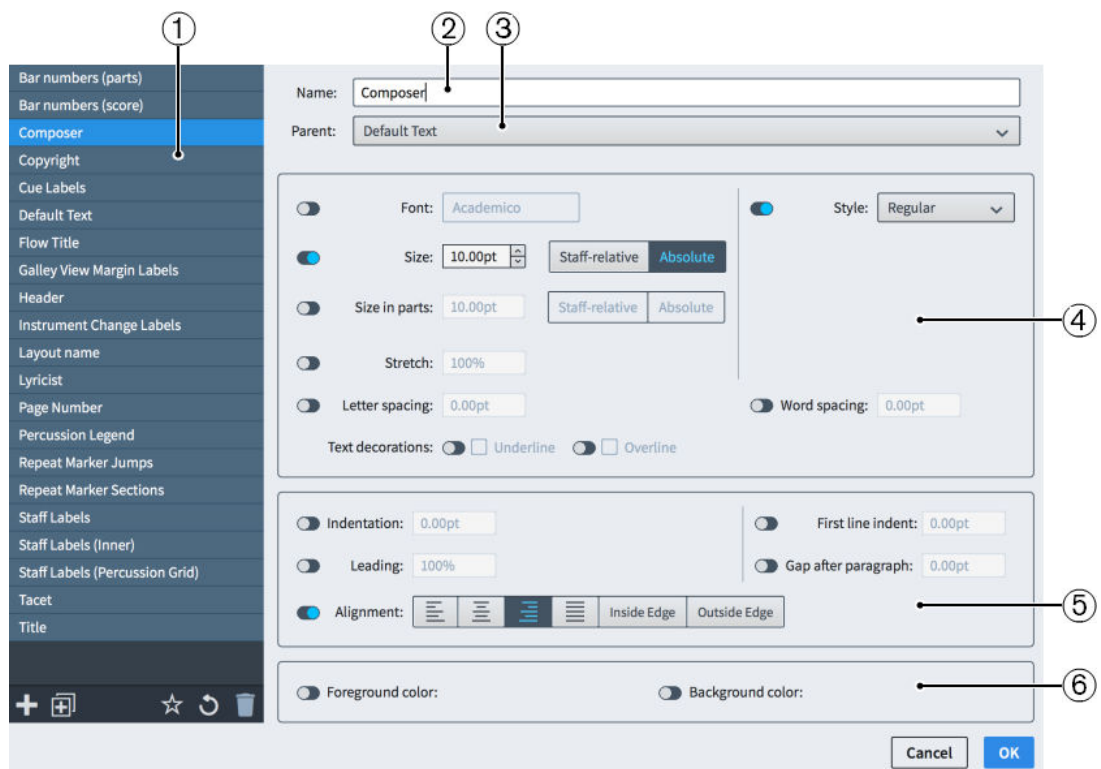
Certain items that are marked as optional in SMuFL fonts, such as clef changes and non-bold tuplet numbers/ratios, are not affected when you change the music font.

Paragraph Styles dialog

The **Paragraph Styles** dialog allows you to change paragraph styles for text and create new styles. You can later use different paragraph styles in different places in your project by choosing them in the text editor.

For example, you can customize the paragraph style for layout names and then apply your layout name paragraph style to every text frame in which you show layout names. This allows you to keep the presentation of different types consistent across your project.

- You can open the **Paragraph Styles** dialog in Engrave mode by choosing **Engrave > Paragraph Styles**.



Paragraph Styles dialog

The **Paragraph Styles** dialog contains the following sections and options:

1 Paragraph styles list

Contains all the paragraph styles in the project. If you had text items selected when you opened the dialog, the corresponding paragraph style of the first selected item is selected in the paragraph styles list by default.

The action bar at the bottom of the list contains the following options:

- **New**



Allows you to create a new paragraph style with default values.

- **New from Selection**



Creates a new style based on the selected one. Initially no values are overridden but you can change options for your new style.

- **Save as Default**



Copies the selected style to your library so that it is available in other projects.

- **Revert to Factory**



Removes all your changes to the selected predefined paragraph styles, reverting them to the default factory settings.

- **Delete**



Deletes the selected style.

NOTE

You cannot delete predefined paragraph styles or any paragraph style that is currently used in your project.

2 Name

Allows you to enter a name for new paragraph styles or edit the name of existing paragraph styles.

3 Parent

Allows you to choose a parent paragraph style from which the selected paragraph style inherits settings.

4 Font appearance options

Allow you to change parameters of the appearance of the paragraph style font, such as changing the font, making the font bold, changing the size of the font, and changing the letter or word spacing. You can also make the font in paragraph styles appear underlined or overlined.

5 Paragraph layout options

Allow you to change the layout of the paragraph style, such as indenting the first line in each paragraph and changing the alignment of text.

6 Color options

Allow you to change the foreground and background colors of the paragraph style.

Creating paragraph styles

You can create new paragraph styles that you can use in your project, for example, to format text consistently in multiple text frames. You can also create new paragraph styles based on existing ones.

PROCEDURE

1. In Engrave mode, choose **Engrave > Paragraph Styles** to open the **Paragraph Styles** dialog.
2. Create a new paragraph style in one of the following ways:
 - To create an entirely new paragraph style, click **New**.
 - To create a new paragraph style based on an existing one, select the existing paragraph style in the styles list and click **New From Selection**.
3. Enter a name for the style in the **Name** field.
4. Optional: Select one of the available styles from the **Parent** menu.

NOTE

If you select a parent style, your paragraph style inherits its settings automatically for all options with deactivated sliders. If your paragraph style has activated sliders, which override its parent style settings, you can deactivate them to reset those options to follow the parent style.

-
5. Activate and change the options as required.
 6. Click **OK** to save your changes and close the dialog.
-

Changing the default horizontal alignment of text styles

You can change the default horizontal alignment of the paragraph styles used for different types of text. This changes the horizontal alignment of the corresponding text style project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave > Paragraph Styles** to open the **Paragraph Styles** dialog.
2. In the paragraph style list, select the text style whose default alignment you want to change.
3. Choose the **Alignment** option you want.
4. Optional: Repeat steps 2 and 3 for other paragraph styles whose horizontal alignment you want to change.
5. Click **OK** to save your changes and close the dialog.

RESULT

The default alignment of the selected text style is changed.

TIP

You can also override the horizontal alignment of text in individual text frames.

RELATED LINKS

[Changing the horizontal alignment of text in text frames](#) on page 339

Deleting paragraph styles

You can delete paragraph styles you have created. However, you cannot delete any of the default paragraph styles.

PROCEDURE

1. In Engrave mode, choose **Engrave > Paragraph Styles** to open the **Paragraph Styles** dialog.
2. In the paragraph style list, select the style that you want to delete.

NOTE

You cannot delete any of the default paragraph styles.

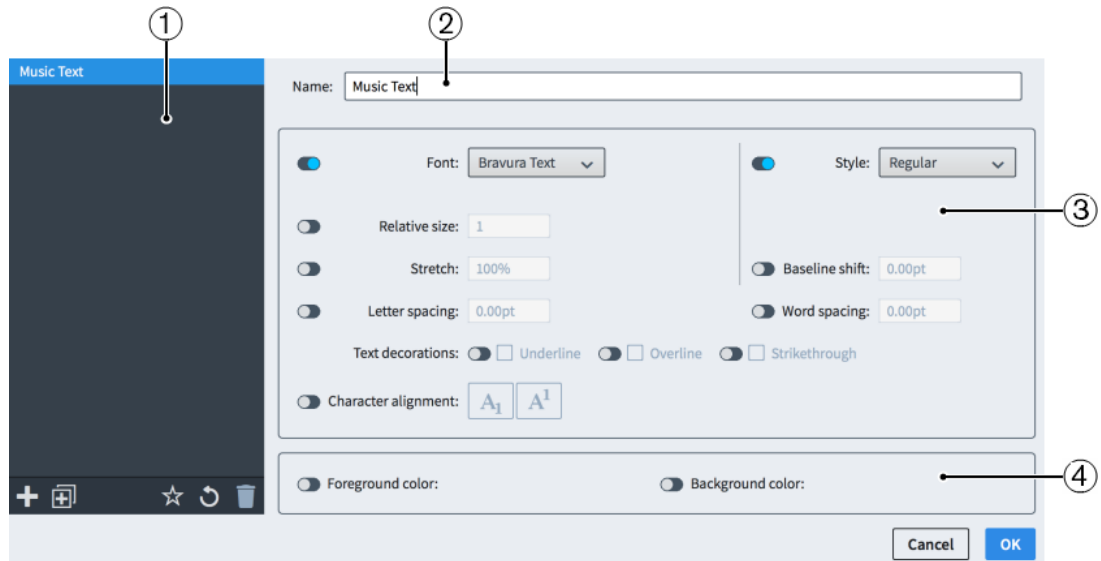
3. Click **Delete**.
4. Click **OK** to save your changes and close the dialog.

Character Styles dialog

The **Character Styles** dialog allows you to change character styles and create new styles. You can later apply character styles to individual letters or words in different places in your project by choosing them in the text editor.

For example, you can create a custom character style with wide letter spacing for specific words and then apply that character style to selected words. Unlike paragraph styles, character styles do not have to apply to whole text frames or text objects.

- You can open the **Character Styles** dialog in Engrave mode by choosing **Engrave > Character Styles**.



Character Styles dialog

The **Character Styles** dialog contains the following sections and options:





1 Character styles list

Contains all the character styles in the project.

The action bar at the bottom of the list contains the following options:

- **New**



- Allows you to create a new character style with default values.
- **New from Selection**

Creates a new style based on the selected one. Initially no values are overridden but you can change options for your new style.
 - **Save as Default**

Copies the selected style to your library so that it is available in other projects.
 - **Revert to Factory**

Removes all your changes to the selected predefined character styles, reverting them to the default factory settings.
 - **Delete**

Deletes the selected style.

NOTE

You cannot delete predefined character styles or any character style that is currently used in your project.

2 Name

Allows you to enter a name for new character styles or edit the name of existing paragraph styles.

3 Character style options

Allow you to change parameters of the character style, such as changing the font, making the font bold, changing the size of the font, and changing the letter or word spacing. You can also make the font in paragraph styles appear underlined or overlined, and change the vertical alignment of characters.

4 Color options

Allow you to change the foreground and background colors of the character style.

Creating character styles

You can create new character styles, both entirely new character styles and character styles based on existed ones.

PROCEDURE

1. In Engrave mode, choose **Engrave > Character Styles** to open the **Character Styles** dialog.
2. Create a new character style in one of the following ways:
 - To create an entirely new character style, click **New**.
 - To create a new character style based on an existing one, select the existing character style in the styles list and click **New From Selection**.
3. Enter a name for the style in the **Name** field.
4. Activate and change the options as required.

IMPORTANT

Only activated options have an effect on the text. If you deactivate options, their settings are reset.

5. Click **OK** to save your changes and close the dialog.

Deleting character styles

You can delete character styles.

PROCEDURE

1. In Engrave mode, choose **Engrave > Character Styles** to open the **Character Styles** dialog.
2. Select the style that you want to delete in the styles list.
3. Click **Delete**.
4. Click **OK** to save your changes and close the dialog.

Text objects vs. text in text frames

Text in Dorico Pro can exist as a text object, added to individual staves or as system text, and in text frames, which are fixed to the page rather than the music.

You can edit both types of text in the same ways, but you can only use text tokens in text frames. You cannot use tokens in text added to staves/systems.

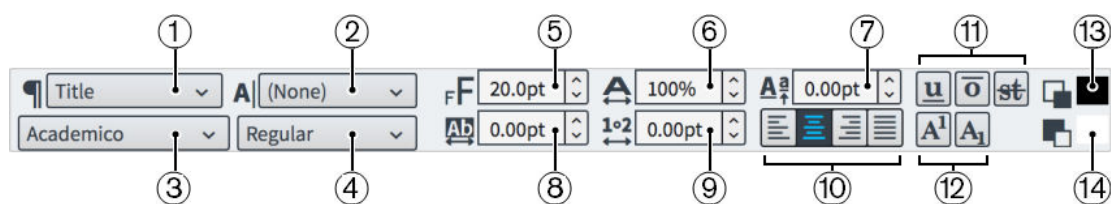
RELATED LINKS

[Text tokens](#) on page 332

[Text editor options in Engrave mode](#) on page 371

Text editor options in Engrave mode

The text editor allows you to add and format text. In Engrave mode, it opens when you enter or edit text in a text frame.



Text editor in Engrave mode

The text editor provides the following options:

- 1 **Paragraph Style**
Allows you to change the paragraph style applied to the whole paragraph, which can change the appearance, formatting, and alignment of the text.
Staff text and system text are always treated as single paragraphs.
- 2 **Character Style**
Allows you to change the appearance of selected text within paragraphs. This overrides the paragraph style applied to the corresponding paragraph.
- 3 **Font**
Allows you to change the font family of selected text.

- 4 Font Style**
Allows you to change the font style of selected text.
- 5 Font Size**
Allows you to change the size of selected text.
- 6 Font Stretch**
Allows you to make selected text wider or narrower.
- 7 Baseline Shift**
Allows you to shift the baseline of selected text gradually up or down.
- 8 Letter Spacing**
Allows you to increase/decrease the space between the characters of selected text.
- 9 Word Spacing**
Allows you to increase/decrease the space between the words of selected text.
- 10 Alignment**
Allows you to choose the alignment of selected text relative to the rhythmic position of the text in the score. For text in a text frame, the text is aligned along the left margin of a text frame.
You can choose from the following alignments:
 - **Align Left**
 - **Align Center**
 - **Align Right**
 - **Justify**
- 11 Line Types**
Allows you to show any of the following types of lines, in any combination, on selected text:
 - **Underline**
 - **Overline**
 - **Strikethrough**
- 12 Script Types**
Allows you to position selected text in one of the following positions relative to the text on the baseline:
 - **Superscript**
 - **Subscript**
- 13 Foreground Color**
Allows you to change the color of selected text.
- 14 Background Color**
Allows you to change the background color of selected text.

RELATED LINKS

- [Inputting text](#) on page 265
- [Entering text in text frames](#) on page 337
- [Paragraph Styles dialog](#) on page 366
- [Character Styles dialog](#) on page 369

Changing the paragraph style of text

You can change the paragraph style that is applied to text added to staves and within individual text frames, including on master pages. For example, if you want to use one paragraph style for page numbers in full score layouts and another for page numbers in part layouts.

PREREQUISITE

If you want to use a different paragraph style to the ones provided by default, you have created a new paragraph style.

PROCEDURE

1. Optional: If you want to change the paragraph style of text on a master page, open the master page editor.
2. Double-click the text frame whose paragraph style you want to change to open the text editor.
3. Select the text whose paragraph style you want to change.

TIP

You can apply different paragraph styles to separate paragraphs in the same text frame.

-
4. Select a paragraph style from the paragraph style menu in the text editor.
 5. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.

RESULT

The paragraph style of the selected paragraphs is changed. For example, if you select a single word, the whole paragraph containing that word is changed.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

[Creating paragraph styles](#) on page 368

Paragraph style overrides

If you override the paragraph style of text within text frames on individual pages, such as changing the size of text in a text frame but not changing the size of its paragraph style, any changes you later make to the paragraph style are not applied to the overridden text.

You can reset the changes you made to revert individual pages back to the master page format. However, this removes all changes made to those pages.

NOTE

You cannot reset changes made to text in text frames on master pages.

RELATED LINKS

[Removing master page overrides](#) on page 309

Moving text objects graphically

In Engrave mode, you can move text objects that you input in Write mode without changing the rhythmic positions to which they are attached. You can move both staff text and system text,

including moving individual instances of system text independently of other instances shown at different staff positions.

NOTE

This does not apply to text in text frames.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. Select the text objects that you want to move.
2. Move the text objects in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected text objects are moved to new positions.

TIP

Offset in the **Common** group of the Properties panel is activated automatically when you move text objects.

- **Offset X** moves text objects horizontally.
- **Offset Y** moves text objects vertically.

You can also use this property to move text objects by changing the values in the value fields.

Deactivating the property resets the selected items to their default position.

RELATED LINKS

[Text editor options in Engrave mode](#) on page 371

[Moving frames](#) on page 323

Changing the placement of text objects relative to the staff

You can show text objects either above or below the staff. Text is automatically positioned to ensure that it does not collide with other objects.

NOTE

This does not apply to text in text frames.

PREREQUISITE

The text editor is closed.

PROCEDURE

1. Select the text objects whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, choose one of the following options for **Position** in the **Text** group:
 - **Above**
 - **Below**
-

RESULT

The selected text objects appear above/below the staff.

AFTER COMPLETING THIS TASK

If you need to move text objects to different graphical positions, you can drag them manually in Engrave mode.

RELATED LINKS

[Moving text objects graphically](#) on page 373

Enabling/Disabling text collision avoidance

You can change whether individual text objects automatically move to avoid collisions, independently of your project-wide setting. Text objects with collision avoidance disabled do not contribute to automatic staff spacing calculations.

NOTE

This does not apply to text in text frames.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the text objects whose collision avoidance you want to enable/disable.
 2. In the Properties panel, activate **Avoid collisions** in the **Text** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

The selected text objects avoid collisions when the checkbox is activated, and do not avoid collisions when the checkbox is deactivated.

When the property is deactivated, text objects follow your project-wide setting for text collision avoidance.

TIP

You can enable/disable text collision avoidance for all text objects project-wide on the **Text** page in **Engrave > Engraving Options**.

Adding borders to text objects

You can add borders to text and system text objects individually, for example, if you want to make the boundaries of text objects clear.

PROCEDURE

1. Select the text objects to which you want to add borders. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Border** in the **Text** group.

RESULT

Borders are added to the selected text objects.


TIP

- You can show borders on text objects in addition to erasing their background.
- Deactivating **Border** removes borders from the selected text objects.

EXAMPLE

Text

Text with no border

The word "Text" is displayed inside a black rectangular border.

Text with border shown

AFTER COMPLETING THIS TASK

You can change the padding between text objects and each edge of their borders.

Changing the thickness of text object borders

You can change the thickness of borders around individual text objects, independently of your project-wide setting.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the text objects whose border thickness you want to change.
2. In the Properties panel, activate **Border thickness** in the **Text** group.
3. Change the value in the value field.

RESULT

The thickness of borders around the selected text objects is changed.

TIP

You can change the default thickness of all text object borders project-wide on the **Text** page in **Engrave > Engraving Options**.

RELATED LINKS

[Changing the thickness of text frame borders](#) on page 338

Changing the padding around text objects

You can change the padding around text objects individually, including changing the padding between text and each edge independently. This affects the distance between text and erased backgrounds and borders.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the text objects whose padding you want to change.
 2. In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Text** group.
 - **L** changes the padding between text objects and their left edge.
 - **R** changes the padding between text objects and their right edge.
 - **T** changes the padding between text objects and their top edge.
 - **B** changes the padding between text objects and their bottom edge.
 3. Change the values in the value fields for the edges whose padding you want to change.
-

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding.

TIP

You can change the default padding of all text objects project-wide on the **Text** page in **Engrave > Engraving Options**. However, this does not allow you to change the padding of each edge independently.

Erasing the background of text objects

You can erase the background of individual text and system text objects, for example, to ensure the text remains legible when crossing barlines.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the text objects whose backgrounds you want to erase.
 2. In the Properties panel, activate **Erase background** in the **Text** group.
-

RESULT

The backgrounds of the selected text objects erase whatever is behind them.

TIP

- You can show borders on text objects in addition to erasing their background.
 - Deactivating **Erase background** returns the selected text objects to the default non-erased background.
-

EXAMPLE



Text with non-erased background



Text with erased background

AFTER COMPLETING THIS TASK

You can change the padding between text objects and each edge of their erased areas.

Music symbols

Music symbols in Dorico Pro is a broad term that covers all the different elements used in musical notation, including stem flags, clefs, articulations, and the bold numbers used in multi-bar rests and time signatures.

In Dorico Pro, some music symbols have specific editor dialogs in which you can edit and create custom versions of those symbols. For all other music symbols, you can edit their project-wide appearance in the **Edit Music Symbol** dialog.

RELATED LINKS

[Edit Accidental dialog](#) on page 678

[Edit Chord Symbol Component dialog](#) on page 569

[Edit Notehead dialog](#) on page 719

[Edit Playing Technique dialog](#) on page 798

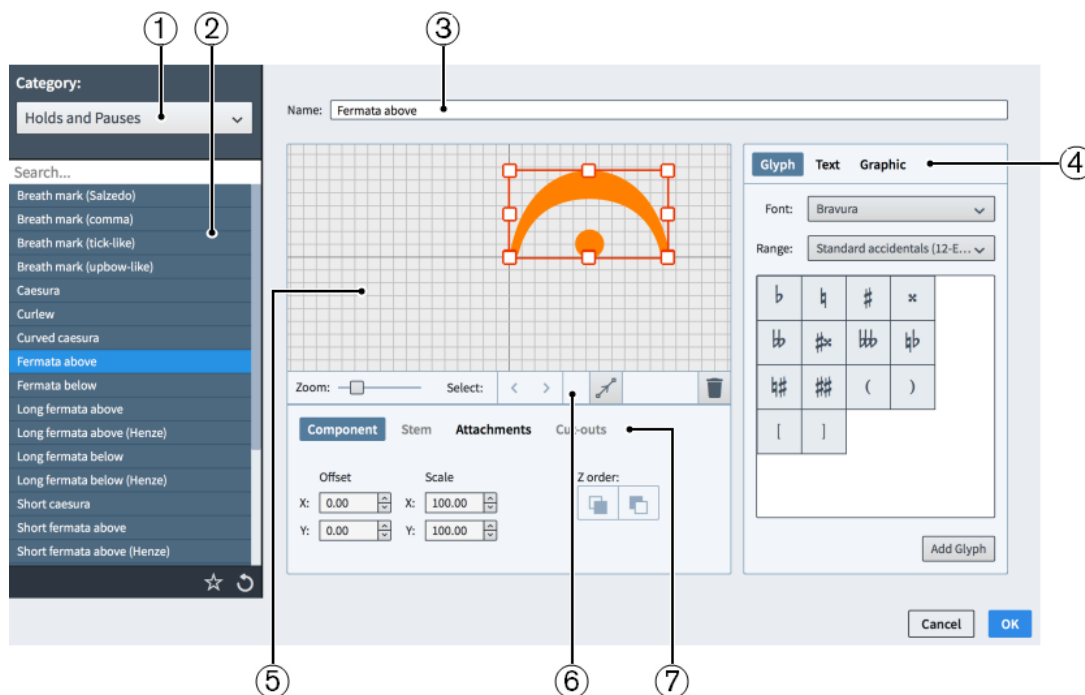
Edit Music Symbol dialog

The **Edit Music Symbol** dialog allows you to edit the appearance of all the different music symbols used in Dorico Pro that do not have a dedicated editor, such as chord symbols, accidentals, noteheads, and playing techniques.

- You can open the **Edit Music Symbol** dialog in Engrave mode by choosing **Engrave > Music Symbols**.

NOTE

You cannot create new music symbols in the **Edit Music Symbol** dialog, you can only edit existing music symbols.



Edit Music Symbol dialog

The **Edit Music Symbol** dialog contains the following sections and options:

1 Category menu

Allows you to filter the list of music symbols by selecting a category from the menu.

2 Music symbol list

Contains all the music symbols in the project within the currently selected category. The action bar at the bottom of the list contains the following options:

- **Save as Default**



Saves the currently selected music symbol in its current state as the default for all future projects.

- **Revert to Factory**



Removes all edits you have made to the selected music symbol, returning it to its original settings and appearance.

3 Name

Displays the default name for the selected music symbol.

4 Component selector

Allows you to choose components to add to the music symbol. You can add different types of components by clicking the respective tab titles.

- **Glyph**, for example, ♯ or ♮. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the music symbol.

NOTE

A full list of the different ranges of glyphs is available on the SMuFL website.

- **Text**, including numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the music symbol.
- **Graphic**: Allows you to load a new graphic file, or select an existing graphic from the **Select existing** list, in SVG, PNG, or JPG format. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the music symbol.

5 Editor

Allows you to arrange and edit the components that make up the music symbol. You can arrange and edit components by clicking and dragging them in the editor and by using the controls at the bottom of the dialog. You can also use the handles on each component to change their size.

6 Editor action bar

Contains selection and view options for the editor.

- **Zoom**
Allows you to change the zoom level in the editor.
- **Select**
Allows you to select the next/previous component.

- **Show Attachments**



Shows all the attachments on all components in the editor.

- **Delete**



Deletes the selected component.

7 Controls

Contains controls that allow you to edit individual components. Controls are divided into tabs according to the aspect of the selected component they affect. For music symbols, only the **Component** and **Attachments** tabs are available as the other tabs do not apply to the symbols in the dialog.

The **Component** tab contains the following options:

- **Offset**: Controls the position of the selected component. **X** moves it horizontally, **Y** moves it vertically.
- **Scale**: Controls the size of the selected component. For graphics, **X** controls its width, **Y** controls its height.

NOTE

Although some components scale their height and width independently, others retain their aspect ratio, meaning only one value affects their overall size.

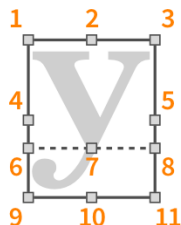
- **Z order**: Allows you to **Bring Forward** or **Send Backward** the selected component in relation to other components when they overlap.

The **Attachments** tab is only available if the music symbol comprises at least two separate components. It contains the following options:

- **Attachment from**: Sets the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.

- **Attachment to:** Sets the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.



The attachment points have the following names in the **Edit Music Symbol** dialog:

- 1 **Top Left**
- 2 **Top Center**
- 3 **Top Right**
- 4 **Middle Left**
- 5 **Middle Right**
- 6 **Baseline Left** (text only)
- 7 **Baseline Center** (text only)
- 8 **Baseline Right** (text only)
- 9 **Bottom Left**
- 10 **Bottom Center**
- 11 **Bottom Right**

Note spacing

The positions of notes and rests relative to each other, and the automatic gaps between them, are known as note spacing.

You can change note spacing in your project at different levels:

- Change the default note spacing project-wide in each layout in **Layout Options**.
- Change the note spacing from a specified point in individual frame chains in individual layouts.
- Change the note spacing at individual rhythmic positions and for individual notes.

Note spacing changes project-wide

You can change the default note spacing values for each layout independently on the **Note Spacing** page in **Setup > Layout Options**.

The options available include changing the default space for quarter notes (crotchets) and the scale space for grace notes and cues. You can also change the minimum percentage value for how full final systems must be before they are justified.

Note spacing changes from specific points in layouts

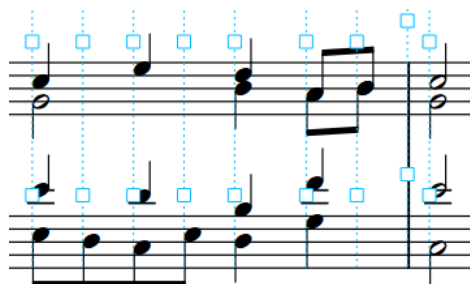
In Engrave mode, you can open the **Note Spacing Change** dialog and change or reset values affecting the spacing and scaling of notes.

Changes you make in the **Note Spacing Change** dialog only apply to the selected layout, and to the frame chain containing the item selected when you made the note spacing change. The preview in the dialog updates in real time as you change values.

Signposts are shown at rhythmic positions where you have made changes to note spacing using the **Note Spacing Change** dialog.

Note spacing at individual rhythmic positions and of individual notes

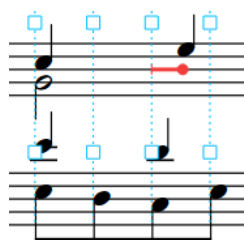
You can make individual spacing adjustments and move individual notes graphically when **Note Spacing** is activated in the Engrave toolbox. When **Note Spacing** is activated, dashed lines representing spacing columns and handles for each spacing-significant item appear.



Handles and dashed lines are shown when **Note Spacing** is activated.

Each rhythmic position that contains a significant item, such as notes, grace notes, rests, clefs, key signatures, and time signatures, can be adjusted using the square note spacing handles. Note spacing handles allow you to adjust the spacing of the selected rhythmic position, which changes the position of all items at that rhythmic position.

Selecting square note spacing handles above items, such as noteheads, causes a circular handle to appear. Circular handles allow you to adjust the graphical position of that individual item, independently of its rhythmic position.



Additionally, larger square system handles are shown at the start/end of each system when **Note Spacing** is activated, allowing you to adjust the start/end horizontal position of individual systems. System handles are positioned on the top left and bottom right corners of each system.

When note spacing handles have been moved, their color changes.

NOTE

When **Note Spacing** is activated, you cannot make any selections or make other types of edits to items in the current layout. To resume normal selection and editing, click **Graphic Editing** in the Engrave toolbox or return to Write mode.

RELATED LINKS

[Changing the default note spacing](#) on page 383

[Engrave toolbox](#) on page 291

[Adjusting note spacing at individual rhythmic positions](#) on page 388

[Changing the start/end position of systems](#) on page 390

[Layout Options dialog](#) on page 90

[Note Spacing Change dialog](#) on page 386

[Removing individual changes to note spacing](#) on page 391

System fullness indicator

The system fullness indicator is a highlighted region in the right page margin that is shown when **Note Spacing** is activated. The system fullness indicator uses colors and percentages to indicate the fullness of the system.

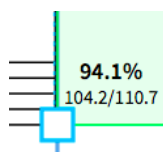
The following colors are used in the system fullness indicator:

- Green: the system is comfortably full. Notes have enough horizontal space to be legible but are not too far apart. Systems that are 60-100% full are considered comfortably full.
- Purple: the system is under-full, meaning notes might appear overly stretched. Systems that are less than 60% full are considered under-full.
- Red: the system is over-full, meaning notes might appear squashed with not enough horizontal space between them. Systems that are more than 100% full are considered over-full.

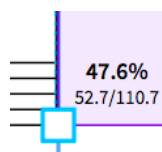
The fullness of systems is also expressed using a percentage. The percentage indicated is calculated by dividing the number of spaces occupied in the system by the total number of available spaces in the system, which is measured from the start of the rhythmic space to the right of the initial clef/time signature/key signature up to the final barline in the system.

Both the color of the system fullness indicator and the fullness percentage are updated in real time as you adjust note spacing in the system.

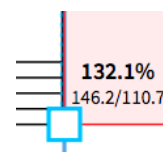
System comfortably full



System under-full



System over-full



RELATED LINKS

[Engrave toolbox](#) on page 291

[Adjusting note spacing at individual rhythmic positions](#) on page 388

Changing the default note spacing

You can change the default note spacing in each layout independently. For example, you can have tighter note spacing in full score layouts compared to part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change note spacing.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Note Spacing** in the page list.
 4. Change the values of the options you want to change.
 5. Click **Apply**, then **Close**.
-

RESULT

The default note spacing is changed project-wide in the selected layouts.

RELATED LINKS

[Note Spacing page in Layout Options](#) on page 384

Note Spacing page in Layout Options

The **Note Spacing** page in **Layout Options** allows you to change the default values for note spacing project-wide in each layout independently. You can also change how full the final system in flows must be before it is automatically justified.

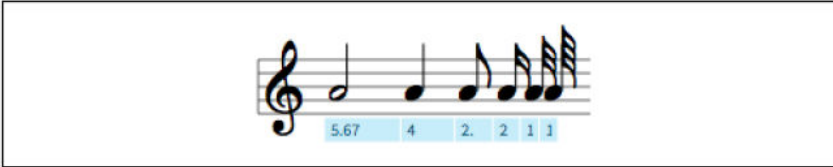
- You can access the **Note Spacing** page by choosing **Setup > Layout Options** and clicking **Note Spacing** in the page list.

Note Spacing

Default space for crotchet/quarter note: spaces

Minimum space for short notes: spaces

Use custom spacing ratio:



Scale space for grace notes by %

Scale space for cue notes by %

Only justify final system in flow when more than % full

Use optical spacing for beams between staves

Options on the **Note Spacing** page in **Layout Options**

The **Note Spacing** page in **Layout Options** contains the following options:

Default space for crotchet/quarter note

Sets the default note spacing for quarter notes (crotchets). The spacing of other durations is scaled proportionally. Increasing the value increases note spacing, decreasing the value decreases note spacing. This is reflected in the preview as you change the value.

Minimum space for short notes

Sets the minimum note spacing for notes with short durations. This can be independent of the default note spacing value.

Use custom spacing ratio

Sets the spacing of notes in relation to other notes according to their rhythmic values. For example, setting **Use custom spacing ratio** to 2 means half notes (minims) take up twice as much space as quarter notes, and eighth notes (quavers) take up half as much space as quarter notes.

Scale space for grace notes by

Sets the note spacing for grace notes as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for grace notes, decreasing the value decreases the note spacing for grace notes.

Scale space for cue notes by

Sets the note spacing for cues as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for cues, decreasing the value decreases the note spacing for cues.

Only justify final system in flow when more than [n]% full

Allows you to change how full the final system in each flow must be before it is justified to the full width of the frame. By default, final systems that are 50% full or less are not justified.

Use optical spacing for beams between staves

When activated, stems in cross-staff beams are evenly spaced, which can mean the noteheads are unevenly spaced. When deactivated, noteheads in cross-staff beams are evenly spaced, which can mean stems appear unevenly spaced.

RELATED LINKS

[Changing the default note spacing](#) on page 383

[Optical spacing for cross-staff beams](#) on page 546

Changing note spacing from specific points

You can change note spacing values from a specified point onwards in the layout currently open in the music area, including changing the scale factor for grace notes and cues.

PROCEDURE

1. In the music area, open the layout in which you want to change note spacing.
2. Select an item at the rhythmic position from which you want to change note spacing, and in the frame chain to which you want the changes to apply.
3. Choose **Engrave > Note Spacing Change** to open the **Note Spacing Change** dialog.
4. In the **Note Spacing Change** dialog, activate the note spacing options you want to change.
5. Choose **Change** for each activated option.
6. Change the value of each note spacing option you want to change.
7. Click **OK** to save your changes and close the dialog.

RESULT

Note spacing is changed from the selected rhythmic position onwards. This applies to the frame chain containing the selected item and the layout currently open in the music area.

A signpost is shown at the position of the note spacing change.

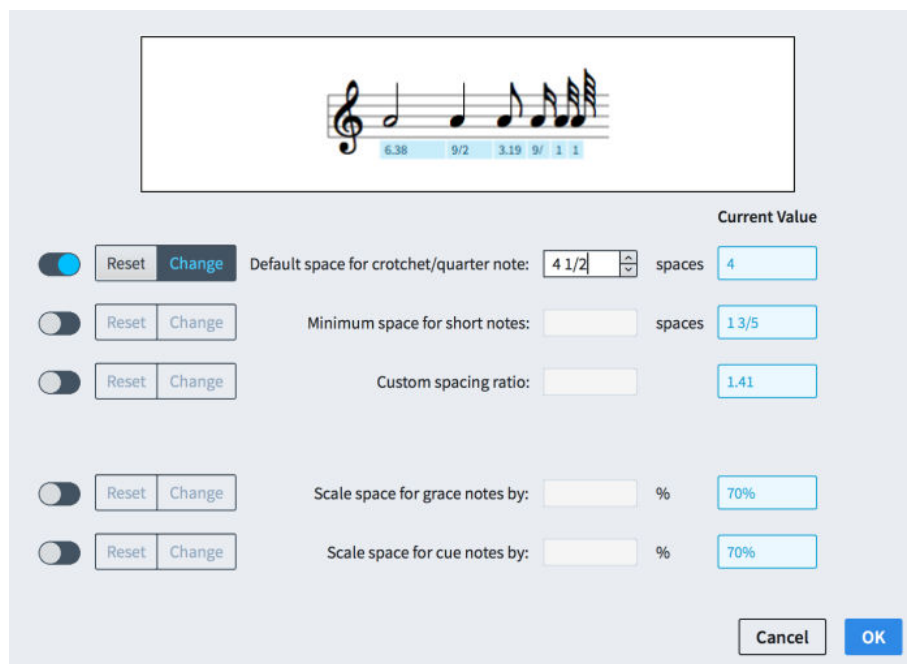
RELATED LINKS

[Note Spacing Change dialog](#) on page 386

Note Spacing Change dialog

The **Note Spacing Change** dialog allows you to change or reset values affecting the spacing and scaling of notes from specific points in layouts, including the scale factor for grace notes and cues.

- You can open the **Note Spacing Change** dialog in Engrave mode by choosing **Engrave > Note Spacing Change** when **Graphic Editing** is selected in the Engrave toolbox and an item is selected in the music area.



Note Spacing Change dialog

The **Note Spacing Change** dialog contains the following options:

Default space for crotchet/quarter note

Sets the default note spacing for quarter notes (crotchets). The spacing of other durations is scaled proportionally. Increasing the value increases note spacing, decreasing the value decreases note spacing. This is reflected in the preview as you change the value.

Minimum space for short notes

Sets the minimum note spacing for notes with short durations. This can be independent of the default note spacing value.

Custom spacing ratio

Sets the spacing of notes in relation to other notes according to their rhythmic values. For example, setting **Custom spacing ratio** to 2 means half notes (minims) take up twice as much space as quarter notes, and eighth notes (quavers) take up half as much space as quarter notes.

Use custom spacing ratio

Sets the spacing of notes in relation to other notes according to their rhythmic values. For example, setting **Use custom spacing ratio** to 2 means half notes (minims) take up twice as much space as quarter notes, and eighth notes (quavers) take up half as much space as quarter notes.

Scale space for grace notes by

Sets the note spacing for grace notes as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing

the value increases the note spacing for grace notes, decreasing the value decreases the note spacing for grace notes.

Scale space for cue notes by

Sets the note spacing for cues as a percentage of the note spacing normally used for notes of their duration. The value cannot be greater than 100%. Increasing the value increases the note spacing for cues, decreasing the value decreases the note spacing for cues.

Each option has an activation switch, meaning you can only change values for options that you have chosen to change.

You can then choose one of the following options for the note spacing change:

Reset

Resets note spacing to your project-wide setting for note spacing in the layout, as set on the **Note Spacing** page in **Layout Options**.

Change

Changes note spacing in the layout to the values set.

RELATED LINKS

[Note spacing](#) on page 381

Resetting note spacing from specific points

You can reset changes you have made to note spacing values using the **Note Spacing Change** dialog. This applies from a specified point onwards in the layout currently open in the music area.

PROCEDURE

1. In the music area, open the layout in which you want to reset note spacing from a specific point.
2. Select an item at the rhythmic position from which you want to reset note spacing, and in the frame chain to which you want the changes to apply.
3. Choose **Engrave > Note Spacing Change** to open the **Note Spacing Change** dialog.
4. Activate the note spacing options you want to reset.
5. Choose **Reset** for each activated option.
6. Click **OK** to save your changes and close the dialog.

RESULT

Note spacing is reset to your project-wide settings for the activated options from the selected rhythmic position onwards. This applies to the frame chain containing the selected item and the layout currently open in the music area.

A signpost is shown at the position of the note spacing change.

RELATED LINKS

[Note Spacing Change dialog](#) on page 386

Deleting note spacing changes at specific points

You can delete note spacing changes you have made using the **Note Spacing Change** dialog, which returns note spacing to your project-wide settings.

PROCEDURE

1. Select the signposts of the note spacing changes you want to delete.

2. Press **Backspace** or **Delete**.
-

RESULT

The selected note spacing changes are deleted. Note spacing returns to your project-wide settings for the layout until the next existing note spacing change or until the end of the project, whichever comes first.

Adjusting note spacing at individual rhythmic positions

You can make adjustments to the note spacing at individual rhythmic positions independently of your project-wide settings.

NOTE

- Moving notes too far away from their intended rhythmic positions can be misleading for players reading the music.
 - When **Note Spacing** is activated, you cannot select or edit anything other than note spacing handles. To resume normal selection and editing, click **Graphic Editing** in the Engrave toolbox or return to Write mode.
-

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select a square handle on the dashed line at each rhythmic position whose spacing you want to adjust.



3. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
This increases the space to the left of the rhythmic position of each selected handle.
 - Press **Alt-Left Arrow** to move them to the left.
This decreases the space to the left of the rhythmic position of each selected handle.

NOTE

- If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.
 - You cannot move note spacing handles with the mouse, you can only move them using the keyboard.
-

RESULT

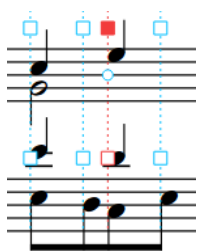
The selected note spacing handles are moved, which increases/decreases the spacing to the left of their original rhythmic position. This also affects the spacing of each selected rhythmic position on all staves in the system.

System breaks are automatically inserted at the start/end of each system in which you adjusted note spacing.

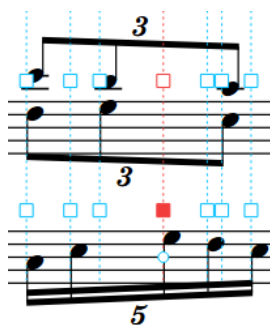
NOTE

You cannot select/delete system break signposts when **Note Spacing** is activated.

EXAMPLE



Moving note spacing handles to the left reduces spacing to the left of the rhythmic position



Moving note spacing handles to the right increases spacing to the left of the rhythmic position

RELATED LINKS

[Removing individual changes to note spacing](#) on page 391

[Signposts](#) on page 281

[Hiding/Showing system break signposts](#) on page 360

Adjusting the spacing of individual notes/items independently of their rhythmic positions

You can change the graphical position of individual notes and some other items, such as key signatures, time signatures, and clefs, independently of their rhythmic positions.

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select the square handle at the rhythmic position of the note/item you want to move graphically.



A circular handle appears beside the note/item.

3. Press **Tab** to select the circular handle.



4. Move the handle in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.

NOTE

- If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.
- You cannot move note spacing handles with the mouse, you can only move them using the keyboard.

RESULT

The graphical position of the selected note/item is changed without changing the note spacing of its rhythmic position.

EXAMPLE



Changing the start/end position of systems

You can change the start/end horizontal position of each system individually, for example, if you want to indent a single system.

NOTE

- If you want to increase the space before staff labels, you can change the minimum indent for systems with staff labels project-wide for each layout independently on the **Staves and Systems** page in **Setup > Layout Options**.
 - If you want to change the end position of systems because they do not fill the entire width of the page, you can change the minimum fullness for justification on the **Note Spacing** page in **Layout Options**.
 - If you want to change the width of all systems on a page by the same amount, you can change the width of the music frame.
-

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select the system handle at the start/end of each system whose start/end position you want to change.
3. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

NOTE

- If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.
 - You cannot move note spacing handles with the mouse, you can only move them using the keyboard.
-

RESULT

The start/end position of the selected systems is changed. Notes on the selected systems appear more/less tightly spaced, depending on whether moving the system handles made their system narrower or wider.

RELATED LINKS

[System indents](#) on page 927

[Changing the justification of final systems](#) on page 349

[Changing the first system indent](#) on page 927

[Changing the minimum indent for systems with staff labels](#) on page 900

Removing individual changes to note spacing

You can remove changes you have made to the note spacing at individual rhythmic positions and reset note spacing handles to their original default positions.

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select the note spacing handles you want to restore to their original positions.
3. Press **Backspace** or **Delete**.

RESULT

The selected rhythmic positions are reset to their default positions.

TIP

You can also reset all note spacing changes within selected systems, frames, or all note spacing changes in the layout by choosing one of the options in the **Engrave > Note Spacing** menu.

RELATED LINKS

[Note spacing](#) on page 381

Staff spacing

The vertical positioning of staves and systems within frames is known as staff spacing. Staff spacing calculations consider the height of staves and the necessary gaps between staves and systems.

You can change staff spacing in your project at different levels:

- Change the default staff spacing project-wide in each layout in **Layout Options**.
- Change the staff spacing between individual staves.

Staff spacing changes project-wide

You can change the default vertical and staff spacing settings for each layout independently on the **Vertical Spacing** page in **Setup > Layout Options**.

The options available allow you to set your ideal spacing, which Dorico Pro then produces as closely as possible. For example, as part of the calculation to decide the number of systems that can fit in each frame in a layout, Dorico Pro considers the height of staves, the minimum gaps between staves, the maximum distances between very high/low notes and staves, and other items that require vertical space, such as pedal lines and tempo marks. However, this calculation

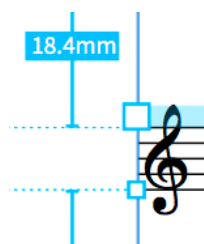
happens before horizontal spacing is finalized, which can result in either more or fewer systems being allocated to frames than ideally fit.

We recommend familiarizing yourself with the available vertical spacing options.

Individual staff spacing changes

You can make adjustments to the vertical position of individual staves and systems when **Staff Spacing** is activated in the Engrave toolbox. When **Staff Spacing** is activated, the following handles are shown:

- A small square staff spacing handle on the bottom left corner of each staff.
- A large square system spacing handle on the top left corner of the top staff in each system.



System spacing handle and staff spacing handle in Engrave mode when **Staff Spacing** is activated

Staff spacing handles allow you to adjust the vertical position of the selected staves. The gap between staves is shown in millimeters by default, and you can click these numbers to change the value using the supported units of measurement, which are points, millimeters, centimeters, and inches. System handles allow you to adjust the vertical position of whole systems.

When staff spacing handles have been moved, their color changes. When you move system handles, both the square handle and the highlighted strip at the top of the system change color.

You can copy manual changes you have made to the staff spacing on individual pages to other pages in the layout.

IMPORTANT

We recommend that you add extra pages and finish laying out your pages before moving individual staves, as individual staff spacing changes are automatically deleted if the page on which they occur or the rhythmic position at the start of the system changes. For example, if you move staves individually and then add a blank page at the start of the layout, all of the individual staff spacing changes in the layout are deleted.

NOTE

- When **Staff Spacing** is activated, you cannot make any selections or make other types of edits to items in the current layout. To resume normal selection and editing, click **Graphic Editing** in the Engrave toolbox or return to Write mode.
- You can change your preferred unit of measurement to be used throughout Dorico Pro on the **General** page in **Preferences**.

RELATED LINKS

[Per-layout vertical spacing options](#) on page 393

[Staves](#) on page 906

[Brackets and braces](#) on page 555

[Engrave toolbox](#) on page 291

[Copying staff spacing changes to other pages](#) on page 398

[Hiding/Showing empty staves](#) on page 351

[Changing your preferred unit of measurement](#) on page 57

Changing the default staff/system spacing

You can change the default gaps between staves and systems in each layout independently. For example, you can have smaller gaps between staves in full score layouts to accommodate more staves, and larger gaps between systems in part layouts to give players space to add pencil markings.

TIP

- If the staves in a layout are very close together, just decreasing the staff size might be sufficient to produce good results.
- We recommend that you set the ideal gaps to the minimum value acceptable to you, as Dorico Pro automatically allocates additional space for other items, such as system objects and dynamics, and avoids collisions between notes and staves above/below.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the default staff/system spacing.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Vertical Spacing** in the page list.
4. In the **Ideal Gaps** section, change the values for the different contexts as required.
5. Click **Apply**, then **Close**.

RESULT

The minimum gaps between staves and systems in the corresponding contexts are changed. This affects how much space Dorico Pro allows for staves/systems in its casting off estimations and whether frames are considered full enough to justify vertically automatically.

RELATED LINKS

[Changing the staff size in layouts](#) on page 908

[Changing the vertical justification of staves/systems](#) on page 350

Per-layout vertical spacing options

Dorico Pro provides multiple options that you can use to control the default vertical spacing and justification of staves and systems in each layout.

- You can access per-layout vertical spacing options by choosing **Setup > Layout Options** and clicking **Vertical Spacing** in the page list.

The **Vertical Spacing** page contains the following sections and options:

Ideal Gaps

Contains multiple scenarios that allow you to set the gap you want Dorico Pro to allow between staves and systems in the corresponding context, including the default scaling of these gaps in galley view, as Dorico Pro does not automatically avoid collisions between staves and items in galley view. The options are accompanied by diagrams to help you visualize the contexts to which each option applies.

We recommend setting the ideal gaps to the minimum value acceptable to you because Dorico Pro never reduces the gap between staves to less than your set values. Setting smaller values gives Dorico Pro greater flexibility when determining

staff spacing, particularly in very full frames, such as reducing the space between staves with no dynamics to allow more space between staves with dynamics. Similarly, we recommend setting vertical spacing options after you have finished inputting notes and items, as this allows you to consider the entire project when setting these options.

Depending on the context, the options are affected by automatic vertical justification in different ways:

- **Staff to staff, Staff group to staff, Staff to staff group, Staff group to staff group, Inter-system gap, and Timecode staff to staff**
These gaps do not apply in frames that are automatically justified.
- **Braced staff to braced staff and Ossia staff to staff**
These gaps always apply, including in frames that are automatically justified, because braced and ossia staves are never justified. This includes extra staves.

NOTE

- Divisi staves are vertically justified when they use the **Staff to staff** gap. When they use the **Braced staff to braced staff** gap, the staves in each divisi section use only the gap set for braced staves and are not vertically justified.
- If the staves in a layout are very close together, just decreasing the staff size might be sufficient to produce good results.

Minimum Gaps

Contains options for the minimum gaps you want Dorico Pro to allow for items in addition to the staff spacing gaps.

- **Automatically resolve collisions between adjacent staves and systems:**
When activated, Dorico Pro automatically allows extra space between staves and systems to avoid collisions. When deactivated, Dorico Pro only uses your set gaps for vertical spacing, which produces evenly-spaced staves and systems but with the possibility of collisions between items.
- **Minimum inter-staff gap with content:** Allows you to set the extra space you want to allow between staves when items are present.
- **Minimum inter-system gap with content:** Allows you to set the extra space you want to allow between systems when items are present.

Vertical Justification

Contains options that allow you to control the frame fullness thresholds above which you want staves and/or systems to justify vertically automatically.

- **Justify distance between staves and systems when frame is at least [n]% full:** When frames are filled above this threshold, the staves and systems they contain are all automatically vertically justified, meaning they are evenly distributed to fill the height of the frame. Frames filled below this threshold are not automatically justified, instead staves follow your ideal gap settings. This can leave gaps between the bottom staff/system and the bottom of the frame.
- **Justify distance only between systems when frame is at least [n]% full:** When frames are filled above this threshold, only the distance between systems in the frame is justified. Staves follow your per-layout ideal gap settings. This helps keep a clear distance between systems on very full pages.

TIP

To achieve consistently spaced systems in part layouts where all the systems contain only a single staff or a pair of braced staves, we recommend making the **Justify distance only between systems when frame is at least [n]% full**

value the same as or smaller than the **Justify distance between staves and systems when frame is at least [n]% full**.

- **Justify staves when frame with single system is above this threshold:** When activated, all the staves in a single system taller than the set threshold are vertically justified, which distributes them evenly to fill the height of the frame.

Hide Empty Staves

Contains options allowing you to control when and which empty staves are hidden in the layout.

- **Hide empty staves:** Allows you to control when empty staves are hidden. For example, it is a common practice to show all staves in the first system even if some are empty, but this is not always required.
- **Allow individual staves of multi-staff instruments to be hidden:** Allows you to control whether individual empty staves belonging to multi-staff instruments can be hidden independently or all multi-staff instrument staves must always be shown.
- **Players excluded from Hide Empty Staves:** Allows you to identify specific players whose staves you always want to show, even if their staff is empty on systems where you have hidden empty staves.

RELATED LINKS

[Page layouts](#) on page 342

[Casting off](#) on page 355

[Changing the vertical justification of staves/systems](#) on page 350

Changing the staff spacing in galley view

You can change the vertical space between staves in galley view in each layout independently, expressed as a percentage of the set ideal gaps. Increasing the gaps between staves in layouts with very high/low notes can be useful because Dorico Pro does not perform automatic collision avoidance in galley view.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the staff spacing in galley view.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Vertical Spacing** in the page list.
 4. In the **Ideal Gaps** section, change the value for **In galley view, expand ideal staff gaps to**.
 5. Click **Apply**, then **Close**.
-

Moving individual staves/systems vertically

You can change the spacing of individual staves, including ossia staves, by changing the vertical position of individual staves and systems independently of your project-wide settings.

IMPORTANT

We recommend that you add extra pages and finish laying out your pages before moving individual staves. Individual staff spacing changes are automatically deleted if the page on which they occur or the rhythmic position at the start of the system changes.

PROCEDURE

1. In the Engrave toolbox, activate **Staff Spacing**.



2. Select one of the following on each staff/system you want to move vertically:

- Staff spacing handle



- System spacing handle



NOTE

- You can switch between having a staff or system spacing handle selected by pressing **Tab**.
 - When using the mouse, you can only move one staff/system at a time.
-

3. Move the selected staves/systems in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

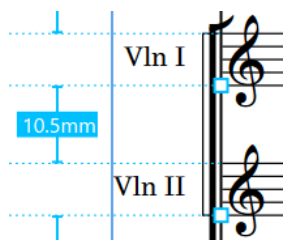
If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag a single staff/system spacing handle upwards/downwards.
-

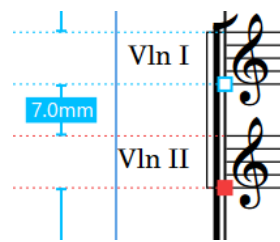
RESULT

The vertical position of the selected staves/systems is changed. The color of the handles changes to indicate that you have moved them.

EXAMPLE



Staff spacing handles at their default positions



The second staff has been moved upwards

Removing individual changes to staff spacing

You can remove changes you have made to the staff/system spacing and reset staff/system spacing handles to their original default positions.

PROCEDURE

1. In the Engrave toolbox, activate **Staff Spacing**.



2. Select the staff/system handles you want to reset to their original positions.
3. Press **Backspace** or **Delete**.

RESULT

The selected staff/system handles are reset to their original positions.

TIP

You can also reset all staff spacing changes within selected systems, frames, or all staff spacing changes in the layout by choosing one of the options in the **Engrave > Staff Spacing** menu.

Moving multiple systems simultaneously

You can move multiple systems at the same time so that the gaps between each system remain equal. This is also known as “concertina dragging”.

IMPORTANT

We recommend that you add extra pages and finish laying out your pages before moving individual staves. Individual staff spacing changes are automatically deleted if the page on which they occur or the rhythmic position at the start of the system changes.

NOTE

- You can only move multiple systems closer together, you cannot use this method to move them further apart.
- You cannot follow these steps for staff spacing handles on tacets.

PROCEDURE

1. In the Engrave toolbox, activate **Staff Spacing**.



2. Select the system handle on the highest system you want to move.



3. **Alt**-click and drag the system handle downwards.

RESULT

All systems below the selected system, until the bottom of the music frame, are moved closer together. The gaps between each system remain equal.

RELATED LINKS

[Staff spacing](#) on page 391

[Tacets](#) on page 352

Copying staff spacing changes to other pages

You can copy manual staff spacing changes you have made on individual pages to other pages in the layout.

NOTE

In order to copy staff spacing changes, destination pages must have the same number of staves per system and the same number of systems per frame as the source page.

PROCEDURE

1. In the music area, open the layout in which you want to copy staff spacing from one page to other pages.
2. Choose **Engrave > Staff Spacing > Copy Staff Spacing** to open the **Copy Staff Spacing** dialog.
3. In the **Copy Staff Spacing** dialog, change the page whose staff spacing you want to copy by changing the value for **From page**.
4. Change the first page to which you want to copy staff spacing by changing the value for **To page start**.
5. Change the last page in the range to which you want to copy staff spacing by changing the value for **To page end**.
6. Click **OK** to save your changes and close the dialog.

RELATED LINKS

[Moving individual staves/systems vertically](#) on page 396

Copy Staff Spacing dialog

In the **Copy Staff Spacing** dialog, you can choose pages whose individual staff spacing changes you want to copy. You can specify the pages in the layout to which you want to copy the staff spacing changes.

- You can open the **Copy Staff Spacing** dialog in Engrave mode by choosing **Engrave > Staff Spacing > Copy Staff Spacing**.

The **Copy Staff Spacing** dialog contains the following options:

From page

Allows you to change the page whose staff spacing you want to copy by specifying the page number.

To page start

Allows you to set the first page in the layout to which staff spacing changes are copied.

To page end

Allows you to set the last page in the layout to which staff spacing changes are copied.

For example, if you wanted to copy staff spacing changes you made on the first page to the next three pages, meaning pages two, three, and four, but not to page five and onwards, you would set **From page** to 1, **To page start** to 2, and **To page end** to 4.

Previews show the displayed page number beside each value field, so that if you have changed the displayed page number of pages within the layout you can still identify the page to which you are copying staff spacing changes.

Play mode

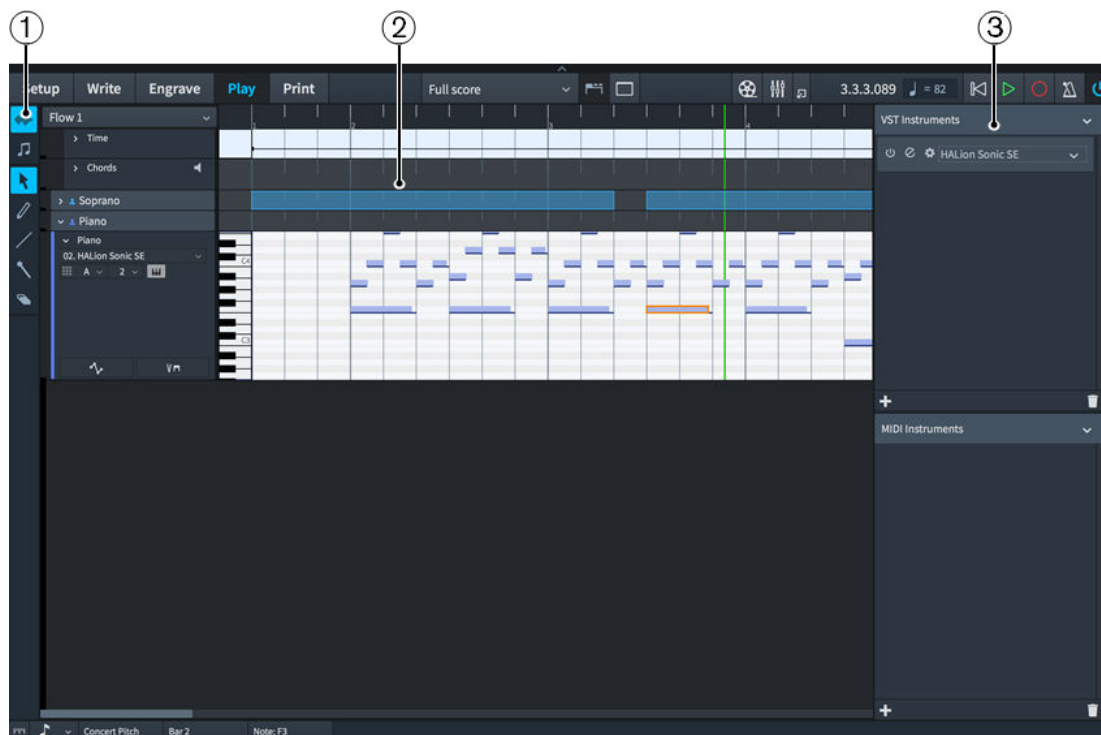
Play mode allows you to set up your project for playback. You can assign VST instruments, adjust the mix, and change the sounding duration of notes in playback without affecting their notated duration.

Project window in Play mode

The project window in Play mode contains the default toolbar and the event display, and also a toolbox and panels that contain all the tools and functions that allow you to set up your project for playback.

You can switch to Play mode in any of the following ways:

- Press **Ctrl/Cmd-4**.
- Click **Play** in the toolbar.
- Choose **Window > Play**.



Project window in Play mode

NOTE

There is no Properties panel in Play mode.

The project window in Play mode comprises the following:

- 1 Play toolbox**
Contains tools that allow you to select and edit note events in the event display.
- 2 Event display**
Allows you to view, input, and edit the playback of each flow in your project, including changing the played duration of notes and the tempo at any rhythmic position.
- 3 VST and MIDI Instruments panel**
Allows you to load new VST and MIDI instruments. You can also select existing VST and MIDI instruments and edit their settings.

RELATED LINKS

[Event display](#) on page 407

Play toolbox

The Play toolbox contains tools that allow you to select and edit the note events in the event display in Play mode. It is located on the left of the window in Play mode.

Played Durations



Allows you to change when notes start/end in playback without affecting their notated durations. When **Played Durations** is selected, the played durations of notes are shown as a lighter event, above a thinner line that shows the notated duration of notes.

Notated Durations



Allows you to change the rhythmic duration of notes, which affects the position and notation of those notes. When **Notated Durations** is selected, the full, notated durations of notes are shown as single events in the piano roll editor.

Object Selection



Allows you to select notes in the piano roll editor. Select **Object Selection** to deselect **Erase**.

You can also select **Object Selection** by pressing **S**.

Draw



Allows you to add and edit notes. You can click and drag in the piano roll editor to input notes with the durations you want. The ends of the notes you draw snap to rhythmic positions according to the current rhythmic grid value.

It also allows you to add points on time and automation tracks. Using the **Draw** tool rather than the **Line** tool adds a point at regular intervals according to the current rhythmic grid value.

You can also select **Draw** by pressing **D**.

Line



Allows you to draw straight lines between two points on time and automation tracks, without adding extra values between those points.

Draw Percussion



Allows you to add notes to percussion staves in the drum editor with one click. You do not have to click and drag to a duration when using **Draw Percussion**.

Erase

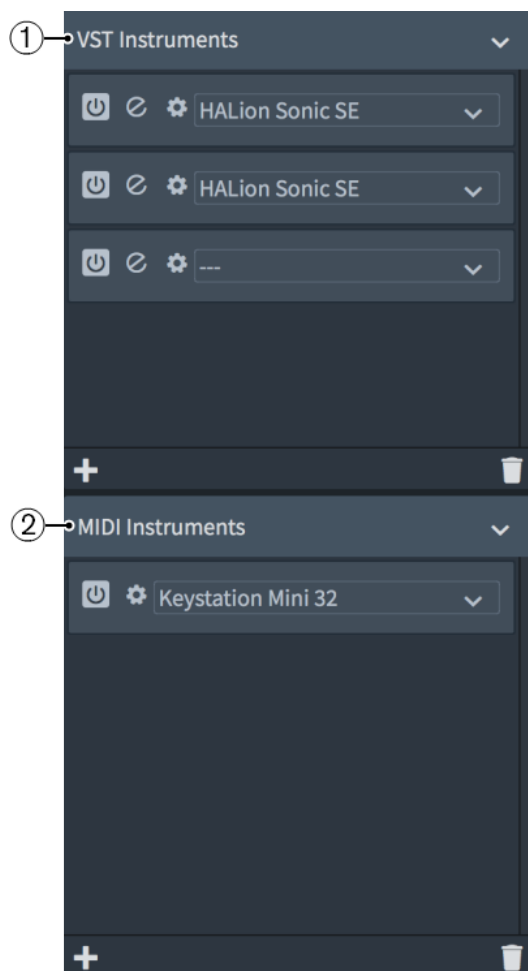


Allows you to delete notes. You can make marquee selections to delete multiple notes when **Erase** is selected.

You can also select **Erase** by pressing E.

VST and MIDI Instruments panel

The VST and MIDI instruments panel contains the VST and MIDI instruments available and used in your project, and allows you to edit their settings. It is located on the right of the window in Play mode.



VST and MIDI Instruments panel

The VST and MIDI Instruments panel contains the following sections:

- 1 **VST Instruments**
- 2 **MIDI Instruments**

VST Instruments

The **VST Instruments** section of the panel contains rack slots in which you can select VST instruments to use for playback.

NOTE

Dorico Pro only shows VST 3 instruments by default. If you want VST 2 instruments to be available in the **VST Instruments** section of the VST and MIDI Instruments panel, you must whitelist them. Only Kontakt is available by default.

When you add instruments in your project, Dorico Pro automatically creates a playback template containing instances of HALion Sonic SE with sounds chosen from the HALion Sonic SE and HALion Symphonic Orchestra libraries. Dorico Pro also sets up expression maps and percussion maps as required.

If you change any of these default settings, Dorico Pro no longer makes automatic changes, meaning you must then load sounds for new instruments manually. Additionally, the HALion plug-in does not communicate changes in the plug-in to Dorico Pro, meaning Dorico Pro still tries to play back the music in your project using the expression map for the original sounds.

You must change the expression map manually for each plug-in you change.

Therefore, we recommend that you do one of the following if you want to update the sounds used for playback after making changes:

- Choose **Play > Load Sounds for Unassigned Instruments** to change the default settings and then add new instruments to your project. This automatically loads sounds for instruments in your project without assigned sounds.
- Choose **Play > Playback Template** to open the **Playback Template** dialog, where you can reload a default playback template.

You can add new slots for VST instruments and delete VST instruments by clicking the respective button in the action bar.

- **Add**



Adds a new slot for a VST instrument in the **VST Instruments** section of the VST and MIDI Instruments panel.

- **Delete**



Deletes the selected VST instrument from the **VST Instruments** section of the VST and MIDI Instruments panel.

MIDI Instruments

The **MIDI Instruments** section of the panel contains rack slots in which you can select MIDI devices to use for output during playback.

NOTE

For your MIDI device to be available for selection, you must plug it into your computer before starting Dorico Pro. If you plug it in after starting Dorico Pro, you must restart the program.

On Windows, you can select any MIDI device that is plugged into your computer.

On macOS, you can select any MIDI device that is plugged into your computer, and any other device set up in Audio MIDI Setup. For example, this allows you to use MIDI from one application in another application.

You can add new slots for MIDI instruments and delete MIDI instruments by clicking the respective button in the action bar.

- **Add**



Adds a new slot for a MIDI instrument in the **MIDI Instruments** section of the VST and MIDI Instruments panel.

- **Delete**



Deletes the selected MIDI instrument from the **MIDI Instruments** section of the VST and MIDI Instruments panel.

Loading VST and MIDI instruments manually

Dorico Pro automatically loads enough VST slots for all the samples required for your project. However, you can also load VST and MIDI instruments manually, either into new slots or into existing slots to replace existing VST and MIDI instruments.

PREREQUISITE

- You have any VST instruments you want to use saved on your computer.
- You have connected the MIDI device you want to use.

NOTE

You must have connected the device to your computer before starting Dorico Pro. If not, you must restart Dorico Pro.

PROCEDURE

1. In either the **VST Instruments** or **MIDI Instruments** section of the VST and MIDI Instruments panel, click **Add**.



2. In the slot in which you want to load a VST or MIDI instrument, select an instrument from the menu.
-

Whitelisting VST instruments

You must whitelist any VST 2 instruments you want to use in Dorico Pro. Because whitelisting works like a preference, you must only whitelist plug-ins once for them to be available in any project.

A default `vst2whitelist.txt` file is included with your Dorico Pro installation, which lists VST 2.x plug-ins that Steinberg has qualified for use with Dorico Pro.

You can create a second `vst2whitelist.txt` file in a user-specific location that is not overwritten if you subsequently update or reinstall Dorico Pro.

When Dorico Pro starts up, it reads both the default whitelist file and your user-specific whitelist file to build up the list of whitelisted plug-ins.

PREREQUISITE

You have quit Dorico Pro and all other programs.

PROCEDURE

1. Open a new text document in a plain text editor, such as Notepad.

2. Enter the file names of the VST plug-ins you want to whitelist without their file extension (.dll on Windows and .vst on macOS).
Each plug-in must have its own line in the text file.
 3. Save your own `vst2whitelist.txt` file in one of the following places, depending on your operating system:
 - `C:\Users\username\AppData\Roaming\Steinberg\VSTAudioEngine2_64` (Windows)
 - `/Users/username/Library/Preferences/VSTAudioEngine2` (macOS)
 4. Delete the following files from the folder:
 - `Vst2xPlugin Blacklist VSTAudioEngine.xml`
 - `Vst2xPlugin Infos VSTAudioEngine.xml`
 - `Vst2xPlugin SearchPaths VSTAudioEngine.xml`
-

RESULT

When you next start Dorico Pro, it considers your whitelisted VST plug-in entries, making them available for use in the program.

Playback Options dialog

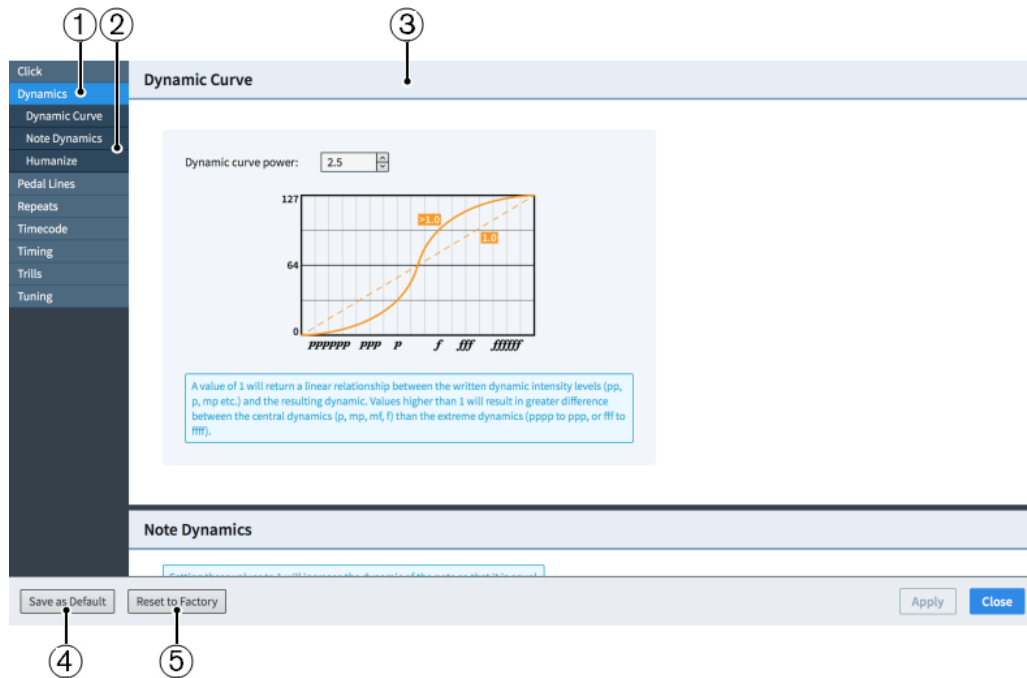
The **Playback Options** dialog provides options that allow you to make project-wide changes to how the music you have written sounds when played back. These options affect playback, regardless of expression maps and patches.

In the **Playback Options** dialog, you can change how dynamics, pedal lines, and different notations are interpreted during playback.

For example, you can change how much louder notes on the first beat in each bar are compared to other notes in the bar, change how long each pedal retake lasts, and how much different articulations, such as *staccatissimo* and *tenuto*, affect the duration of notes.

You can open **Playback Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play > Playback Options** in Play mode.



Playback Options

The **Playback Options** dialog contains the following:

1 Page list

Contains the categories of options that you can view and change in the dialog, divided into pages. When you click a page in this list, any applicable section titles appear below the page in the page list.

2 Section titles

Shows the titles of any sections on the selected page. You can click these section titles to navigate directly to that section of the page.

3 Section

Pages are divided into sections, which can contain multiple options. Sections that contain many options are divided into subsections. For options that have multiple possible settings, the current setting is highlighted.

4 Save as Default/Remove Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- **Save as Default** saves all options currently set in the dialog as the default for new projects.
- **Remove Saved Defaults** deletes your previous saved defaults without resetting the options in the current project. After removing your saved defaults, all future projects start with the default factory settings. If you have existing saved defaults, you can access **Remove Saved Defaults** by pressing **Alt** (macOS)/**Ctrl** (Windows).

5 Reset to Factory/Reset to Saved Defaults

This button has different functions depending on whether you have existing saved defaults.

- If you have no saved defaults, **Reset to Factory** resets all the options in the dialog back to the default factory settings.
- If you have existing saved defaults, **Reset to Saved Defaults** resets all the options in the dialog back to your saved defaults. You can access **Reset to Factory** instead by pressing **Alt** (macOS)/**Ctrl** (Windows). Resetting options back to the default factory

settings only affects the current project and does not delete your saved defaults, meaning future projects start with your saved defaults.

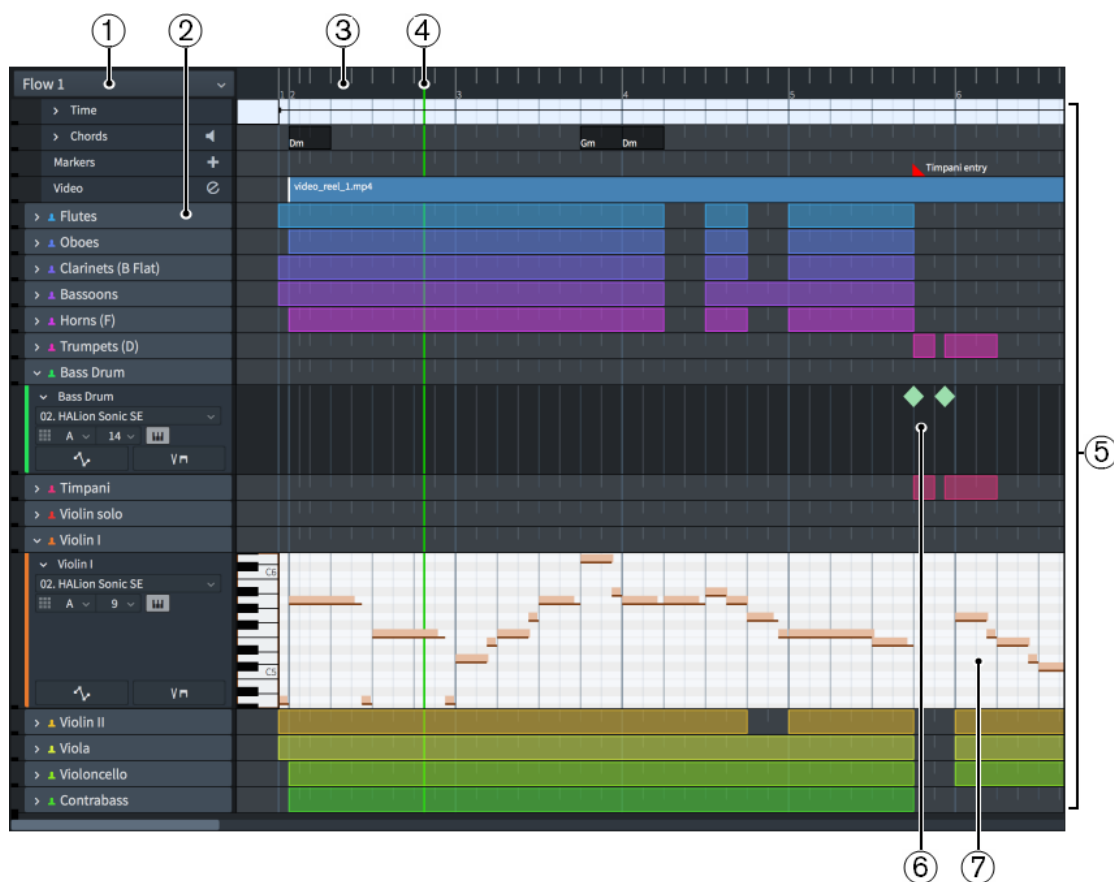
RELATED LINKS

[Expression maps](#) on page 451

[Options dialogs in Dorico Pro](#) on page 30

Event display

The event display in Play mode is the equivalent of the music area in Write mode. It allows you to view and edit your music, but focuses more on how it sounds in playback rather than its notation. The event display presents your project in a similar way to that used in a digital audio workstation, or “DAW”, such as Cubase.



Event display in Play mode

The event display comprises the following:

- 1 Flow menu**
Allows you to select the flow you want to be shown in the event display. Only a single flow is shown at a time.
- 2 Track headers**
Display the name of each track and contain appropriate options for the track type. You can expand the track headers of some track types, which reveals further options.
- 3 Ruler**
Displays bar numbers and shows beat divisions that match the current rhythmic grid value.
- 4 Playhead**

Shows the current rhythmic position in playback.

5 Tracks

Horizontal rows that contain musical elements represented in time from left to right.

6 Drum editor

Displays notes for unpitched percussion instruments.

7 Piano roll editor

Displays notes for pitched instruments.

Tools and options in the Play toolbox allow you to input, edit, and delete notes and other events, such as tempo changes, in the event display.

RELATED LINKS

[Playhead](#) on page 430

[Tracks](#) on page 414

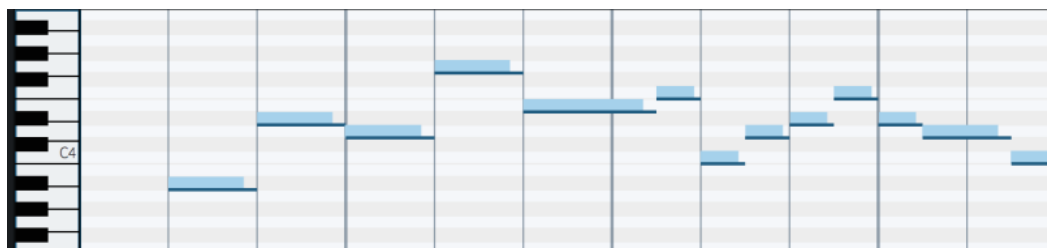
[Play toolbox](#) on page 401

Piano roll editor

The piano roll editor displays MIDI notes for pitched instruments in a continuous sequence, with the vertical position of note events indicating their pitch.

In Dorico Pro, pitched instruments are displayed in an individual piano roll editor for their instrument track.

Pitched instruments are positioned in the piano roll editor according to their pitch, which is demonstrated by a piano keyboard on the left edge of the piano roll editor.



Piano roll editor

Each instrument is automatically assigned a color when you add them in Setup mode, so that you can tell them apart more easily in Play mode. This color is used for notes in the piano roll on that instrument track, as well as shown as a strip on the instrument track header.

You can edit notes in the piano roll editor, including moving and transposing them.

NOTE

Editing the played duration of notes causes them to appear in a darker color in the piano roll editor to notes whose played duration you have not changed.

RELATED LINKS

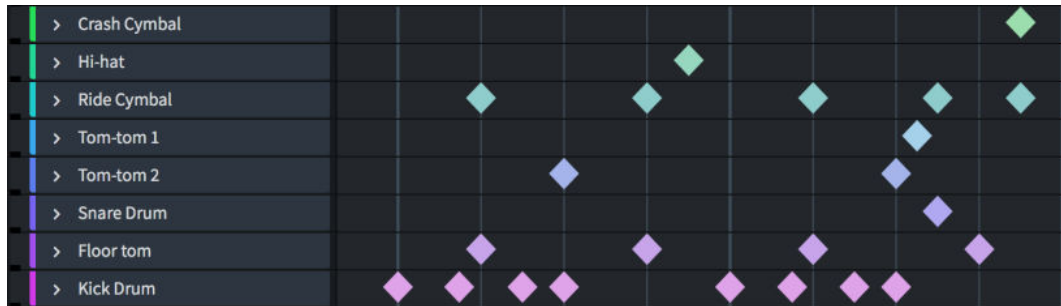
[Instrument tracks](#) on page 416

[Played vs. notated note durations](#) on page 466

Drum editor

The drum editor displays MIDI notes for unpitched percussion instruments in a continuous sequence. The drum editor appears different to the piano roll editor and has different functionality.

Instead of showing the piano roll view as used in the piano roll editor, in the drum editor the onset of each note on each percussion instrument is shown. Each note is shown as an event of the same size, unlike note events in the piano roll, whose width reflects the duration of the notes.



Drum editor

Each unpitched percussion instrument has its own instrument track, including when they are in a percussion kit. You can expand unpitched percussion instrument tracks like other instrument tracks if you want to make changes, such as assigning the instrument to another playback endpoint.

NOTE

If you change the endpoint for an unpitched percussion instrument, that endpoint must have an appropriate percussion map chosen, otherwise Dorico Pro does not know how to play the music for that instrument.

You can move notes in the drum editor to new rhythmic positions. Unpitched percussion instruments only have one vertical position for their notes, so you cannot transpose notes in the drum editor.

RELATED LINKS

[Instrument tracks](#) on page 416

[Expanding/Collapsing tracks](#) on page 429

Inputting notes in the event display

You can input notes into the instruments in your project using the event display in Play mode. You can follow these steps for both pitched and unpitched instruments.

PROCEDURE

1. Expand the instrument tracks into which you want to input notes.

TIP

When inputting notes in unpitched percussion instruments, expanding just the player track is sufficient.

2. Select one of the following tools, depending on the instrument type:
 - To input notes in pitched instrument tracks, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.



- To input notes in unpitched percussion instrument tracks, select **Draw Percussion** by clicking **Draw Percussion** in the Play toolbox.



3. Input notes in one of the following ways, depending on the instrument type:
 - For pitched instruments, click and drag horizontally in the piano roll for the required duration at the pitch position you want.
 - For unpitched percussion instruments, click in the drum editor at the positions where you want to input notes.
-

RESULT

In the piano roll editor, notes are input at the pitches indicated by the piano keyboard on the left of the piano roll.

In the drum editor, a note is input in the corresponding instrument each time you click. The current rhythmic grid value determines the duration of the notes. The duration of notes is indicated by a highlighted area in the track. The shape of the note event in the drum editor is the same for all durations.

AFTER COMPLETING THIS TASK

You can change both the notated and played durations of notes. You can also change the duration of notes in the score in Write mode.

RELATED LINKS

[Instrument tracks](#) on page 416

[Expanding/Collapsing tracks](#) on page 429

[Changing the played duration of notes](#) on page 466

[Changing the duration of notes](#) on page 157

Moving notes in the event display

You can move notes rhythmically within the event display. This also affects how the selected notes are notated in any relevant score and part layouts.

PREREQUISITE

- **Object Selection** is selected in the Play toolbox.
 - **Notated Durations** is selected in the Play toolbox.
-

PROCEDURE

1. Expand the instrument tracks whose notes you want to move.

TIP

When moving notes belonging to unpitched percussion instruments, expanding just the player track is sufficient.

2. Select the notes you want to move rhythmically.
3. Move the selected notes according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

- Click and drag them to the right/left.
-

RESULT

The selected notes are moved to new rhythmic positions according to the current rhythmic grid value. If you selected multiple notes, they are moved together as a block.

NOTE

When using the keyboard, you can both transpose and move notes in the piano roll editor in the same action. When using the mouse, you must release the mouse between transposing and moving.

RELATED LINKS

[Play toolbox](#) on page 401

Lengthening/Shortening notes in the piano roll editor

You can change the duration of notes belonging to pitched instruments from within the piano roll editor in Play mode. This automatically changes the notated duration of notes in any relevant score and part layouts.

PREREQUISITE

- **Object Selection** is selected in the Play toolbox.
 - **Notated Durations** is selected in the Play toolbox.
-

PROCEDURE

1. Expand the instrument tracks whose notes you want to lengthen/shorten.
2. In the piano roll editor, select the notes you want to lengthen/shorten.
3. Lengthen/Shorten the notes in any of the following ways:
 - To lengthen notes by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
 - To shorten notes by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.
 - To double the length of notes, press **Ctrl/Cmd-Shift-Alt-Right Arrow**.
 - To halve the length of notes, press **Ctrl/Cmd-Shift-Alt-Left Arrow**.
 - Click and drag the right end of one of the selected notes to the length you want.

NOTE

You can only change the notated duration of notes with the mouse when **Notated Durations** is selected in the Play toolbox. When **Played Durations** is selected, you can click and drag notes to change their played duration.

RESULT

The notes are lengthened/shortened.

NOTE

If you select multiple notes that end at different rhythmic positions and drag them with the mouse pointer, changing their duration forces all the notes to end at the same rhythmic position.

RELATED LINKS

[Expanding/Collapsing tracks](#) on page 429

[Played vs. notated note durations](#) on page 466

[Changing the duration of notes](#) on page 157
[Play toolbox](#) on page 401

Transposing notes in the piano roll editor

You can transpose notes in the piano roll editor by moving them vertically to other pitch positions. You cannot transpose notes in the drum editor, or move them to other unpitched percussion instruments.

PREREQUISITE

Object Selection is selected in the Play toolbox.

PROCEDURE

1. Expand the instrument tracks whose notes you want to transpose.
 2. In the piano roll editor, select the notes you want to transpose.
 3. Transpose the notes in any of the following ways:
 - To move notes up one staff position, such as from C to D, press **Alt-Up Arrow**.
 - To move notes down one staff position, such as from D to C, press **Alt-Down Arrow**.
 - To transpose notes up a single octave division, such as a quarter tone in 24-EDO, press **Shift-Alt-Up Arrow**.
 - To transpose notes down a single octave division, such as a quarter tone in 24-EDO, press **Shift-Alt-Down Arrow**.
 - To transpose notes up an octave, press **Ctrl/Cmd-Alt-Up Arrow**.
 - To transpose notes down an octave, press **Ctrl/Cmd-Alt-Down Arrow**.
 - Click and drag them upwards/downwards.
-

RESULT

The selected notes are transposed according to their new pitch positions in the piano roll editor.

NOTE

- This also affects how the selected notes are notated in any relevant score and part layouts.
 - When using the keyboard, you can both transpose and move notes in the piano roll editor in the same action. When using the mouse, you must release the mouse between transposing and moving.
-

RELATED LINKS

[Moving notes in the event display](#) on page 410
[Equal Division of the Octave \(EDO\)](#) on page 674
[Play toolbox](#) on page 401

Deleting notes in the event display

You can delete notes in the event display in Play mode. This also removes notes from any relevant score and part layouts.

PROCEDURE

1. Expand the instrument tracks whose notes you want to delete.

TIP

When deleting notes from unpitched percussion instruments, expanding just the player track is sufficient.

2. Press **E** to select **Erase**.
3. Delete notes in any of the following ways:
 - Click individual notes.
 - Make a marquee selection to delete multiple notes at once.

NOTE

You can only make marquee selections on a single instrument, including percussion instruments in percussion kits.

RESULT

The notes you click or include in a marquee selection are deleted.

TIP

You can also delete notes by selecting **Object Selection** in the Play toolbox, then selecting the notes you want to delete in the event display and pressing **Backspace** or **Delete**.

RELATED LINKS

[Selecting multiple items using marquee selections](#) on page 43

Zooming in/out of tracks in the event display

You can change the zoom level in the tracks in the event display to make notes appear larger/smaller. This does not affect the height of tracks.

PROCEDURE

- Change the zoom in any of the following ways:
 - To make notes appear wider, press **Z**.
 - To make notes appear narrower, press **X**.
 - To make notes appear taller, **Shift**-click and drag upwards on the piano keyboard on the left.
 - To make notes appear shorter, **Shift**-click and drag downwards on the piano keyboard on the left.
 - To make notes appear wider and taller, spread two fingers outwards on a touchpad.
 - To make notes appear narrower and shorter, pinch two fingers together on a touchpad.
 - To make notes appear wider, click and drag downwards along the playhead in the ruler.
 - To make notes appear narrower, click and drag upwards along the playhead in the ruler.
-

RELATED LINKS

[Changing the height of tracks](#) on page 429

Tracks

Tracks are rows in the event display that represent time horizontally from left to right. They allow you to control multiple musical elements in a project simultaneously but independently of each other.

The term was established when audio mixing was done on tapes, and multitracking allowed separate elements of the music to be recorded and edited independently of each other before being combined into the final piece of music.

In modern programs, such as Cubase, tracks can contain many types of sounds, including audio recordings and software instruments. Tracks containing audio recordings often display the waveform of the audio, while tracks containing software instruments often display the pitches as rectangular note events positioned horizontally in time and vertically in pitch on a piano roll.

Dorico Pro provides the following types of tracks in the event display in Play mode:

Player tracks

Contain all the instrument tracks belonging to that player. You can expand/collapse player tracks to show the instrument tracks they contain.

Instrument tracks

Display the notes belonging to the instrument in a piano roll or drum editor, depending on the type of instrument.

Each instrument track also has its own playing techniques lane and automation lane.

Time track

Displays tempo changes in the flow, including tempo marks input in Write mode as well as tempo changes input in the **Time** track.

Chords track

Displays chord symbols in the flow.

Markers track

Displays markers in the flow, including their text.

Video track

Shows where there is video in the flow, if applicable, including its file name.

RELATED LINKS

[Event display](#) on page 407

[Player tracks](#) on page 415

[Instrument tracks](#) on page 416

[Time track](#) on page 421

[Chords track](#) on page 425

[Markers track](#) on page 427

[Video track](#) on page 429

[Expanding/Collapsing tracks](#) on page 429

Player tracks

Player tracks represent each player in the flow currently shown in the event display and show where notes exist for any of the instruments held by that player. Player tracks are labelled using the player names given to players in Setup mode.



Example player track

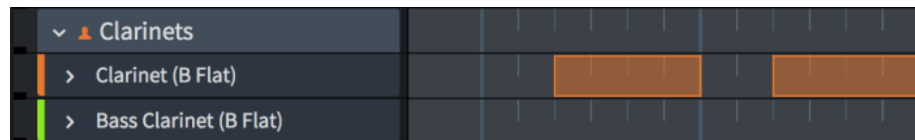
Each player track comprises the following:

1 Track height adjuster

Allows you to change the height of the track by clicking and dragging its bottom corner.

2 Track disclosure arrow

Allows you to expand/collapse the track. Expanding player tracks reveals the instrument tracks of all the instruments held by that player. You can then expand/collapse each instrument track individually.



Expanded player track revealing two collapsed instrument tracks

3 Track name

Shows the name of the track. Player tracks use the player name given to the player in the **Players** panel in Setup mode.

4 Track header

Shows the name of the track and contains the track disclosure arrow.

5 Colored regions

Show where notes exist for any of the instruments held by the player. On collapsed instrument tracks, colored regions show where notes exist for that instrument.

- Colored regions on player tracks use the color assigned to the top instrument held by the player.
- Colored regions on collapsed instrument tracks use the color assigned to that instrument.

NOTE

To interact with the notes indicated by a colored region, you must expand the player track and the corresponding instrument track.

RELATED LINKS

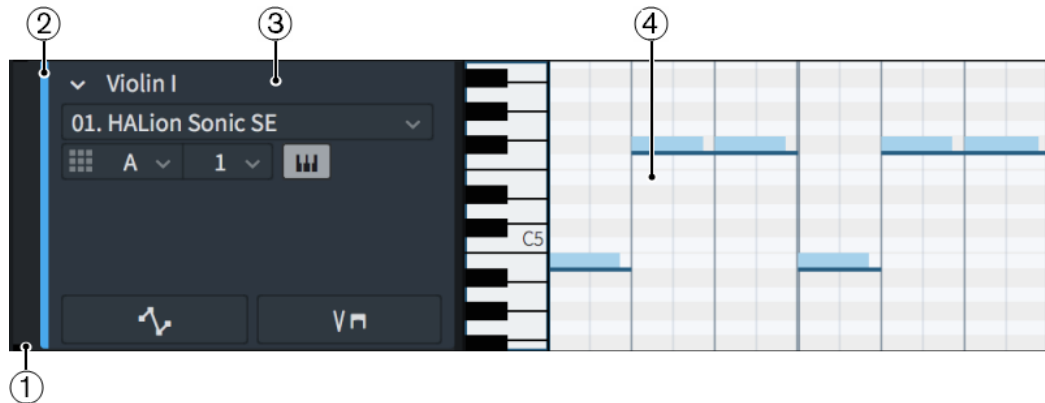
- [Event display](#) on page 407
- [Piano roll editor](#) on page 408
- [Drum editor](#) on page 409
- [Expanding/Collapsing tracks](#) on page 429
- [Player, layout, and instrument names](#) on page 96

Instrument tracks

Instrument tracks allow you to view, input, and edit notes belonging to the corresponding instrument, displayed on a piano roll editor or drum editor, depending on the type of instrument. They are labelled using the instrument name for each instrument.

Each instrument in your project has its own instrument track in the event display in Play mode, including when a single player holds multiple instruments.

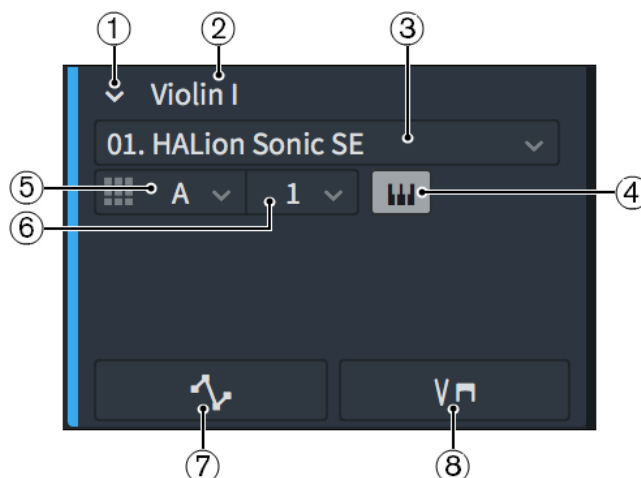
Instruments are automatically assigned a track color when you add them in Setup mode, so that you can tell them apart more easily in Play mode. This color appears as a strip on the instrument track and is used for notes in the event display.



Example instrument track

Each instrument track comprises the following:

- 1 Track height adjuster**
Allows you to change the height of the track by clicking and dragging its bottom corner.
- 2 Color strip**
Displays the color assigned to the track. This color is also used for notes in the piano roll editor/drum editor and for colored regions on player tracks/collapsed instrument tracks.
- 3 Track header**
Shows the name of the track and contains appropriate options for instrument tracks, such as VST or MIDI slot menus.
- 4 Piano roll editor/Drum editor**
Displays notes belonging to the instrument in either a piano roll editor or drum editor, depending on the instrument type.



Example instrument track header

Each instrument track header contains the following:

1 Track disclosure arrow

Allows you to expand/collapse the track.

- Collapsed player tracks show colored regions in the event display. You cannot select or move colored regions.
- Expanded player tracks show notes in either a piano roll editor or drum editor, depending on the instrument type.

2 Track name

Shows the name of the track. Instrument tracks use the instrument name set in the **Edit Instrument Names** dialog for the instrument.

3 VST or MIDI Instrument menu

Allows you to select an instance of a VST or MIDI instrument to use for the instrument track.

4 Edit Instrument

Opens the corresponding VST instrument, allowing you to edit settings for the slot or channel.

5 Port menu

Allows you to change the endpoint to which the instrument is assigned by selecting the port you want to use when using a plug-in that has multiple ports of 16 channels.

6 Slot menu

Allows you to change the endpoint to which the instrument is assigned by selecting the slot in the selected VST instrument, or channel in the selected MIDI instrument, that you want to use for the instrument track.

7 Show the automation lane

Hides/Shows the automation lane below the instrument track.

8 Show the playing techniques lane

Hides/Shows the playing techniques lane below the instrument track.

RELATED LINKS

[Expanding/Collapsing tracks](#) on page 429

[Event display](#) on page 407

[Player tracks](#) on page 415

[Piano roll editor](#) on page 408

[Drum editor](#) on page 409

[Automation lanes](#) on page 418

[Player, layout, and instrument names](#) on page 96

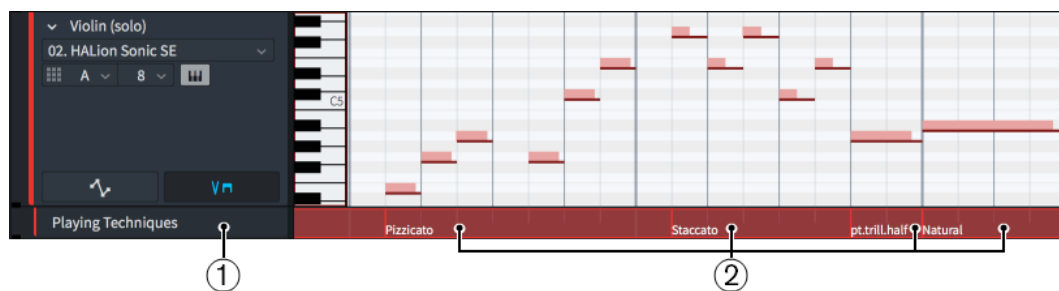
[Endpoint Setup dialog](#) on page 448

[Assigning instruments to endpoints](#) on page 450

Playing techniques lanes

Playing techniques lanes display where you have input playing techniques for the corresponding instrument. Each instrument track has its own playing techniques lane that you can show in the event display.

- You can hide/show the playing techniques lane for an instrument track by clicking **Show the playing techniques lane** in the instrument track header.



Playing techniques lane below an instrument track

Playing techniques lanes comprise the following:

1 Lane header

Shows the name of the lane.

2 Playing technique regions

Display the playing technique that applies to notes in the region. You can hover your mouse pointer over playing technique regions on the lane to see the following related information:

- Playing technique/Playing technique combination used in the expression map
- VST or MIDI instrument used for the region
- Channel in the VST instrument used for the region
- Expression map used for the region

NOTE

You cannot change playing techniques using this lane.

RELATED LINKS

[Instrument tracks](#) on page 416

[Event display](#) on page 407

[Expression maps](#) on page 451

Hiding/Showing playing techniques lanes

You can hide/show the playing techniques lane for each instrument track.

PROCEDURE

1. Expand the instrument tracks whose playing technique lanes you want to hide/show.
2. In each instrument track header, click **Show the playing techniques lane**.

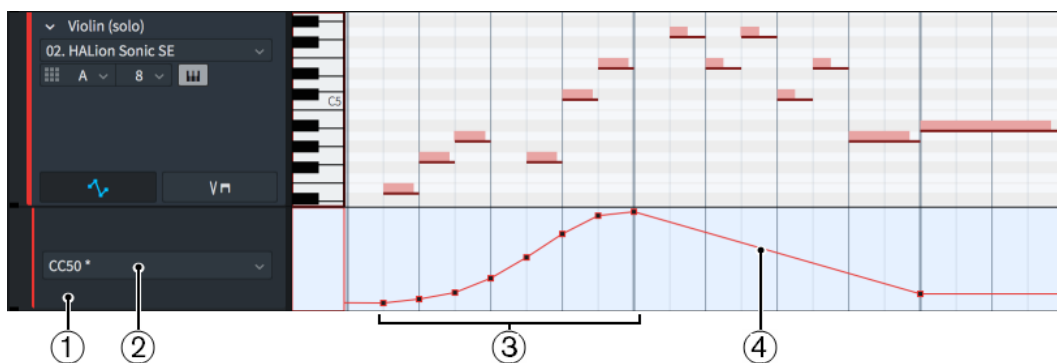
RESULT

The playing techniques lane for each instrument track is shown when the button is highlighted, and hidden when the button is not highlighted.

Automation lanes

Automation lanes allow you to view, input, and edit MIDI controller data that applies to the corresponding instrument. Each instrument track has its own automation lane that you can show in the event display.

- You can hide/show the automation lane for an instrument track by clicking **Show the automation lane** in the instrument track header.
- You can change the MIDI controller whose data is displayed in the automation lane by selecting the controller from the menu in the automation lane track header.



Automation lane below an instrument track

Automation lanes comprise the following:

- 1 Lane header**
Contains the MIDI controller menu.
- 2 MIDI Controller menu**
Allows you to select the MIDI controller whose automation data you want to view and edit in the automation lane. Controllers that already contain automation data are shown with an asterisk beside their name in the menu.
- 3 Automation events input using the Draw tool**
When you use the **Draw** tool to input automation, separate events are created where you click. If you click and drag, separate events are created at regular intervals according to the current rhythmic grid value.
- 4 Gradual automation events input using the Line tool**
When you use the **Line** tool to input automation, a smooth line is created with a single automation event at each end.

Although only a single automation lane can be displayed, it is possible to create data for multiple MIDI controllers in the same lane.

All automation events drawn in automation lanes are included when exporting MIDI files.

RELATED LINKS

[Instrument tracks](#) on page 416

Hiding/Showing automation lanes

You can hide/show the automation lane for each instrument track.

PROCEDURE

1. Expand the instrument tracks whose automation lanes you want to hide/show.
 2. In each instrument track header, click **Show the automation lane**.
-

RESULT

The automation lane for each instrument track is shown when the button is highlighted, and hidden when the button is not highlighted.



Inputting automation in automation lanes

You can input automation data for multiple MIDI controllers in the automation lane for each instrument track.

PREREQUISITE

The automation lane is shown for each instrument to which you want to add automation.

PROCEDURE

1. In each automation lane header, select the MIDI controller into which you want to input automation from the **MIDI Controller** menu.
2. Select one of the following tools, depending on the type of automation you want to input:
 - To input single automation events, or multiple automation events at regular intervals according to the current rhythmic grid value, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

 - To input gradual automation events, select **Line** by clicking **Line** in the Play toolbox.

3. Input automation in one of the following ways:
 - To input single automation events, click in the automation lane at each position where you want an automation event.
 - To input multiple automation events at regular intervals, click and drag in the automation lane.
 - To input gradual automation events, click and drag in the automation lane from where you want the gradual automation event to start to where you want it to end.

RESULT

Automation events are input.

Moving automation events

You can move individual automation events, including moving them upwards and downwards to change their values.

PREREQUISITE

The automation lane is shown for each instrument whose automation events you want to move.

PROCEDURE

1. In the automation lane header, select the MIDI controller whose automation events you want to move from the **MIDI Controller** menu.
2. Select the automation events you want to move in one of the following ways:
 - Click a single automation event
 - Make a marquee selection around multiple automation events

NOTE

You can only move automation events in a single automation lane at a time.

3. Move the selected automation events in any of the following ways:
 - To move them to the right/left, **Ctrl/Cmd**-click and drag them to the right/left.
 - To move them upwards/downwards, **Ctrl/Cmd**-click and drag them upwards/downwards.

TIP

If you want to move automation events upwards/downwards by smaller increments, you can press **Alt** when dragging.

- Click and drag them in any direction.

NOTE

You cannot move automation events beyond other existing automation events during the same action. Releasing the mouse causes the moved automation event to replace the existing one. You can then reselect it and move it further.

RELATED LINKS

[Hiding/Showing automation lanes](#) on page 419

Deleting automation events

You can delete individual or multiple automation events.

PREREQUISITE

The automation lane is shown for each instrument whose automation events you want to delete.

PROCEDURE

1. Press **E** to select **Erase**.
2. Delete automation events in any of the following ways:
 - Click each automation event you want to delete.
 - Make a marquee selection around the automation events you want to delete.

RESULT

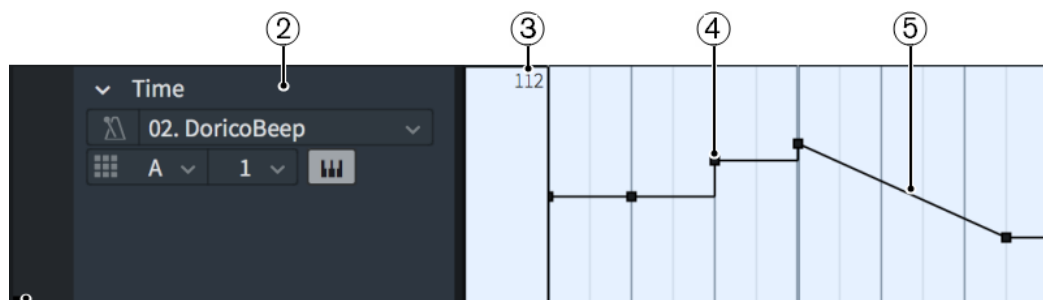
The automation events you click or include in a marquee selection are deleted.

RELATED LINKS

[Hiding/Showing automation lanes](#) on page 419

Time track

The **Time** track allows you to view and edit the tempo of your project, including inputting new tempo changes. It appears above the top player track in the event display in Play mode, and is one of the tracks you can hide/show.



①
Time track

The **Time** track comprises the following:

- 1 **Track height adjuster**
Allows you to change the height of the track by clicking and dragging its bottom corner.
- 2 **Track header**
Shows the name of the track and contains appropriate options, such as the menu for the sound source for the metronome.

3 Fixed tempo read-out

Displays the tempo that corresponds to the current mouse pointer position in the **Time** track.

4 Absolute tempo change

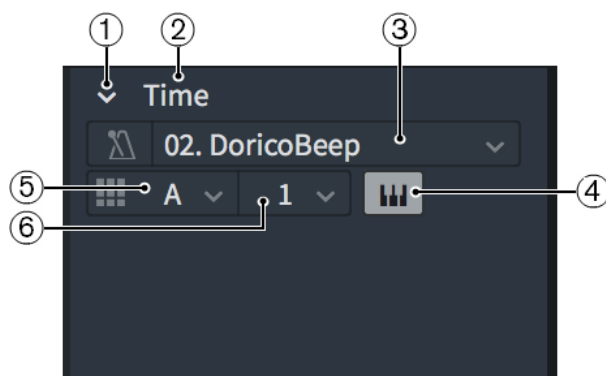
Indicates an immediate change in tempo, shown as a step change.

5 Gradual tempo change

Indicates a steady change in tempo across the duration of the line between the tempo changes at each end.

TIP

Clicking and dragging tempo changes in the **Time** track causes a tempo read-out to appear temporarily, showing their precise tempo.



Time track header

The **Time** track header contains the following:

1 Track disclosure arrow

Allows you to expand/collapse the track.

2 Track name

Shows the name of the track.

3 VST or MIDI Instrument menu

Allows you to select an instance of a VST or MIDI instrument to use for the click.

4 Edit Instrument

Opens the corresponding VST instrument, allowing you to edit settings for the slot or channel.

5 Port menu

Allows you to change the endpoint to which the **Time** track is assigned by selecting the port you want to use when using a plug-in that has multiple ports of 16 channels.

6 Slot menu

Allows you to change the endpoint to which the **Time** track is assigned by selecting the slot in the selected VST instrument, or channel in the selected MIDI instrument, that you want to use for the click.

You can use the following tools to input tempo changes into the **Time** track in Play mode:

- **Draw:** Inputs a separate tempo change at regular intervals, as determined by the current rhythmic grid value.
- **Line:** Inputs a tempo change only at the start and end of the drawn range.

Tempo changes input in the **Time** track in Play mode appear as signposts in Write mode by default to avoid changing the appearance of the printed score. Signposts are not printed by

default, so if you want such tempo changes to be printed in the score, we recommend that you select them in Write mode and activate **Metronome mark shown** in the **Tempo** group of the Properties panel. You can also change their appearance in other ways, for example, by adding text.

All tempo changes input in the **Time** track are included when exporting MIDI files.

RELATED LINKS

[Play toolbox](#) on page 401

[Rhythmic grid](#) on page 144

[Tempo marks](#) on page 950

[Changing the type and appearance of absolute tempo changes](#) on page 959

[Signposts](#) on page 281



Inputting tempo changes in the Time track

You can input tempo changes, including gradual tempo changes, in the **Time** track in Play mode. Tempo changes input in the **Time** track do not appear in layouts, but instead are shown as signposts.

PREREQUISITE

The **Time** track is shown.

PROCEDURE

1. Expand the **Time** track.
2. Select one of the following tools, depending on the type of tempo change you want to input:
 - To input single absolute tempo changes, or multiple absolute tempo changes at regular intervals according to the current rhythmic grid value, select **Draw** by pressing **D** or clicking **Draw** in the Play toolbox.

 - To input gradual tempo changes, select **Line** by clicking **Line** in the Play toolbox.

3. Input tempo changes in one of the following ways:
 - To input single absolute tempo changes, click in the **Time** track at each position where you want a tempo change.
 - To input multiple absolute tempo changes at regular intervals, click and drag in the **Time** track.
 - To input gradual tempo changes, click and drag in the **Time** track from where you want the gradual tempo change to start to where you want it to end.

TIP

The metronome value corresponding to the current vertical position of the mouse pointer is displayed in the **Time** track header.

RESULT

Tempo changes are input. This affects the speed of playback, but the tempo changes are not shown in layouts. Instead, they appear as signposts.

The tempo changes are included when exporting MIDI files.

RELATED LINKS

- [Hiding/Showing tracks](#) on page 430
- [Hiding/Showing tempo marks](#) on page 957
- [Signposts](#) on page 281
- [Changing the rhythmic grid value](#) on page 145

Moving tempo changes in the Time track

You can move individual tempo changes to new rhythmic positions in the **Time** track. This affects their rhythmic position everywhere in the project.

PREREQUISITE

- The **Time** track is shown.
- **Object Selection** is selected in the Play toolbox.

PROCEDURE

1. In the **Time** track, select the tempo changes you want to move in one of the following ways:
 - Click a single tempo change
 - Make a marquee selection around multiple tempo changes
2. **Ctrl/Cmd**-click and drag the selected tempo change, or one of the selected tempo changes, to the right/left.

NOTE

- You can also simply click and drag to the right/left but this does not prevent the selected tempo changes from moving upwards/downwards, which affects their tempo.
- You cannot move tempo changes beyond other existing tempo changes during the same move. Releasing the mouse causes the moved tempo change to replace the existing one. You can then reselect it and move it further.

RESULT

The rhythmic positions of the selected tempo changes are changed. This also affects their rhythmic positions in any layouts in which they appear.

AFTER COMPLETING THIS TASK

You can also move tempo changes vertically, which changes their tempo.

RELATED LINKS

- [Time track](#) on page 421
- [Hiding/Showing tracks](#) on page 430
- [Hiding/Showing tempo marks](#) on page 957
- [Selecting multiple items using marquee selections](#) on page 43

Changing the tempo in the Time track

You can change the tempo of individual tempo changes in the **Time** track.

PREREQUISITE

- The **Time** track is shown.
- **Object Selection** is selected in the Play toolbox.

PROCEDURE

1. In the **Time** track, select the tempo changes whose tempo you want to change in one of the following ways:
 - Click a single tempo change
 - Make a marquee selection around multiple tempo changes
2. **Ctrl/Cmd**-click and drag the selected tempo change, or one of the selected tempo changes, upwards/downwards.

A tempo read-out appears beside the mouse pointer, providing visual feedback of the tempo.

TIP

- If you want to change the tempo by smaller increments, you can press **Alt** when dragging.
 - You can also simply click and drag them upwards/downwards but this does not prevent the selected tempo changes from moving to the right/left, which affects their rhythmic positions.
-

RESULT

The tempo of the selected tempo changes is changed. This affects the speed of playback and the displayed metronome mark of any tempo changes also shown in layouts.

RELATED LINKS

[Hiding/Showing tracks](#) on page 430

Deleting tempo changes in the Time track

You can delete tempo changes in the **Time** track.

PREREQUISITE

The **Time** track is shown.

PROCEDURE

1. Press **E** to select **Erase**.
 2. Delete tempo changes in any of the following ways:
 - Click each tempo change you want to delete.
 - Make a marquee selection around the tempo changes you want to delete.
-

RESULT

The tempo changes you click or include in a marquee selection are deleted. This also deletes their corresponding tempo marks or tempo mark signposts from layouts.

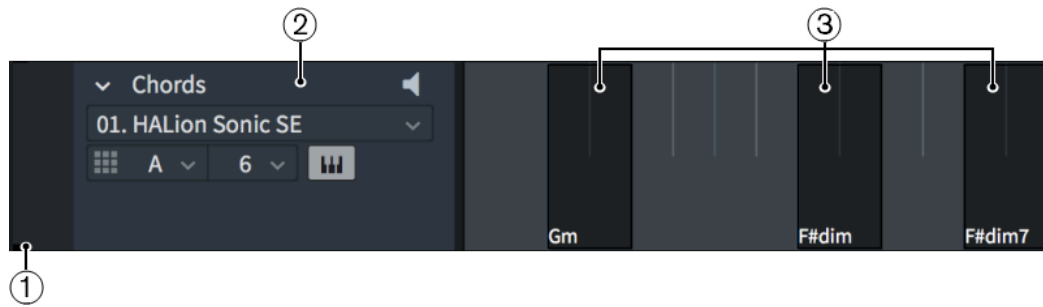
RELATED LINKS

[Selecting multiple items using marquee selections](#) on page 43

Chords track

A **Chords** track is included in every project. You can assign a VST or MIDI instrument to this track to hear any chords that you input into the score as chord symbols in playback.

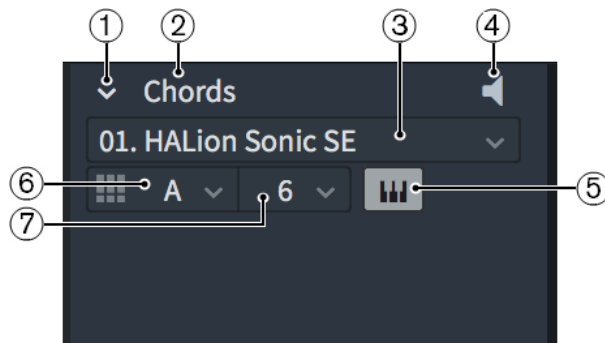
The **Chords** track appears above the top player track in the event display, and is one of the tracks you can hide/show.



①
Chords track

The **Chords** track comprises the following:

- 1 Track height adjuster**
Allows you to change the height of the track by clicking and dragging its bottom corner.
- 2 Track header**
Shows the name of the track and contains appropriate options, such as the button that enables/disables chords playback.
- 3 Chords**
Indicates where chord symbols exist in the flow and shows the chord symbol name.



Chords track header

The **Chords** track header contains the following:

- 1 Track disclosure arrow**
Allows you to expand/collapse the track.
- 2 Track name**
Shows the name of the track.
- 3 VST or MIDI Instrument menu**
Allows you to select an instance of a VST or MIDI instrument to use for chords playback.
- 4 Enable Chords Playback**
Allows you to include chords in, or exclude chords from, playback.
- 5 Edit Instrument**
Opens the corresponding VST instrument, allowing you to edit settings for the slot or channel.
- 6 Port menu**
Allows you to change the endpoint to which the **Chords** track is assigned by selecting the port you want to use when using a plug-in that has multiple ports of 16 channels.
- 7 Slot menu**
Allows you to change the endpoint to which the **Chords** track is assigned by selecting the slot in the selected VST instrument, or channel in the selected MIDI instrument, that you want to use for chords playback.

You can use an existing slot containing a sound already loaded in the project, or you can use a new slot with a new sound loaded just for chords.

NOTE

- You must assign a VST or MIDI instrument and a slot for the **Chords** track in order to hear chords in playback.
- If you assign an empty slot to your **Chords** track and later add more instruments to your project, the sounds for the new instruments overwrite the slot.

RELATED LINKS

[Chord symbols](#) on page 564

[Loading VST and MIDI instruments manually](#) on page 404

[Hiding/Showing tracks](#) on page 430


Enabling chord symbol playback

You can include chord symbols in playback. They are played as sustained chords, with their duration taken from the gap between one chord symbol and the next. Chord symbols input using a MIDI keyboard use the same voicing as you used to input them.

PREREQUISITE

The **Chords** track is shown.

PROCEDURE

1. In the **Chords** track header, click **Enable chords playback**.

2. Optional: If you want to specify the sound used for chords playback, expand the **Chords** track.
3. In the **Chords** track header, select the endpoint you want using the **Port** and **Slot** menus.

RELATED LINKS

[Hiding/Showing tracks](#) on page 430

[Endpoints](#) on page 447

[Endpoint Setup dialog](#) on page 448

Markers track

The **Markers** track allows you to view the markers in your project and input new ones. It appears above the top player track in the event display in Play mode, and is one of the tracks you can hide/show.



Markers track

The **Markers** track comprises the following:

- 1 **Track height adjuster**
Allows you to change the height of the track by clicking and dragging its bottom corner.

2 Track header

Shows the name of the track and contains any appropriate options for the track type.

3 Add Marker

Allows you to add a new marker at the current position of the playhead.

4 Markers

Shows the position of each marker in the flow, including their text.

RELATED LINKS

[Markers](#) on page 814

[Videos](#) on page 125

[Hiding/Showing tracks](#) on page 430

[Changing the text shown in markers](#) on page 815

Inputting markers in the Markers track

You can input markers directly into the **Markers** track in Play mode.

PREREQUISITE

The **Markers** track is shown.

PROCEDURE

1. Move the playhead to the time position where you want to input a marker.

NOTE

You cannot input markers in negative time, such as when a video starts three bars into the flow, causing the initial timecode of the flow to be in negative time.

2. In the **Markers** track header, click **Add Marker**.



RESULT

A marker is input at the position of the playhead. It shows the default text "Marker".

EXAMPLE



Marker in the **Markers** track

AFTER COMPLETING THIS TASK

You can change the text shown in the marker.

RELATED LINKS

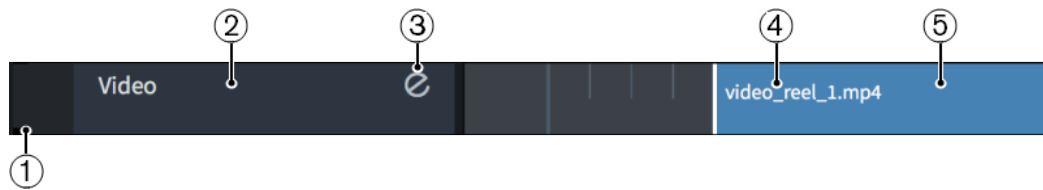
[Changing the start position of videos](#) on page 127

[Changing the text shown in markers](#) on page 815

[Moving the playhead](#) on page 431

Video track

The **Video** track shows where videos exist in the flow relative to the music. It appears above the top player track in the event display in Play mode and is one of the tracks you can hide/show.



Video track

The **Video** track comprises the following:

- 1 Track height adjuster**
Allows you to change the height of the track by clicking and dragging its bottom corner.
- 2 Track header**
Shows the name of the track and contains any appropriate options for the track type.
- 3 e**
Allows you to hide/show the **Video** window. This performs the same function as **Show Video** in the toolbar.
- 4 Video file name**
- 5 Video region**
Shows the position of the video file relative to the music and its length.

RELATED LINKS

- [Videos](#) on page 125
- [Adding videos](#) on page 127
- [Hiding/Showing the Video window](#) on page 128
- [Changing the start position of videos](#) on page 127
- [Toolbar](#) on page 34

Expanding/Collapsing tracks

You can expand/collapse tracks in Play mode individually, and you can expand/collapse all player tracks in the current flow at the same time.

PROCEDURE

- Expand/Collapse tracks in any of the following ways:
 - To expand/collapse an individual track, click its disclosure arrow.
 - To expand/collapse all player tracks, **Ctrl/Cmd**-click any player track disclosure arrow.
-

Changing the height of tracks

You can change the height of all types of tracks at any time, for example, if you want a single track to occupy more space in the event display temporarily so you can work on it in more detail.

PROCEDURE

- Change the height of tracks in any of the following ways:
 - To make tracks taller, select them and press **Shift-H**.

- To make tracks shorter, select them and press **Shift-G**.
- Click and drag the bottom left corner of a single track upwards/downwards.

TIP

When the mouse pointer is in the correct position, it appears as a split arrow.

RELATED LINKS

[Zooming in/out of tracks in the event display](#) on page 413

Hiding/Showing tracks

You can hide/show the tracks that appear above the top player track in the event display in Play mode.

By default, only the **Time** and **Chords** tracks are shown. If you have added at least one video to one flow in the project, the **Time**, **Chords**, **Markers**, and **Video** tracks are all shown by default.

NOTE

You cannot hide/show player and instrument tracks.

PROCEDURE

- Choose **Play > Tracks > [track type]**.
For example, choose **Play > Tracks > Time Track** to hide/show the **Time** track.
-

RESULT

The selected track type is shown when a tick appears beside their entry in the submenu, and hidden when no tick appears.

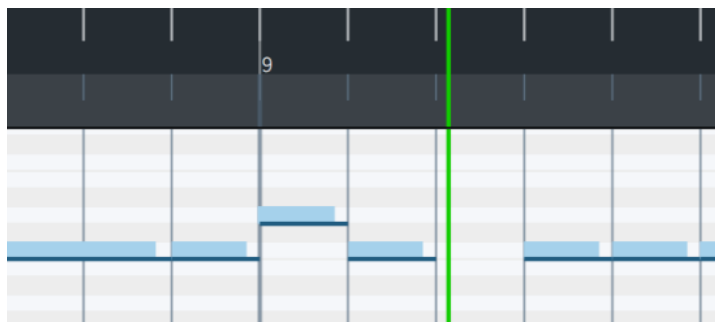
RELATED LINKS

[Tracks](#) on page 414

Playhead

The playhead is a vertical line that moves during playback, showing the current rhythmic position. It is also known as a “playback line”.

The playhead is shown at all times in Play mode, but you can also see it in other modes during playback. You can also choose to show the playhead when playback is stopped in other modes on the **Play** page in **Preferences**.



The playhead in Play mode

Dorico Pro automatically keeps the playhead in view during playback by moving it along with the music, but you can also move the playhead manually. Dorico Pro tries to keep systems in the same place on the screen when it scrolls along with the playhead for consistency as you follow your music.

RELATED LINKS

[Preferences dialog](#) on page 51

Moving the playhead

The playhead automatically moves along with the music during playback, but you can also move the playhead manually in any mode.

You can move the playhead both when it is stopped and during playback, but not all methods of moving the playhead work during playback.

By default, the playhead is only shown during playback. You can choose to show the playhead at all times on the **Play** page in **Preferences**.

PROCEDURE

- Move the playhead in any of the following ways:
 - To move the playhead forwards, press + (plus) on a numeric keypad.
 - To move the playhead backwards, press **Num -** (minus on a numeric keypad).
 - To move the playhead back to the start of the flow, press **Num .** (period on a numeric keypad).
 - To move the playhead to the start of the earliest selected item, press **Alt-P**.
 - To move the playhead to the next frame, press **Ctrl/Cmd-F9** or **Ctrl/Cmd-Num +** (plus on a numeric keypad).
 - To move the playhead back to the previous frame, press **Ctrl/Cmd-F7** or **Ctrl/Cmd-Num -** (minus on a numeric keypad).
 - Click **Fast Forward** in the **Transport** window to navigate forwards.
 - Click **Rewind** in the **Transport** window to navigate backwards.
 - Click **Rewind to Beginning of Flow** in the **Transport** window to go back to the start of the flow.
 - In Play mode, click the ruler at any position.

NOTE

You cannot click the ruler to move the playhead during playback.

RELATED LINKS

[Transport window](#) on page 446

[Preferences dialog](#) on page 51

Playing back music

You can listen to the music you have written from the beginning of your project or from a specific point. You can also use the playback key commands in any mode.

PROCEDURE

1. Start playback in one of the following ways:

- Play back all instruments from the selection by selecting a single note and pressing **P**.
- Play back all instruments from the selection by selecting a single note and choosing **Play > Play From Selection**.
- Play back only a single staff by selecting multiple items on the staff and pressing **P**.

NOTE

This does not affect which channels are soloed or muted in Play mode.

- Play back multiple staves by selecting items on multiple staves and pressing **P**.

NOTE

This does not affect which channels are soloed or muted in Play mode.

- Continue playback from the playhead position by pressing **Space**.
 - Play back from the last playback start position by pressing **Shift-Space**. This works even if you have since deselected the item at that position.
 - Play back from the start of the flow by pressing **Shift-Alt-Space**.
 - Click **Play From Playhead Position** in the **Transport** window.
 - Click **Play From Selection** in the **Transport** window.
 - Choose **Play > Play From Playhead Position**.
 - Choose **Play > Play From Last Start Position**.
 - Choose **Play > Play From Start of Flow**.
 - Choose **Play > Play From Start of Project**.
2. Optional: Move the playhead during playback to later/earlier positions.
 3. Stop playback in any of the following ways:
 - Press **Space** or **P**.
 - Press **0** on a numeric keypad.
 - Click **Stop** in the **Transport** window.
-

RELATED LINKS

[Muting/Soloing tracks](#) on page 432

[Endpoint Setup dialog](#) on page 448

Muting/Soloing tracks

You can mute/solo individual tracks. This allows you to set fixed groups to sound in playback, for example, if you only want to listen to certain groups of players at a time.

PROCEDURE

1. In the toolbar, click **Show Mixer** to show the Mixer.



2. In the Mixer, click the appropriate button at the top of each channel you want to mute/solo.

- **Mute**



- **Solo**

S

RESULT

Each track is muted/soloed and the corresponding buttons are enabled.

This affects which tracks play back until you change which tracks are muted/soloed, meaning you do not have to reselect the tracks you want to hear each time. For example, if you have eight tracks and solo four, only those four are played back. If you mute two tracks, those tracks are not played back but the other six are played back.

NOTE

- Soloing tracks automatically mutes all other tracks. If you solo a track that was muted, it is automatically unmuted.
 - You can also play back only certain tracks/staves by selecting notes/items on each track/staff you want to hear.
-

EXAMPLE



Mute when enabled



Solo when enabled

RELATED LINKS

[Expanding/Collapsing tracks](#) on page 429

[Muting notes/items individually](#) on page 434

Muting/Soloing instruments

You can solo the currently selected instruments, which automatically mutes all other instruments. This can be useful if you want to ensure only certain instruments are played back while you are working on a specific section of a project.

PROCEDURE

1. Select at least one note belonging to each instrument you want to solo. You can do this in Write, Engrave, and Play modes.
 2. Press **Alt-S**.
-

RESULT

The selected instruments are soloed and all other instruments are muted by changing their mute/solo states in the Mixer. This affects which instruments are muted/soloed until you deactivate their mute/solo states.

TIP

You can also determine which staves are included in playback for each separate playback without changing their states in the Mixer.

RELATED LINKS

[Mixer](#) on page 443

Deactivating mute/solo instrument states

You can deactivate the mute and solo states of all instruments in your project, for example, if you want to hear all instruments in playback after soloing a small selection. You can do this in any mode.

PROCEDURE

- Deactivate mute/solo instrument states in the following ways:
 - To deactivate all mute instrument states, press **Alt-U**.
 - To deactivate all solo instrument states, press **Shift-Alt-S**.
 - In the Mixer, click **Deactivate All Mute States**.
 - In the Mixer, click **Deactivate All Solo States**.

RESULT

All instruments in the project have the corresponding state removed. For example, removing both mute and solo instrument states reverts all instruments to their default state, causing all instruments to be included in playback.

RELATED LINKS

[Mixer](#) on page 443

Muting notes/items individually

You can mute individual notes and items to exclude them from playback without deleting them, for example, to hear chords without their arpeggios or hear a passage with multiple dynamics at a single volume level.

PROCEDURE

1. In Write mode, select the notes/items you want to mute in playback.
2. In the Properties panel, activate **Muted** in the **Common** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

The selected notes/items are muted when the checkbox is activated, meaning they do not affect playback, and are not muted when the checkbox is deactivated.

Resetting changes to volume faders

You can reset changes you have made to volume faders in the Mixer back to their default level.

PREREQUISITE

The Mixer window is shown.

PROCEDURE

- In the Mixer, **Ctrl/Cmd**-click each volume fader that you want to reset.

RELATED LINKS

[Hiding/Showing the Mixer window](#) on page 445

[Mixer](#) on page 443

Changing the tempo mode

You can switch the tempo mode at any time between using a single fixed tempo and following tempo changes, for example, if you have a project with multiple tempo changes but want to use a single fixed tempo when recording MIDI.

PROCEDURE

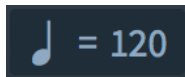
- Change the tempo mode in any of the following ways:
 - In any mode, click **Fixed Tempo Mode** in the toolbar.
 - In Play mode, choose **Play > Fixed Tempo Mode**.

RESULT

Follow tempo mode is active when **Fixed Tempo Mode** in the toolbar appears highlighted, and when no tick appears beside **Fixed Tempo Mode** in the **Play** menu.

Fixed tempo mode is active when **Fixed Tempo Mode** in the toolbar is not highlighted, and when a tick appears beside **Fixed Tempo Mode** in the **Play** menu.

EXAMPLE



Tempo when fixed tempo mode is active



Tempo when follow tempo mode is active

Changing the pre-roll duration

In Dorico Pro, pre-roll is the time added to playback before the first beat of the first bar in each flow. You can change the pre-roll duration, for example, if some flows in your project start with grace notes.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
2. Click **Timing** in the page list.
3. In the **Flows** section, change the value for **Pre-roll before flow**.
For example, for flows starting with a single grace note, 0.25 seconds is usually sufficient.
4. Click **Apply**, then **Close**.

RESULT

The duration of the pre-roll before each flow in playback, measured in seconds, is changed.

Changing the playback tuning

You can change the tuning used for playback, based on the pitch of the A above middle C, for example, if you want to hear your music played at the Baroque pitch of A=415 Hz.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
2. Click **Tuning** in the page list.
3. Change the value for **Pitch of A4**.
4. Click **Apply**, then **Close**.

RESULT

The tuning of all notes in the project is changed, which affects their sounding pitch in playback.

Repeats in playback

Dorico Pro supports the playback of repeat structures, including repeat endings, repeat barlines, and repeat markers, provided all the correct jumps and sections are in place.

There is no limit to the number of repeat structures you can have in a single flow and still obtain correct playback.

By default, Dorico Pro includes repeats in playback, except after repeat jumps, such as D.S. al Coda. You can change both of these options on the **Repeats** page in **Play > Playback Options**.

During playback, the bars/beats and time displays in the mini transport and **Transport** window reflect the current position of the playhead in repeat structures.

Dynamics and tempo marks are reflected in repeats. Repeats are also included in both audio and MIDI exports.

RELATED LINKS

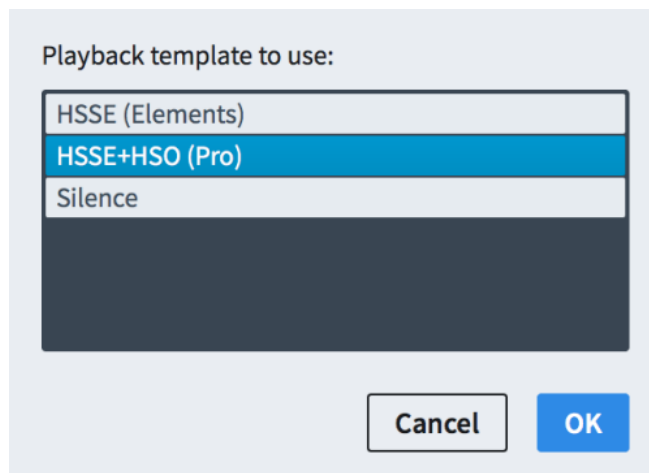
[Transport window](#) on page 446

[Mini transport](#) on page 35

Playback templates

Dorico Pro uses playback templates to allocate sounds from VST instruments and MIDI devices to the instruments in your project.

- You can find the available playback templates by choosing **Play > Playback Template**, which opens the **Playback Template** dialog.



Playback Template dialog

Dorico Pro offers the following playback templates:

- **HSSE (Elements)**
Intended for use with HALion Sonic SE.
- **HSSE+HSO (Pro)**
Intended for use with both HALion Sonic SE and HALion Symphonic Orchestra.
- **Silence**
Prevents Dorico Pro from loading sounds.

TIP

Choosing the **Silence** template makes Dorico Pro project files significantly smaller, for example, when sending them electronically.

When you use any of these playback templates, Dorico Pro automatically loads new sounds for any new instruments you add to the project.

You can override the template and make your own manual changes to the sounds used by instruments in your project, such as by changing the expression maps assigned to endpoints. Overriding the playback template prevents Dorico Pro from making further changes to these settings. This includes preventing Dorico Pro from automatically loading new sounds for new instruments until you reapply one of the default playback templates.

RELATED LINKS

[Endpoint Setup dialog](#) on page 448

[Assigning expression/percussion maps to endpoints](#) on page 450

Changing/Resetting the playback template

You can change the playback template used for the project currently open, for example, if you do not need to use playback and so want to prevent Dorico Pro from loading sounds. Re-selecting playback templates resets them to their default settings.

PROCEDURE

1. Choose **Play > Playback Template** to open the **Playback Template** dialog.
 2. Select the playback template you want to use.
 3. Click **OK** to save your changes and close the dialog.
-

RESULT

The playback template used for the current project is changed. If you re-selected the playback template already in use, the playback template is reset.

TIP

You can change the default playback template used for all future projects on the **Play** page in **Preferences**.

RELATED LINKS

[Playback templates](#) on page 436

[Preferences dialog](#) on page 51

Swing playback

Swing is a style of performance where equally-notated notes are played in a regular pattern of alternating longer and shorter notes, which commonly entails eighth notes being played as a quarter note triplet followed by an eighth note triplet.



A swing phrase with simplified straight notation

How the same phrase sounds with a 2:1 swing ratio

Swing playback allows you to hear the uneven rhythms you want whilst retaining their simplified notation, including if the second eighth note beat is divided into two 16th notes. In Dorico Pro, you can enable swing playback for your whole project, only for certain sections, and only for individual instruments. You can also edit the default swing patterns to customize the rhythmic feel you want in the **Rhythmic Feel** dialog.

Based on academic research into the rendering of swing by musicians, swing patterns in Dorico Pro are tempo-dependent by default. This means that the swing feels more pronounced at lower tempos, and straighter at higher tempos. Rhythmic feels that produce the same swing ratio at all tempos are also available in the **Rhythmic Feel** dialog.

NOTE

Dorico Pro currently only supports eighth note swing playback. 16th note swing playback is planned for future versions.

RELATED LINKS

[Rhythmic Feel dialog](#) on page 441

Swing ratios and rhythmic feels

Swing ratios express the strength of the swing using beat units. For example, a swing ratio of 2:1 means the first note in each pair is twice as long as the second, creating a triplet swing.

A swing ratio of 1:1 means the music is played straight, while a swing ratio of 5:1 means each pair of notes is played as if they were sextuplets, with the first note in the pair lasting five divisions and the second note lasting one.



Swing ratio 1:1



Swing ratio 5:1

The following rhythmic feels and swing ratios are provided by default in Dorico Pro:

2:1 swing (fixed)

Extends the first note in a pair of eighth notes to be twice as long as the second, creating a strict triplet 2:1 ratio. This is also known as a “triplet swing”. This ratio is maintained regardless of the tempo by default.

3:1 swing (fixed)

Extends the first note in a pair of eighth notes to be three times as long as the second, creating a dotted eighth-16th ratio (dotted quaver-semiquaver). This ratio is maintained regardless of the tempo by default.

Heavy swing

Produces a tempo-dependent swing ratio of between 3:1 at low tempos and 1.5:1 at high tempos.

Light swing

Produces a tempo-dependent swing ratio of between 1.5:1 at low tempos and 1:1 at high tempos.

Medium swing

Produces a tempo-dependent swing ratio of between 2:1 at low tempos and 1.5:1 at high tempos.

Straight (no swing)

Produces no swing, that is, even eighth notes in the ratio 1:1 at all tempos.

You can change the swing ratio used project-wide, and you can also change the swing ratio used for specific sections and for individual players. You can edit these settings and create your own swing ratios in the **Rhythmic Feel** dialog.

RELATED LINKS

[Rhythmic Feel dialog](#) on page 441

Enabling swing playback project-wide

You can enable swing playback project-wide using any of the default swing ratios or custom swing ratios you have created in the project.

PREREQUISITE

If you want to use a custom rhythmic feel for swing playback, you have created that custom rhythmic feel.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
2. Click **Timing** in the page list.
3. In the **Rhythmic Feel** section, select the rhythmic feel you want from the **Default rhythmic feel** menu.
4. Click **Apply**, then **Close**.

RESULT

All pairs of eighth notes in your project are played back with the selected swing ratio, including if the second eighth note beat is divided into two 16th notes.

RELATED LINKS

[Playback Options dialog](#) on page 405

[Creating custom rhythmic feels for swing playback](#) on page 441

[Rhythmic Feel dialog](#) on page 441

Enabling swing playback for specific sections/players

You can enable swing playback for specific sections in your project and for individual players independently, for example, if you want only the soloist to swing for a twelve-bar section.

PROCEDURE

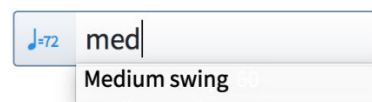
1. In Write mode, select an item at the start of the bar where you want to change the rhythmic feel for swing playback.

NOTE

If you select an item in the middle of a bar, the rhythmic feel change only takes effect from the start of the next bar.

2. Press **Shift-T** to open the tempo popover.
3. Enter the rhythmic feel you want into the popover. For example, enter **med** for Medium swing.

When you start entering a rhythmic feel into the tempo popover, a menu appears that shows suggested rhythmic feels containing the letters/words you enter, which you can select.



4. Input the rhythmic feel change and close the popover in one of the following ways:
 - To input a rhythmic feel change for all staves, press **Return**.
 - To input a rhythmic feel change only for the selected staff, press **Alt-Return**.
-

RESULT

The rhythmic feel used for swing playback is changed from the start of the bar, or the start of the next bar if you selected an item in the middle of a bar. If you pressed **Alt-Return**, the rhythmic feel change only applies to the staff on which you selected an item.

A signpost appears showing the name of the rhythmic feel you input. It is shown above the top staff in the system for rhythmic feel changes that apply to all staves, and directly above an individual staff for rhythmic feel changes that apply only to that staff.

RELATED LINKS

[Tempo popover](#) on page 196

Deleting rhythmic feel changes

You can delete rhythmic feel changes you have enabled for specific changes or for individual players only.

PREREQUISITE

Rhythmic change signposts are shown.

PROCEDURE

1. In Write mode, select the signposts of the rhythmic changes you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The rhythmic changes are deleted. The playback of the affected staves returns to your project-wide settings until the next existing rhythmic change signpost, if applicable.

RELATED LINKS

[Hiding/Showing signposts](#) on page 283

Creating custom rhythmic feels for swing playback

You can create custom rhythmic feels that you can use for swing playback, for example, if you want a swing ratio that is not included in the default rhythmic feels. You can create entirely new rhythmic feels or rhythmic feels based on existing ones.

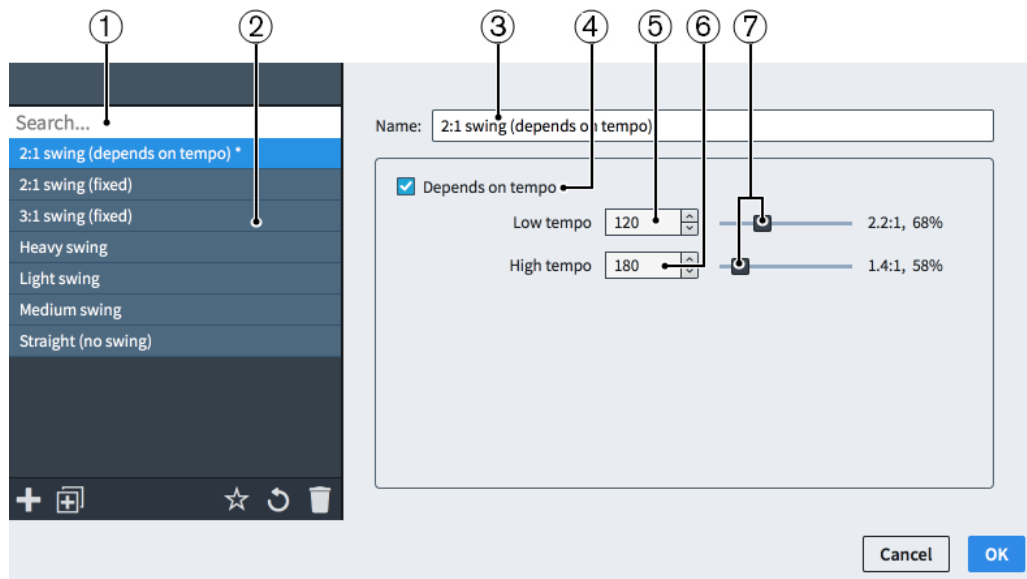
PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
 2. Click **Timing** in the page list.
 3. In the **Rhythmic Feel** section, click **Edit** to open the **Rhythmic Feel** dialog.
 4. Create a new rhythmic feel in one of the following ways:
 - To create an entirely new rhythmic feel, click **New**.
 - To create a new rhythmic feel based on an existing one, select the existing rhythmic feel in the rhythmic feels list and click **New from Selection**.
 5. Enter a name for the rhythmic feel in the **Name** field.
 6. Move the **Low tempo** swing ratio slider to the swing ratio you want.
 7. Optional: If you want the swing ratio of your custom rhythmic feel to vary according to the tempo, activate **Depends on tempo**.
 8. Optional: If you activated **Depends on tempo**, change the bpm values for **Low tempo** and/or **High tempo**.
 9. Optional: If you activated **Depends on tempo**, move the **High tempo** swing ratio slider to the swing ratio you want.
 10. Click **OK** to save your changes and close the dialog.
 11. Click **Apply**, then **Close**.
-

Rhythmic Feel dialog

The **Rhythmic Feel** dialog allows you to edit the settings of the default rhythmic feels used for swing playback and to create your own custom rhythmic feels.

- You can open the **Rhythmic Feel** dialog by clicking **Edit** in the **Rhythmic Feel** section of the **Timing** page in **Play > Playback Options**.



Rhythmic Feel dialog

The **Rhythmic Feel** dialog contains the following options and sections:

1 Search field

Allows you to filter the rhythmic feels according to your entry.

2 Rhythmic feels list

Contains the rhythmic feels available for your project.

The action bar at the bottom of the list contains the following options:

- **New**



Allows you to create a new rhythmic feel with default values.

- **New from Selection**



Creates a new rhythmic feel based on the selected one. Initially no values are overridden but you can change the options for your new rhythmic feel.

- **Save as Default**



Copies the selected rhythmic feel to your library so that it is available in other projects.

- **Revert to Factory**



Removes all your changes to the selected predefined rhythmic feels, reverting them to the default factory settings.

- **Delete**



Deletes the selected rhythmic feel.

NOTE

You cannot delete predefined rhythmic feels or any rhythmic feel that is currently used in your project.

3 Name

Allows you to enter a name for new rhythmic feels or edit the name of existing rhythmic feels.

4 Depends on tempo

Controls whether the swing pattern uses the same ratio at all tempos or changes according to the tempo.

- When **Depends on tempo** is activated, the swing ratio varies according to the tempo. A second slider appears for **High tempo**, allowing you to change the values for both **Low tempo** and **High tempo**.
- When **Depends on tempo** is deactivated, the swing ratio value of the single slider is used at all tempos.

5 Low tempo

Sets the tempo at/below which the swing ratio changes, measured in quarter note beats per minute. The swing ratio slider to the right controls the swing ratio used.

6 High tempo

Sets the tempo at/above which the swing ratio changes, measured in quarter note beats per minute. When **Depends on tempo** is activated, the swing ratio slider to the right controls the swing ratio used.

7 Swing ratio sliders

Allow you to set the swing ratio to be used below the set **Low tempo** and above the set **High tempo**. Their possible ranges are from 1:1, which is straight, to 5:1, which is a sextuplet with the second notated eighth note sounding on the final division.

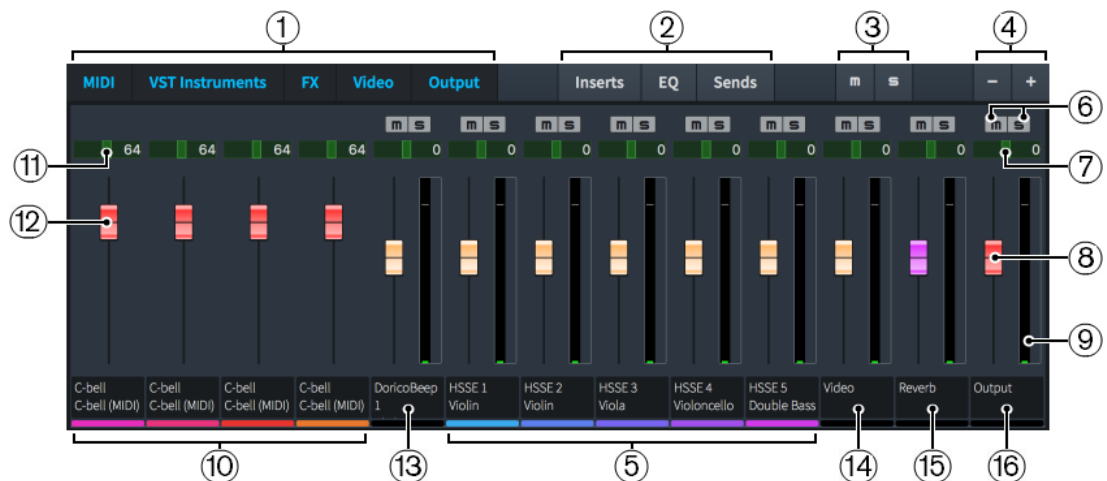
The current swing ratio and swing percentage values of the sliders are shown to their right.

RELATED LINKS

[Playback Options dialog](#) on page 405

Mixer

The Mixer allows you to control the sounds produced in playback, both for the master output and on each individual channel.



Mixer

- 1 Channel type buttons**
Allow you to hide/show channels in the Mixer according to their type, and in any combination.
- 2 Channel controls**
Allow you to hide/show the corresponding controls in the channel strip according to their type, and in any combination.
- 3 Deactivate All Mute States/Deactivate All Solo States**
Allows you to deactivate all mute/solo states by clicking the corresponding button.
- 4 Zoom**
Allows you to make channels wider/narrower.
- 5 VST channels**
There is a mixer channel for each stereo output from the VST instruments in your project, and all instruments in your project are shown, even if they are spread across multiple VST instrument instances. Channels are stereo by default.
- 6 Mute/Solo**
Allows you to mute/solo individual tracks.
- 7 Balance panner**
Allows you to position the sound of each individual track on the stereo spectrum for stereo playback.
- 8 Fader**
Allows you to control the volume level of each individual track.
MIDI channels have a MIDI fader.
- 9 Channel meter**
Indicates the output volume of each individual channel in real time.
- 10 MIDI channels**
Every VST instrument in your project has its own MIDI channel in addition to its VST channel. These MIDI channels allow you to change the MIDI volume and MIDI pan of each instrument.
- 11 MIDI pan**
Allows you to position the MIDI output of the channel on the stereo spectrum for stereo playback.
- 12 MIDI fader**
Allows you to change the MIDI volume of the channel.
Some plug-ins require MIDI faders, and this is often useful if you are using a MIDI device for playback.
- 13 Click channel**
Allows you to control the volume of the metronome click.
- 14 Video channel**
Allows you to control the volume of video audio.
- 15 FX Send channel**
Allows you to control the volume of send effects, such as reverb. By default, this channel has REVERence loaded automatically.
- 16 Output channel**
Allows you to control the master output volume.

NOTE

In order to control the volume levels in your project, we recommend that you first input dynamics and adjust the dynamic curve to suit your project before using the track faders.

Any changes you make in the Mixer are automatically saved and applied to the project.

RELATED LINKS

[Hiding/Showing the Mixer window](#) on page 445

[Muting/Soloing tracks](#) on page 432

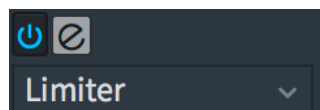
[Resetting changes to volume faders](#) on page 434

Mixer channel strips

Each channel in the Mixer has its own channel strip, which contains the channel controls. You can hide/show each type of channel control by clicking the corresponding button at the top of the mixer.

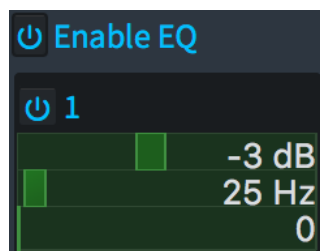
Each channel strip contains the following types of controls:

Inserts



Each channel has four slots into which you can load an insert. You can select an insert from the available options in the menu.

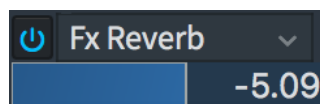
EQ



Each channel has four bands of EQ.

In order to make changes to the EQ bands on a channel, you must first click **Enable EQ**. You can use this to bypass the EQ on a channel without losing your settings.

Sends



Each channel has four slots for sends. By default, the first slot for each channel sends to the FX channel, which has reverb loaded on it.

Hiding/Showing the Mixer window

You can open and close the Mixer window at any time, for example, if you do not want it in view when working on the music in the music area.

PROCEDURE

- Hide/Show the Mixer window in any of the following ways:

- Press **F3**.
- Click **Show Mixer** in the toolbar.



- Choose **Window > Mixer**.

The Mixer window is shown when a tick appears beside **Mixer** in the menu, and hidden when no tick appears.

Transport window

The **Transport** window contains all the transport functions in Dorico Pro. It contains more precise versions of the transport functions available in the toolbar and additional transport functions.

You can open/close the **Transport** window in any of the following ways:

- Press **F2**.
- Click **Show Transport Bar** in the toolbar.



Transport window

The **Transport** window contains the following information and functions:

- 1 Bars/Beats display**
Shows the position of the playhead relative to bars and beats in the current flow in the following order of units: bars, beats, 16th notes, 120ths of a 16th note.
- 2 Time display**
Shows the position of the playhead as elapsed time in the following order of units: hours, minutes, seconds, milliseconds. Alternatively, it can show the timecode position of the playhead in the current flow in the following order of units: hours, minutes, seconds, frames.
You can switch between having the time display show the time and timecode by clicking it.
- 3 Rewind to Beginning of Flow**
Moves the playhead back to the beginning of the flow.
- 4 Rewind**
Moves the playhead back by a half note each time you click.
- 5 Fast Forward**
Moves the playhead forwards by a half note each time you click.
- 6 Stop**
Stops playback.
- 7 Play From Playhead Position**
Plays back from the position of the playhead.
- 8 Play From Selection**
Plays back from the position of the first selected item in the music area.
If you select items on multiple staves, or multiple items on a single staff, only the selected staves are played back.
- 9 Record**

Starts/Stops MIDI recording.

10 Retrospective Record

Retrieves any MIDI notes you played during the previous playback and allows you to input them on any staff, even if you were not recording them explicitly.

11 Click

Plays/Mutes the metronome click during playback and recording.

12 Tempo

Displays the tempo used for both playback and recording. The value changes according to the current position of the playhead and its appearance changes according to its current mode.

RELATED LINKS

[Mini transport](#) on page 35

[Changing the tempo mode](#) on page 435

Changing the content shown in the transport display

You can switch between showing the timecode, the total elapsed time, and the current rhythmic position of the playhead expressed in bars, beats, and ticks in both the mini transport in the toolbar and the **Transport** window.

PROCEDURE

- In either the mini transport in the toolbar or the **Transport** window, click the transport display until the content you want appears.
In the **Transport** window, this is the display on the right.

RESULT

Each time you click in the mini transport display, it cycles through showing the rhythmic position of the playhead, elapsed time, and the timecode.

In the **Transport** window, it only switches between the timecode and elapsed time, as the rhythmic position of the playhead is shown permanently on the left of the window.

TIP

You can change what is shown in the mini transport by default for all future projects on the **Play** page in **Preferences**.

RELATED LINKS

[Toolbar](#) on page 34

[Mini transport](#) on page 35

[Transport window](#) on page 446

[Timecodes](#) on page 819

[Preferences dialog](#) on page 51

Endpoints

“Endpoint” is the term used for the unique combination of inputs and outputs that together allow the correct sounds to be played for each instrument.

In Dorico Pro, each endpoint brings together the following:

- A particular VST instrument or MIDI output device
- A specific channel on that VST instrument or MIDI output device

- The patch or program assigned to that channel
- The expression map, and optionally percussion map as well, that describes the instrument or instruments that can be played by that patch or program, and the playing techniques and articulations provided

Each instrument in your project is connected to a specific endpoint, and assigning an expression map to the same endpoint allows Dorico Pro to translate playing technique changes and note articulations into the key switches and controller switches necessary to reflect the required sounds for the instrument in playback.

If you are using the **HSSE+HSO (Pro)** playback template with HALion Sonic SE or HALion Symphonic Orchestra, endpoints and expression maps are set up automatically. However, if you want to load other plug-ins or change the patches within HALion Sonic SE, then you must use the **Endpoint Setup** dialog.

For example, if you have a project that uses the **HSSE+HSO (Pro)** playback template and you change one of the sounds in HALion Sonic SE, such as changing Clarinet Combi in HALion Symphonic Orchestra to GM Clarinet, this plays back incorrectly because the HALion Symphonic Orchestra patch uses a modulation wheel to control volume dynamics, but the GM patch uses note velocity. In playback, notes consequently have no dynamics and too much vibrato. You can correct this in the **Endpoint Setup** dialog by changing the expression map for that channel from the HALion Symphonic Orchestra Clarinet to **Default**, which uses note velocity for dynamics instead of a modulation wheel.

Endpoint Setup dialog

The **Endpoint Setup** dialog displays which expression and percussion maps are currently linked to each endpoint, and allows you to change these settings.

- You can open the **Endpoint Setup** dialog by clicking the cog button beside each plug-in in the VST and MIDI Instruments panel.



Number of MIDI ports: 1

Number of MIDI channels: 6

Port	Channel	Assigned Instruments	Expression map	Percussion map
A	1	Clarinet	HSO Clarinet Solo	
A	2	Bass Clarinet	HSO Bass Clarinet	
A	3	Viola	HSO Viola Solo	
A	4	Suspended Cymbal	Default	HSO Cymbal Large Combi KS
A	5	Bass Drum	Default	HSO Gran Cassa Combi KS
A	6	Tam-tam	Default	HSO Tam Tam

Number of audio outputs to show in Mixer: 1

Endpoint Setup dialog

The **Endpoint Setup** dialog contains the following options and sections:

1 Number of MIDI ports

Displays the number of MIDI ports currently used by the corresponding plug-in.

Allows you to change the number of MIDI ports, for example, if you are using a plug-in that uses more than one port. Dorico Pro does not load multiple MIDI ports by default.

2 Number of MIDI channels

Displays the number of MIDI channels currently used by the corresponding plug-in.

Allows you to change the number of channels, for example, if you have a monotimbral plug-in such as a piano sampler which only has one MIDI channel, or a multitimbral plug-in with 16 MIDI channels and 16 audio outputs.

3 Set

Sets the plug-in to have the number of MIDI ports and channels specified in the **Number of MIDI ports** and **Number of MIDI channels** fields.

4 Endpoint setup table

Contains the settings for the corresponding plug-in, arranged into the following columns:

- **Port**

Displays the port used by the instrument in the corresponding row of the table.

NOTE

You cannot change the port from within the **Endpoint Setup** dialog. You must change the port in the instrument track headers.

- **Channel**

Displays the channel used by the instrument in the corresponding row of the table.

NOTE

You cannot change the channel from within the **Endpoint Setup** dialog. You must change the channel in the instrument track headers.

- **Assigned Instruments**

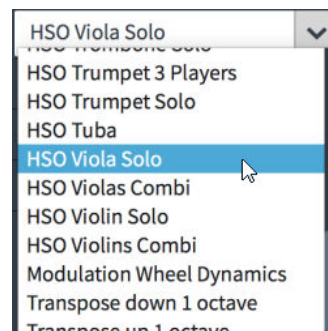
Displays the name of the instrument in the corresponding row.

NOTE

This field uses the underlying instrument name, meaning that any changes you have made to the instrument name in the **Edit Instrument Names** dialog are not shown.

- **Expression map**

Displays the expression map currently assigned to the instrument in the corresponding row. You can change the expression map by double-clicking it and selecting another expression map from the menu.



- **Percussion map**

Displays the percussion map currently assigned to the instrument in the corresponding row. You can change the percussion map by double-clicking it and selecting another percussion map from the menu.

5 Number of audio outputs to show in Mixer

Allows you to change the number of audio outputs shown in the Mixer, for example, if you want to hide unused outputs when using plug-ins that provide more audio outputs than are used by Dorico Pro.

RELATED LINKS

[Expression Maps dialog](#) on page 452

[Edit Instrument Names dialog](#) on page 97

Assigning instruments to endpoints

You can assign instruments to any endpoint, for example, if you have loaded a plug-in with multiple ports and want to change the endpoint of an existing instrument to an endpoint on one of your new ports.

PROCEDURE

1. Expand the instrument tracks whose assigned endpoints you want to change.
2. In each instrument track header, select a new option from one or both of the following menus:
 - **Port**
 - **Slot**

RESULT

The endpoints to which the instruments are assigned are changed in one of the following ways:

- Changing just the **Slot** value changes the channel in the plug-in used by the corresponding instrument.
- Changing both the **Port** and **Slot** values changes both the port in the plug-in, and the channel in that port, used by the corresponding instrument.

RELATED LINKS


[Expression Maps dialog](#) on page 452

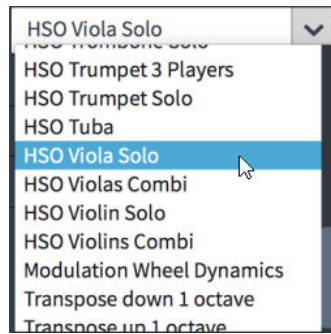
[Instrument tracks](#) on page 416

Assigning expression/percussion maps to endpoints

You can assign expression/percussion maps to the endpoints in your project, for example, if you have created a custom percussion map and must link it to the endpoint for the corresponding VST patch.

PROCEDURE

1. In the VST and MIDI Instruments panel, click the cog button beside the plug-in in which you want to change the expression/percussion maps assigned to endpoints to open the **Endpoint Setup** dialog.

2. Double-click the expression/percussion map you want to change.
3. Click the disclosure arrow on the right of the field.
A menu appears containing all maps of the same type currently loaded in your project.



4. Select the expression/percussion map you want from the menu.
 5. Press **Return**.
 6. Optional: Repeat steps 2 to 5 for any other endpoints whose assigned expression/percussion maps you want to change.
 7. Click **OK** to save your changes and close the dialog.
-

RELATED LINKS

[Percussion maps](#) on page 460

Expression maps

Expression maps tell Dorico Pro how to use appropriately the patches and sounds in the VST instruments that you have loaded into your project.

Expressing a range of dynamics on instruments means changing the volume and attack of notes. Because the strength of attack changes the character of the start of sounds as well as their volume, loud sounds often require stronger attacks and quiet sounds often require softer attacks.

Different patches and instruments have different approaches to changing dynamics and volume in playback. For example, some patches only change the velocity whereas others use a controller in combination with changing the velocity.

Dorico Pro also uses expression maps to specify the playing techniques that are supported by each patch in your project. For example, string instruments such as the violin have different techniques, because they can play *arco*, *pizzicato*, and *col legno*, and their bow position can be anywhere between *sul ponticello* and *sul tasto*.

Dorico Pro supports the following ways of sending information to VST instruments:

- Key switches
- Controllers

NOTE

Program changes are not currently supported.

In addition to the HALion Symphonic Orchestra expression maps, there are the following expression maps in Dorico Pro:

- **CC11 Dynamics**
Uses MIDI controller 11 to play dynamics.

NOTE

This only applies to instruments that can change their dynamic while notes are sounding, such as violin or flute.

- **Default**
Uses note velocity to control dynamic volume.
- **Modulation Wheel Dynamics**
Uses a modulation wheel to control the dynamic volume.
- **Transpose down 1 octave**
Used by some instrument patches that sound an octave higher than written so that they can be played without needing a full range keyboard.
- **Transpose up 1 octave**
Allows the bottom octave of keyboards to be used for key switches instead of notes, but is also used by some bass instrument patches that sound an octave lower than written so that they can be played without needing a full range keyboard.

You can edit, create, and import/export expression maps in the **Expression Maps** dialog.

RELATED LINKS

[Percussion maps](#) on page 460

Expression Maps dialog

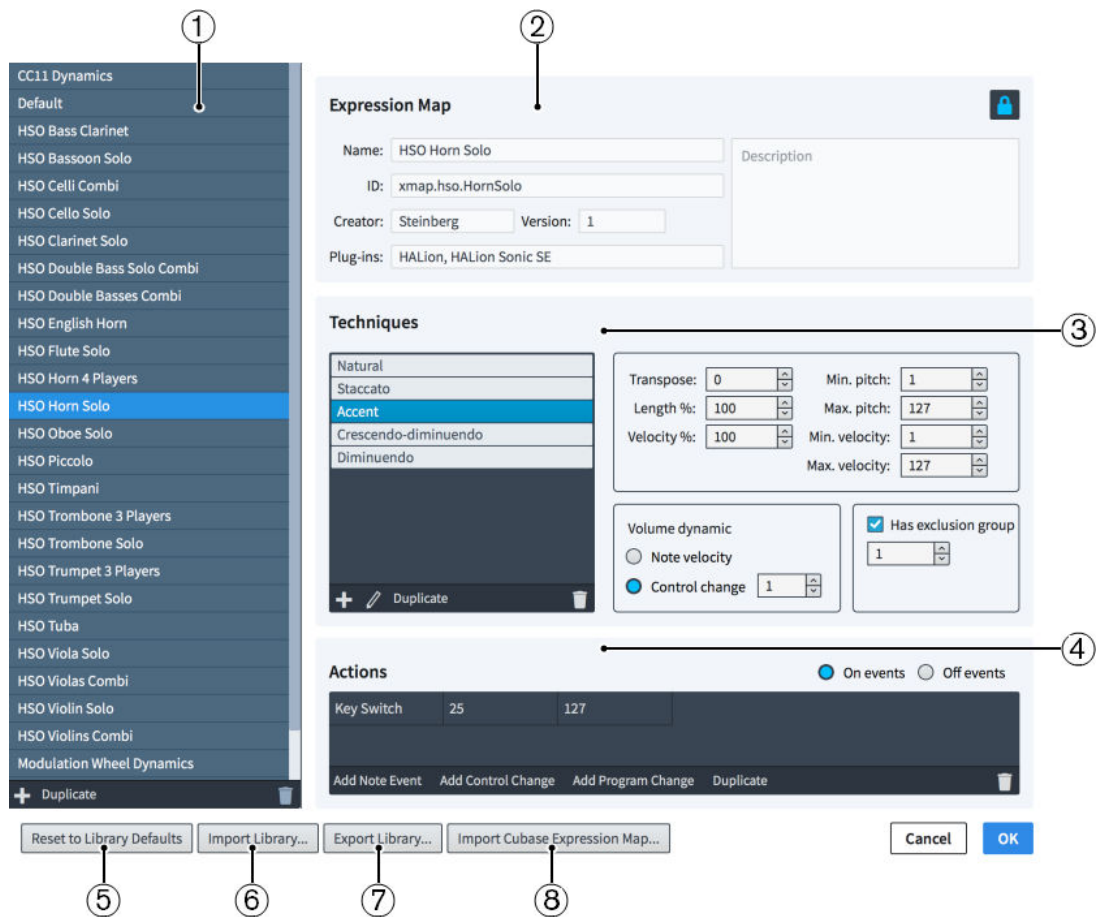
The **Expression Maps** dialog allows you to create new expression maps, edit existing expression maps, and import/export expression maps. You can also import expression maps made in Cubase.

- You can open the **Expression Maps** dialog in Play mode by choosing **Play > Expression Maps**.

Although the format of expression maps in Dorico Pro is similar to Cubase, Dorico Pro does not handle expression maps in exactly the same ways. For example, Dorico Pro allows you to use more playing techniques, but Cubase can reproduce more combinations of multiple playing techniques.

NOTE

During playback, Dorico Pro does not currently support all fields in the **Expression Maps** dialog. This is planned for future versions.



Expression Maps dialog

The **Expression Maps** dialog contains the following sections and options:

1 Expression maps list

Contains the expression maps currently available for your project.

You can add and delete expression maps using the following buttons in the action bar at the bottom of the expression maps list:

- **Add Expression Map**



Allows you to add a new expression map that contains no existing settings.

- **Duplicate**

Creates a copy of an existing expression map that you can edit separately from the original.

- **Delete Expression Map**



Allows you to delete the selected expression maps.

NOTE

You can only delete custom expression maps. You cannot delete any default expression maps.

2 Expression Map section

Allows you to specify the following identifying information for the selected expression map:

- **Name**
Allows you to set the name of the expression map that appears in the program, for example, in the **Endpoint Setup** dialog.
- **ID**
Allows you to set the unique ID of the expression map. You can enter any content in the ID field.
It can be useful to include the instrument and sound library for which you created the map, as well as your name, for example, `xmap.user.paulsmith.hso.violinpizz`.
- **Creator**
Allows you to name the creator if you are sharing your expression map with other users.
- **Version**
Allows you to indicate the expression map version so you can identify the most recent one.
- **Plug-ins**
Allows you to list the names of plug-ins to which the expression map applies, with each name separated by a comma. You can leave this field blank.

NOTE

All fields in the **Expression Map** section are locked by the **Lock Info** button at the top right. You must click this button in order to change the information in the fields.

3 Techniques section

The **Techniques** section contains the following groups:

- **Techniques list**
Contains a list of techniques for the expression map currently selected.

NOTE

Most instruments have a “natural” technique, which is the most common way of playing the instrument. Dorico Pro requires every instrument to have a defined natural technique.

- **Dynamics**
Allows you to choose whether the volume dynamic for the selected technique is controlled by its **Note velocity** or a **Control change**.

NOTE

Control change requires you to specify the controller by number. You can consult the documentation for the VST instrument and/or MIDI controller you are using to find the appropriate controller number.

- **Technique controls**
Contains controls that affect the technique selected in the Techniques list, such as **Velocity**.
- **Exclusion Groups**
Allows you to specify techniques that are mutually exclusive. For example, players cannot play vibrato and non-vibrato at the same time. Putting techniques into the same exclusion group means only one can be used at a time.

NOTE

Although settings are imported into the Technique controls and Exclusion Groups from Cubase, Dorico Pro does not currently implement all the information. This is planned for future versions.

In simple cases, techniques in the Techniques list are individual techniques, such as **Staccato** or **Accent**. However, it is possible to combine multiple techniques for plug-ins that have separate samples for different combinations of techniques. For example, **Staccato + Accent** might require a separate set of key switches to **Staccato** and **Accent** individually.

Selecting a technique in the Techniques list makes it available for editing in the **Actions** section. All the controls in this panel apply to the current technique.

You can add new techniques, edit existing techniques, and delete techniques using the following buttons in the Techniques list action bar:

- **Add Technique**



Allows you to add a new technique or combination of techniques to the expression map from the available techniques in the **Technique Combinations** dialog.

- **Edit Technique**



Allows you to edit the combination of techniques used in the selected technique in the **Technique Combinations** dialog.

You can also edit existing techniques by double-clicking them in the Techniques list.

- **Duplicate**

Creates a copy of an existing technique that you can then edit separately from the original.

- **Delete Technique**



Allows you to delete the selected technique.

NOTE

You can only select one technique at a time in the Techniques list.

4 Actions section

Allows you to determine how the switch required to execute each technique is controlled. This section also contains the details of existing actions required to produce the selected playing technique.

Actions can be any of the following types:

- Key switch
- Control change
- Program change

NOTE

Depending on your plug-in, multiple types of actions can be required to change individual techniques.

In the **Actions** section, actions are displayed in a table with three columns.

Key Switch	30	127
Control Change	1	64
Program Change	1	

Actions table

The first column shows the type of action.

The second column controls the first parameter of the MIDI event. For note events, this indicates the pitch. For control changes, this indicates the control change number. For program changes, this indicates the program number.

The third column controls the second parameter of the MIDI event. For note events, this indicates the velocity. For control changes, this indicates the amount of control change within the range 0 to 127. Program changes do not have a second parameter.

You can add new actions of each type and duplicate existing actions using the corresponding button in the action bar.

You can delete actions by selecting them individually and clicking **Delete Action** in the action bar.



The **Actions** section also allows you to specify which actions affect the start of notes and which affect the end of notes. For example, you might want an event that resets the technique back to normal to apply only to the end of notes.

- **On events** affects the start of notes.
- **Off events** affects the end of notes.

5 Reset to Library Defaults

Allows you to revert any changes you have made to the expression maps from the Default Library.

6 Import Library

Allows you to import expression maps from .doricolib files.

7 Export Library

Allows you to select multiple expression maps and export them into a .doricolib file, which you can import into other projects and share with other users.

8 Import Cubase Expression Map

Allows you to import an expression map in Cubase format.

NOTE

It is not currently possible to import all combinations of techniques. Cubase expression maps in Dorico Pro often require some editing to function correctly.

However, switch data is preserved.

RELATED LINKS

[Endpoint Setup dialog](#) on page 448

Technique Combinations dialog

The **Technique Combinations** dialog allows you to create combinations of techniques. You can later assign actions to these combinations to create specific sounds in playback.

You can open the **Technique Combinations** dialog in the following ways:

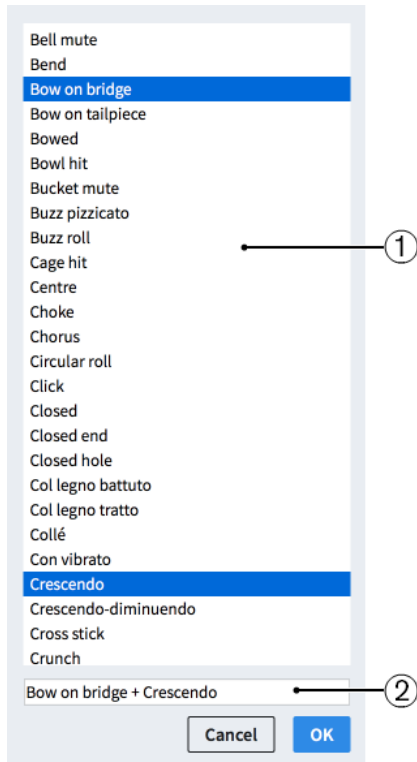
- In the **Expression Maps** dialog, click **Add Technique** in the **Techniques** action bar.



- In the **Expression Maps** dialog, select an existing technique in the Techniques list and click **Edit Technique** in the **Techniques** action bar.



- In the **Expression Maps** dialog, double-click an existing technique in the Techniques list.



Technique Combinations dialog

1 Techniques list

Allows you to select techniques to include in a new technique or to replace existing techniques.

You can select multiple techniques to combine by **Ctrl/Cmd**-clicking each technique.

2 Name

Displays the name of the selected technique. If you select multiple techniques, each name is automatically separated by a + symbol.

You cannot change the name of techniques.

RELATED LINKS

[Expression Maps dialog](#) on page 452





[Creating playing technique combinations](#) on page 458

Creating new expression maps

You can create new expression maps from scratch and you can duplicate existing expression maps and edit the settings.

PROCEDURE

1. Choose **Play > Expression Maps** to open the **Expression Maps** dialog.
2. Create a new expression map in one of the following ways:

- Click **Add Expression Map** to create an empty expression map.

 - In the list on the left of the dialog, select an existing expression map on which you want to base a new map and click **Duplicate**.
3. Click **Lock Info** to unlock the fields in the **Expression Map** section.
- | | |
|---|---|
|  |  |
| Locked | Unlocked |
4. In the **Expression Map** section, enter information for your expression map in the relevant fields.
5. Optional: In the Techniques list, add a new technique in one of the following ways:
- Click **Add Technique**.

 - Select an existing technique and click **Duplicate**.
6. Optional: If technique combinations you require do not exist in the expression map, create them in the **Technique Combinations** dialog.
7. In the Techniques list, select a technique.
8. In the **Techniques** section, change any of the options relevant to the selected technique. For example, choose whether the volume of the selected technique is controlled by its **Note velocity** or a **Control change**.
9. In the **Actions** section, add an action for the currently selected technique in one of the following ways:
- Click **Add Note Event**.
 - Click **Add Control Change**.
 - Click **Add Program Change**.
 - Select an existing action and click **Duplicate**.
10. Choose the type of event from one of the following options:
- **On events**
 - **Off events**
11. Optional: Repeat steps 9 and 10 for each action you require for each technique.
12. Optional: To change the values for actions, double-click them and change their values.
13. Click **OK** to save your changes and close the dialog.
-

RELATED LINKS

[Expression Maps dialog](#) on page 452



[Endpoint Setup dialog](#) on page 448

[Technique Combinations dialog](#) on page 456

Creating playing technique combinations

PROCEDURE

1. Choose **Play > Expression Maps** to open the **Expression Maps** dialog.
2. In the page list, select the expression map to which you want to add new technique combinations.

3. Open the **Technique Combinations** dialog to change the technique combination for a technique in one of the following ways:
 - To create a new playing technique, click **Add Techniques** in the Techniques list action bar.

 - To change the technique combination for an existing playing technique, select the technique and click **Edit Technique** in the Techniques list action bar.

 4. In the **Technique Combinations** dialog, select the techniques you want to combine. You can select multiple techniques, but you can also only select a single technique.
 5. Click **OK** to save your changes and close the dialog. The **Technique Combinations** dialog closes.
-

RESULT

A new technique combination is created and becomes available in the Techniques list for the selected expression map in the **Expression Maps** dialog.

RELATED LINKS

[Technique Combinations dialog](#) on page 456

[Expression Maps dialog](#) on page 452

Importing expression maps

You can import expression maps into projects.

PROCEDURE

1. Choose **Play > Expression Maps** to open the **Expression Maps** dialog.
 2. Click **Import Library** to open the File Explorer/macOS Finder.
 3. In the File Explorer/macOS Finder, locate and select the expression map file you want to import.
 4. Click **Open**.
-

RESULT

The selected expression map is imported into your project. It appears in the Expression Maps list.

Exporting expression maps

You can export expression maps so you can use them in other projects.

PROCEDURE

1. Choose **Play > Expression Maps** to open the **Expression Maps** dialog.
 2. Click **Export Library** to open the File Explorer/macOS Finder.
 3. In the File Explorer/macOS Finder, specify a name and location for the library file.
 4. Click **Save**.
-

RESULT

The expression map is exported and saved in the selected location.

Percussion maps

Unpitched percussion instruments are played back using patches that map unpitched sounds onto different MIDI notes. The pitches required to produce different unpitched sounds vary by device, sample library, manufacturer, and so on, and have no connection to the position of percussion instruments on five-line staves.

The following list contains some examples of unpitched percussion instruments from the General MIDI percussion map.

- Bass drum: C2 (MIDI note 36, two octaves below middle C)
- Kick drum: D2 (MIDI note 38)
- Closed hi-hat: F#2 (MIDI note 42)
- Cowbell: G#3 (MIDI note 56)
- Open triangle: A5 (MIDI note 81)

Dorico Pro uses percussion maps to connect the written representation of notes and playing techniques for percussion instruments to the samples required to play those sounds back.

NOTE

A percussion map describes which unpitched percussion instruments and their playing techniques are present in a particular patch, and how to play them back. For example, it describes which MIDI note to play, and if another MIDI note is needed as a key switch to trigger particular playing techniques.

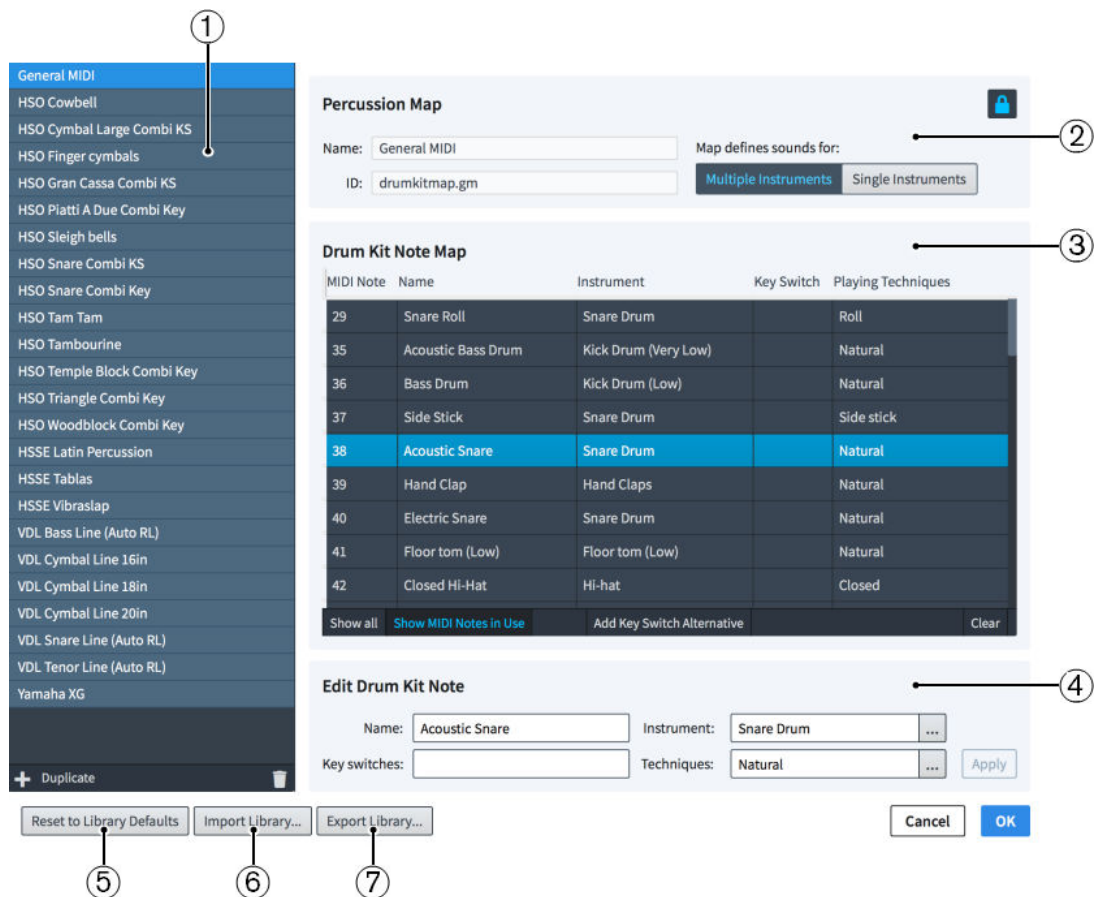
A set of percussion maps for the unpitched percussion patches that are part of the HALion Symphonic Orchestra and HALion Sonic SE factory libraries is provided with Dorico Pro. They are automatically chosen when you add percussion instruments to your project.

You can define custom percussion maps for third-party sound libraries or MIDI devices in the **Percussion Maps** dialog, in order to obtain correct playback.

Percussion Maps dialog

In the **Percussion Maps** dialog, you can define custom percussion maps for third-party sound libraries or MIDI devices in order to obtain correct playback.

- You can open the **Percussion Maps** dialog in Play mode by choosing **Play > Percussion Maps**.



Percussion Maps dialog

The **Percussion Maps** dialog is divided into the following sections:

1 Percussion maps list

Contains the percussion maps currently available in your project.

You can add and delete percussion maps using the following buttons in the action bar at the bottom of the Percussion Maps list:

- **Add Percussion Map**



Allows you to add a new percussion map that contains no existing settings.

- **Duplicate**

Creates a copy of an existing percussion map that you can edit separately from the original.

- **Delete Percussion Map**



Allows you to delete the selected percussion maps.

NOTE

You can only delete custom percussion maps. You cannot delete any default percussion maps.

2 Percussion Map section

Allows you to specify the following identifying information for the selected percussion map:

- **Name**
Allows you to specify the displayed name for the percussion map that appears in the **Endpoint Setup** dialog.
- **ID**
Allows you to set the unique ID of the percussion map. You can enter any content in the ID field.
It can be useful to include the instrument and sound library for which you created the map, as well as your name, for example, `xmap.user.paulsmith.hso.cowbell`.

NOTE

The **Endpoint Setup** dialog is where you set which percussion map Dorico Pro uses for each channel on your VST instrument or MIDI output device.

You can choose one of the options for **Map defines sounds for**, as appropriate for the current percussion map:

- **Multiple Instruments**
Choose this if the patch for which you are creating a map contains many different percussion instruments, such as the General MIDI drum map.
- **Single Instruments**
Choose this if the patch for which you are creating a map contains only a single percussion instrument, perhaps with multiple playing techniques for that instrument. For example, a snare drumline patch in Virtual Drumline or another specialist sample library.
This can also be useful when your VST instrument has several patches that have the same technique mappings. For example, there are both large and small cymbal patches in HALion Symphonic Orchestra which provide natural strike and roll sounds. Creating a single individual instrument percussion map allows you to use the same mapping for these sounds for multiple patches.

3 Drum Kit Note Map section

Lists all MIDI notes from 0 to 127. You can specify which combination of unpitched instrument and playing technique is produced by each note.

4 Edit Drum Kit Note section

Allows you to specify data in the following fields for the MIDI note selected in the **Drum Kit Note Map** section:

- **Name**
The displayed name for the specific combination of instrument and technique. You may choose to input the name used in the manufacturer's documentation for your VST instrument or MIDI output device.
- **Instrument**
Allows you to select an instrument for the MIDI note selected in the **Drum Kit Note Map** section from a list of all the unpitched percussion instruments you can create in Dorico Pro.
- **Techniques**
Allows you to select a playing technique to apply to the instrument selected in the **Instrument** field from a list of all the playing techniques you can create in Dorico Pro.
- **Key switches**
Allows you to specify the MIDI note number of the key you want to use as a key switch if this sound requires another MIDI note to be played to trigger this specific combination of instrument and playing techniques.

NOTE

Key switches are not compulsory.

5 Reset to Library Defaults

Allows you to revert any changes you have made to the percussion maps from the Default Library.

6 Import Library

Allows you to import percussion maps from .doricolib files.

7 Export Library

Allows you to select multiple percussion maps and export them into a .doricolib file, which you can import into other projects and share with other users.

Creating custom percussion maps

You must define custom percussion maps in order to obtain correct playback when using third-party sound libraries or MIDI devices. You can create new, empty percussion maps, or create custom percussion maps based on existing maps that you have duplicated.

PROCEDURE

1. Choose **Play > Percussion Maps** to open the **Percussion Maps** dialog.

2. Create a new custom percussion map in any of the following ways:

- Click **Add Percussion Map** to create an empty map.



- In the list on the left of the dialog, select an existing percussion map on which you want to base a new custom map and click **Duplicate**.

3. Click **Lock Info** to unlock fields in the **Percussion Map** section.



Locked



Unlocked

4. In the **Percussion Map** section, enter the display name you want for the percussion map in the **Name** field.

This name appears in the **Endpoint Setup** dialog.

5. In the **Percussion Map** section, enter any unique identification name in the **ID** field.

It can be useful to include the instrument and sound library for which you created the map, as well as your name, in the identification name for percussion maps, for example, xmap.user.paulsmith.hso.cowbell.

6. In the **Percussion Map** section, choose one of the following options for **Map defines sounds for**, as appropriate for the current percussion map:

- **Multiple Instruments**
- **Single Instruments**

7. In the **Drum Kit Note Map** section, click **Show all** to show unmapped notes.


8. Select the row corresponding to the MIDI note for which you want to create a new mapping.

9. In the **Edit Drum Kit Note** section, click the following button beside the **Instrument** field.



A dialog containing a list of instruments opens.

10. Select the instrument that corresponds to the sound produced by the selected MIDI note from the list.

11. Click **OK**.
 12. In the **Edit Drum Kit Note** section, click the following button beside the **Techniques** field.

A dialog containing a list of playing techniques opens.
 13. Select the appropriate playing techniques for the sound produced by the selected MIDI note from the list.
For example, **Ctrl/Cmd**-click **Buzz roll** and **Rim**.
 14. Click **OK**.
 15. In the **Edit Drum Kit Note** section, enter the display name you want for this combination of instrument and playing technique in the **Name** field.
 16. In the **Edit Drum Kit Note** section, specify the MIDI note number of the key switch if this sound requires one in the **Key switches** field.
 17. Click **Apply**.
 18. Optional: Repeat these steps for each MIDI note until you have created all the required mappings for your project.
 19. Click **OK** to save your changes and close the dialog.
-

RESULT

Your new percussion map is created.

AFTER COMPLETING THIS TASK

You must assign custom percussion maps to the same endpoints as the VST instruments or MIDI devices that provide the corresponding patches.

You can export the percussion map if you want to use it in other projects.

RELATED LINKS

[Percussion maps](#) on page 460

[Assigning expression/percussion maps to endpoints](#) on page 450

[Endpoint Setup dialog](#) on page 448

Importing percussion maps

You can import percussion maps into projects.

PROCEDURE

1. Choose **Play > Percussion Maps** to open the **Percussion Maps** dialog.
 2. Click **Import Library** to open the File Explorer/macOS Finder.
 3. In the File Explorer/macOS Finder, locate and select the percussion map file you want to import.
 4. Click **Open**.
-

RESULT

The selected percussion map is imported into your project. It appears in the Percussion Maps list.

Exporting percussion maps

You can export percussion maps so you can use them in other projects.

PROCEDURE

1. Choose **Play > Percussion Maps** to open the **Percussion Maps** dialog.

2. Click **Export Library** to open the File Explorer/macOS Finder.
 3. In the File Explorer/macOS Finder, specify a name and location for the library file.
 4. Click **Save**.
-



RESULT

The percussion map is exported and saved in the selected location.

Defining how combinations of articulations and single-note tremolos sound in playback

You can define specific playback behaviors for particular combinations of articulations and single-note tremolos in playing technique-specific noteheads for unpitched percussion instruments.

PROCEDURE

1. In Setup mode, open the **Percussion Instrument Playing Techniques** dialog in any of the following ways:
 - For an individual percussion instrument: In the **Players** panel, expand the card of the player holding the instrument, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
 - For percussion instruments that are part of percussion kits: In the **Players** panel, click the arrow in the kit instrument label, and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.
 2. Select the playing technique-specific notehead whose playback behaviors you want to define in the list at the top of the dialog.
 3. Click **Add Technique** in the action bar at the bottom left of the dialog.

 4. Click **Choose Playing Techniques** beside the **Playback playing technique** field.

 5. Select the playing technique you want from the list in the dialog that opens. You can select multiple playing techniques by holding down **Ctrl/Cmd** and clicking the playing techniques you want.
 6. Choose one of the following options:
 - **Replace**
Allows you to use this playing technique instead of the default playing technique defined for this combination of notehead and staff position.
 - **Add**
Allows you to add this playing technique on top of the default playing technique defined for this combination of notehead and staff position.
 7. Choose any articulations and a tremolo stroke that you want from the available options.
 8. Click **OK** to save your changes and close the dialog.
-

RESULT

The behavior of the selected playing technique in playback is changed.

RELATED LINKS

[Percussion Instrument Playing Techniques dialog](#) on page 1027

[Creating new playing technique-specific noteheads for unpitched percussion instruments](#) on page 1030

Played vs. notated note durations

You can show notes in the piano roll editor in Play mode with their played duration or notated duration.

Played duration

When **Played Durations** in the Play toolbox is selected, note events in the piano roll editor are each shown with two components:

- A filled, light-colored rectangle showing the played duration of the note.
- A thin, darker rod showing the notated duration of the note.

For example, notes with staccato articulations are played for less time than their notated duration, whereas notes under slurs are played for longer than their notated duration.

By default in Dorico Pro, notes in the piano roll editor in Play mode are shown with their played duration.

NOTE

Editing the played duration of notes causes them to appear in a darker color in the piano roll editor to notes whose played duration you have not changed.

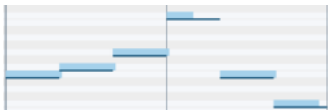


Notated duration

You can select **Notated Durations** in the Play toolbox to see note events as single rectangles, which span the full width that corresponds to the notated duration of the note.

You can change the notated duration of notes in the piano roll editor when **Notated Durations** is selected.

EXAMPLE

The following examples all contain the same musical phrase, shown in different ways.

Played duration	Notated duration	Score
		

RELATED LINKS

[Slurs in playback](#) on page 893

Changing the played duration of notes

You can change the played duration of notes individually, both at the start and end of notes. For example, you can make notes sound for longer or start sounding later.

PREREQUISITE

Played Durations is selected in the Play toolbox.

PROCEDURE

1. In the piano roll editor, select the notes whose played duration you want to change.
 2. Click and drag the end of one of the notes to the right/left.
Your cursor becomes a two-way arrow when you are in the correct position.
 3. Optional: Repeat step 2 for the start of the notes.
-

RESULT

The played duration of the selected notes is changed.

RELATED LINKS

[Play toolbox](#) on page 401

Removing changes to the played duration of notes

You can remove all changes made to the played duration of individual notes, for example, if you change your mind about playback overrides you have made and want to revert those notes to their default start position, length, and velocity.

Removing playback overrides also removes any offsets to the start and end position of notes imported from MIDI files with preserved note positions.

NOTE

Note velocity is not currently displayed in Dorico Pro, but note velocities are imported from MIDI files. If you want dynamics you input in Write mode to take effect in playback, you must remove playback overrides.

PROCEDURE

1. In the piano roll editor or drum editor, select the notes whose played durations you want to reset.
 2. Choose **Play > Reset Playback Overrides**.
-

RESULT

All overrides to the default played duration of the selected notes are removed.

NOTE

The played duration of the selected notes appears to revert to match their notated duration. However, starting playback or switching modes refreshes their appearance to their default played duration. For example, if the notes are staccato, their played duration is half their notated duration by default.

Print mode

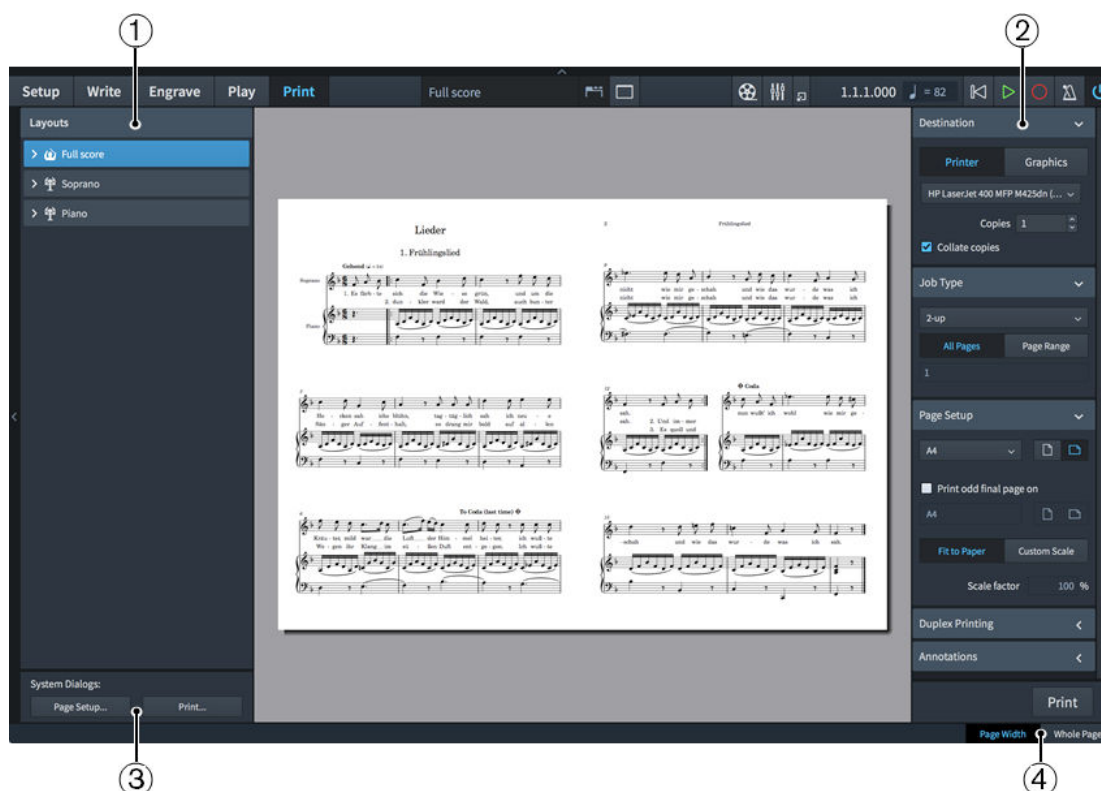
Print mode allows you to print your layouts or to export them as graphics files, such as PDF and SVG.

Project window in Print mode

The project window in Print mode contains the default toolbar and the print preview area as well as panels and sections that provide all the tools and functions that allow you to prepare printing or exporting your layouts.

You can switch to Print mode in any of the following ways:

- Press **Ctrl/Cmd-5**.
- Click **Print** in the toolbar.
- Choose **Window > Print**.



Panels and sections in Print mode

The following panels and sections are available in Print mode:

1 Layouts panel

Shows a list of all layouts in your project and allows you to select what to print or export.

NOTE

The layout selector in the toolbar is disabled in Print mode. If you want to see a different layout in the print preview area, select it in the **Layouts** panel.

2 Print Options panel

Contains options for printing or exporting your layouts.

3 macOS: System Dialogs

Contains macOS-specific printing options.

4 View options

Allows you to change the print preview area to show pages in one of the following views:

- **Page Width**
The page fills the width of the print preview area, which might not show the whole page depending on the orientation and format of the page.
- **Whole Page**
Shows the whole page in the print preview area.

RELATED LINKS

[Toolbar](#) on page 34

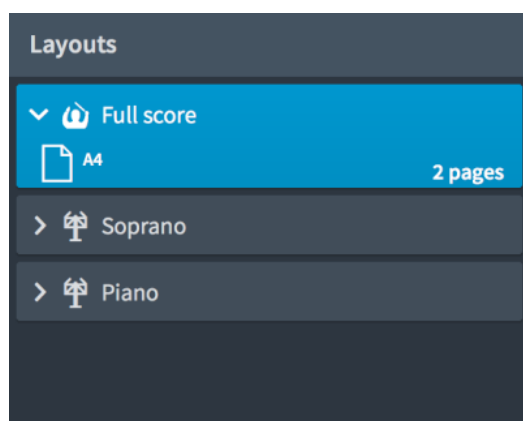
[Print preview area](#) on page 39

Layouts panel (Print mode)

In Print mode, the **Layouts** panel shows a list of all layouts in your project and allows you to select layouts to print or export. It is located on the left of the window.

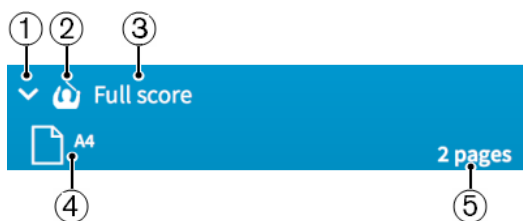
You can hide/show the **Layouts** panel in Print mode in any of the following ways:

- Press **Ctrl/Cmd-7**.
- Click the disclosure arrow on the left edge of the main window.
- Choose **Window > Show Left Panel**.



Layouts panel in Print mode

The **Layouts** panel contains all the layouts in your project, displayed as cards. Each layout card shows the following:



1 Disclosure arrow

Expands/Collapses the layout card.

2 Layout type

Shows the type of layout from the following options:

- Full score layout



- Instrumental part layout



- Custom score layout



3 Layout name

Shows the name of the layout. Dorico Pro automatically adds default names depending on the name of the instrument that is assigned to a player and on the type of layout that is added. For example, if you assign a flute to a player, the instrumental part layout automatically gets the same name. If you add an empty instrumental part layout, the layout name shows **Empty part** and an incremental number if you add multiple empty part layouts.

4 Page size and orientation

Shows the size and orientation of the layout as set on the **Page Setup** page in **Setup > Layout Options**.

5 Layout length

Shows the number of pages in the layout. You can use this in combination with its page size and orientation to determine the best job type for printing/exporting.

TIP

A layout with two pages might best be printed as 2-up, while a layout with five pages might best be printed as spreads with the final page printed on a different paper size. A layout with 12 pages might best be printed as a booklet.

The selected layouts are printed/exported when you click **Print** or **Export**. If you have selected some layouts set to print and some set to export graphics, the button reads **Print and Export**.

RELATED LINKS

[Page arrangements for printing/exporting](#) on page 480

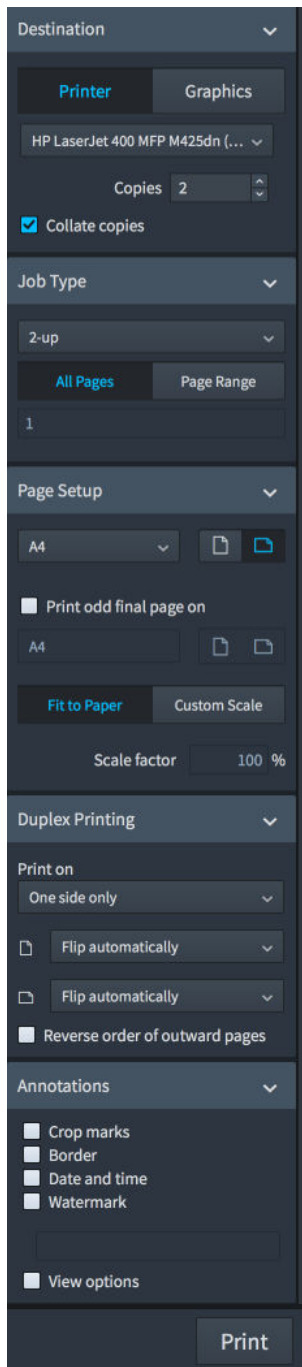
[Booklet printing](#) on page 481

Print Options panel

The Print Options panel contains options for printing or exporting your layouts. It is located on the right of the window in Print mode.

You can hide/show the Print Options panel in any of the following ways:

- Press **Ctrl/Cmd-9**.
- Click the disclosure arrow on the right edge of the main window.
- Choose **Window > Show Right Panel**.



All the options that you set in the Print Options panel are saved with your project. The options are divided into the following sections:

Destination

Allows you to select a physical printer for printing or a file location for exporting a graphics file. If you print your work, you can choose how many copies you want to print. If you choose to export a graphics file, you can specify the format, file name, and directory of the saved file.

Depending on the destination type selected, the button at the bottom of the panel reads either **Print** or **Export**. If you have selected some layouts set to print and some set to export graphics, the button reads **Print and Export**.

Job Type

Allows you to choose the range of pages to be printed or exported and how they are arranged.

Page Setup

Allows you to set the paper size and orientation. You can specify the scale factor of the image to be printed or exported.

Duplex Printing

Allows you to specify whether to print on one or on both sides of each sheet of paper. This option is only available if you select **Printer** in the **Destination** section.

Annotations

Allows you to activate options that are often required by publishing houses or printing agencies, such as crop marks or a border around the printed image.

Print button

Allows you to print/export selected layouts according to the settings you have set in the Print Options panel.

Depending on your selection, the print button can appear in one of the following ways:

- **Print**
- **Export**
- **Print and Export**

For example, if you selected layouts that are all set to print, **Print** is shown. If you selected some layouts set to export graphics and some layouts set to print, **Print and Export** is shown.

RELATED LINKS

[Duplex printing](#) on page 481

[Page arrangements for printing/exporting](#) on page 480

Printing layouts

You can print layouts individually or multiple layouts together. You can specify print settings for each layout independently, for example, you can select different printers for different layouts in the same project.

Dorico Pro uses settings for layouts to create automatic print settings, so you might find that many print options are already appropriate for the layouts you want to print. For example, if you are connected to a printer that can print A3 paper and the page size of your full score layout is set to A3 in **Layout Options**, Dorico Pro automatically selects A3 in the **Page Setup** section of the Print Options panel.

PROCEDURE

1. In the **Layouts** panel, select the layouts that you want to print.

NOTE

The layout selector in the toolbar is disabled in Print mode. If you want to see a different layout in the print preview area, select it in the **Layouts** panel.

2. In the Print Options panel, enter the number of copies you want into the **Copies** field in the **Destination** section.

NOTE

- Changing the **Copies** value changes the number of copies for all currently selected layouts. However, you can change the number of copies for layouts individually. For example, you can select a full score layout and set it to print 3 copies and leave the part layouts to print only 1 copy. You can then select all layouts to print them together and the previously set values are followed.
 - The **Copies** field appears blank when you have selected layouts with different values.
-

3. Activate/Deactivate **Collate copies**.
 4. In the **Destination** section, choose **Printer** and select a printer from the menu.
 5. In the **Job Type** section, select the page arrangement you want from the menu.
 6. Optional: If you only want to print a specified range of pages, choose **Page Range** in the **Job Type** section.
 7. Optional: If you selected **Page Range**, enter the pages you want into the value field.
 8. In the **Page Setup** section, select a paper size from the menu.
 9. Choose the paper orientation you want.
 10. Optional: If you selected **Spreads** or **2-up** for the job type, activate/deactivate **Print odd final page on** to specify the paper size on which you want to print final pages for layouts with odd numbers of pages.
 11. Select a paper size and paper orientation for the odd final page.
 12. Choose one of the following size options:
 - **Fit to Paper**
 - **Custom Scale**
 13. Optional: If you selected **Custom Scale**, enter the scale factor you want into the **Scale factor** field.
 14. In the **Duplex Printing** section, select one of the printing options from the **Print on** menu.
 15. Optional: If you selected a duplex printing option, use the bottom two menus to select how the printed image is flipped when printing on the reverse side of the paper.
 16. In the **Annotations** section, activate each annotation you want to add to the selected layouts.
 17. Click **Print**.
-

RESULT

The selected layouts are printed according to the print settings you have applied.

If your selection included part layouts sets to concert pitch, Dorico Pro shows a warning and offers to switch them all to transposed pitch before printing/exporting. You can also select which layouts you want to switch to transposed pitch or proceed anyway with no changes.

TIP

- You can select individual layouts and set up their printing options without printing straight away. Once you have set up the printing options you want for multiple layouts, you can then select all the layouts you want to print and click **Print**. Your existing print settings are applied, even if your selection contains layouts with different print settings.
 - You can assign key commands to different printing and exporting commands on the **Key Commands** page in **Preferences**, which you can use in any mode.
-

RELATED LINKS

- [Printers](#) on page 479
- [Paper size and orientation setup](#) on page 483
- [Export File Names dialog](#) on page 477
- [Page arrangements for printing/exporting](#) on page 480
- [Print Options panel](#) on page 470
- [Duplex printing](#) on page 481
- [Annotations](#) on page 485
- [Changing the page size and orientation](#) on page 343

Printing/Exporting a page range

By default, Dorico Pro prints/exports all pages of the selected layouts. You can specify a specific page range to print/export.

NOTE

You can only print booklets using the complete range of pages. You cannot define any page ranges.

PROCEDURE

1. In the **Layouts** panel, select the layouts from which you want to print/export a range of pages.
2. Optional: In the **Destination** section, check the layouts are set to print/export using the printer/graphics file formats you want.
3. In the **Job Type** section, choose **Page Range**.
4. Enter the pages you want into the value field.
 - To specify a range, enter the first page and last page separated with a dash, such as 1-4.
 - To specify individual pages or separate ranges, enter each page/range separated with commas, such as 1,3,5-8.

NOTE

Separate ranges are exported as separate files.

5. Click **Print/Export/Print and Export**.
-

RESULT

The specified pages in the selected layouts are printed/exported. Exported files use the file name recipe set for their graphics file format in the **Export File Names** dialog.

RELATED LINKS

- [Export File Names dialog](#) on page 477
- [Page arrangements for printing/exporting](#) on page 480

Specifying printing options (macOS only)

Dorico Pro allows you to access the standard printing options of your operating system.

NOTE

If you use the standard printing options of your operating system, the settings in the Print Options panel are ignored. macOS-specific print settings are not saved with your project. These

must be set each time you want to print, whereas the Dorico Pro print options are always saved with your project.

PROCEDURE

1. In the **Layouts** panel, click **Page Setup** in the **OS X Dialogs** section to open the macOS **Page Setup** dialog.
 2. In the **Page Setup** dialog, set the paper size.
 3. Click **OK**.
 4. In the **OS X Dialogs** section, click **Print** to open the macOS **Print**.
 5. In the **Print** dialog, set up the printing options you want.
-

Exporting layouts as graphic files

You can export individual layouts as a variety of graphic files, such as PDF or PNG.

PROCEDURE

1. In the **Layouts** panel, select the layouts you want to export.
2. In the Print Options panel, choose **Graphics** in the **Destination** section.
3. Choose a color mode.
 - **Mono** exports the graphic in black and white.
 - **Color** exports the graphic in full color.

NOTE

If you export a graphic file with a resolution of 72 dpi, we recommend that you select **Color**. If you select **Mono**, staff lines can disappear.

4. Select a graphics file format from the menu.
5. Optional: If you selected **PNG** or **TIFF**, select a resolution from the **Resolution** menu.

TIP

You cannot change the resolution if you select **PDF** or **SVG**. However, if you select **PNG** or **TIFF**, change the resolution, and then select **PDF** or **SVG**, the resolution you selected still applies.

6. Optional: Specify an export path.
7. Optional: If you want to change the file name recipe, click **File Name Options** to open the **Export File Names** dialog.
8. Optional: In the **Export File Names** dialog, change the file name recipe for your selected graphics file formats.
9. Optional: If you only want to export a specified range of pages, choose **Page Range** in the **Job Type** section.
10. Optional: If you selected **Page Range**, enter the pages you want into the value field.

NOTE

Separate ranges are exported as separate files.

11. Click **Export**.
-

RESULT

The selected layouts are exported as the selected graphics format using the file name recipe set for their graphics file format in the **Export File Names** dialog. They are saved in the folder set in the **Destination folder** field, or in the same folder as the project file if the set export path is no longer accessible.

If your selection included part layouts sets to concert pitch, Dorico Pro shows a warning and offers to switch them all to transposed pitch before printing/exporting. You can also select which layouts you want to switch to transposed pitch or proceed anyway with no changes.

TIP

You can assign key commands to different printing and exporting commands on the **Key Commands** page in **Preferences**, which you can use in any mode.

RELATED LINKS

[Export File Names dialog](#) on page 477

[Graphics file formats](#) on page 484


[Image resolution](#) on page 485

Specifying an export path for graphics files

You can specify a path to any folder to which you want to export graphics files. You can specify a different export path for each layout and still export them all simultaneously.

By default, Dorico Pro exports graphics files into the same folder as your project file. If you have not saved your project yet, graphics files are saved in the default user folder of your operating system.

PROCEDURE

1. In the **Layouts** list, select the layouts whose export path you want to change.
 2. In the **Destination** section of the Print Options panel, click **Choose Folder** beside the **Destination folder** field to open the File Explorer/macOS Finder.

 3. In the File Explorer/macOS Finder, locate and select the destination folder you want.
 4. Click **Open** (macOS)/**Select Folder** (Windows) to insert the new path in the **Destination folder** field.
 5. Optional: Repeat steps 1 to 4 for other layouts whose export path you want to change.
 6. Optional: If you want to change the file name recipe, click **File Name Options** to open the **Export File Names** dialog.
 7. Optional: In the **Export File Names** dialog, change the file name recipe for your selected graphics file formats.
-

RESULT

The export path for the selected layouts is changed. When exported, the layouts use the file name recipe set for their graphics file format in the **Export File Names** dialog.

NOTE

If the export path specified is no longer accessible, such as if you receive a project from someone who uses a different operating system, Dorico Pro automatically updates the export path to the same location as the project file.

Export File Names dialog

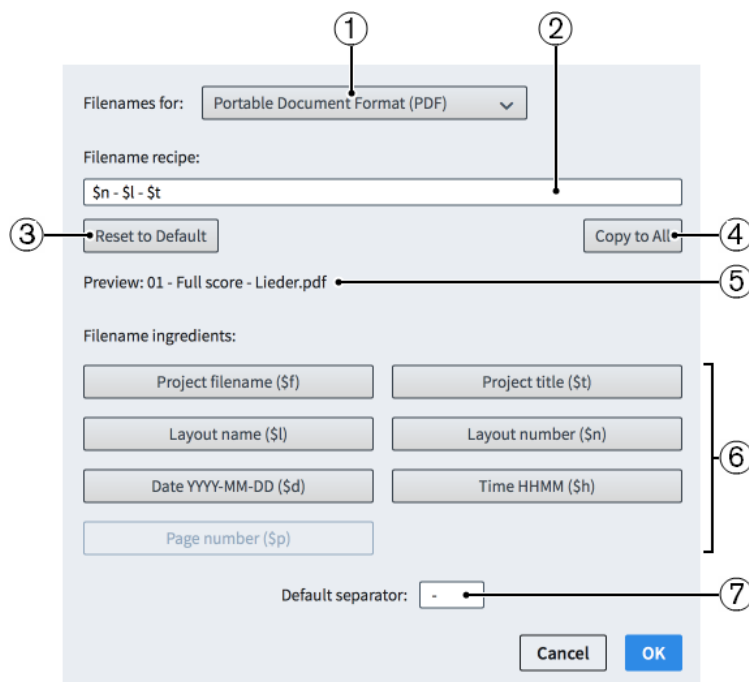
The **Export File Names** dialog allows you to determine the contents of file names for each graphics file format independently. You can use universal ingredients that update to show the correct information for each layout automatically, and you can enter text that is the same for all layouts.

You can open the **Export File Names** dialog in any of the following ways:

- Click **File Name Options** in the **Destination** section of the Print Options panel in Print mode when the currently selected layout is set to **Graphics**.
- Click **Edit** in the **Exporting Files** subsection of the **General** page in **Preferences**.

NOTE

Your settings are linked between both ways of accessing the dialog and are saved as the default for all future projects.



The **Export File Names** dialog contains the following options:

1 File names for

Allows you to select different graphics file formats. You can set different file name recipes for each graphics file format.

2 File name recipe

Displays the recipe for the selected graphics file format. You can enter text directly into this field, and click ingredients to add them automatically.

For example, the default PDF file name recipe is \$n - \$l - \$t.

3 Reset to Default

Resets the file name recipe to the default for the selected graphics file format.

4 Copy to All

Copies the file name recipe to all layouts in the project.

5 Preview

Displays an example file name based on the current recipe. The layout used for the preview is the one shown in the layout selector in the toolbar.

For example, the preview for a full score PDF file name using the default recipe might be 01 - Full score - Lieder .pdf

6 File name ingredients

Allow you to add ingredients to the file name recipe quickly that are automatically populated as appropriate for each layout. For example, the ingredient \$I becomes Piano when used to export a piano part layout.

The buttons for each ingredient display both the information to which the ingredient refers and the characters for it.

When you click file name ingredients, they are added to the end of the file name recipe. They are automatically separated from the previous ingredient using the default separator.

NOTE

The page number ingredient is not available for the PDF file name recipe as it is a multi-page format.

7 Default separator

Allows you to set the characters used to separate ingredients in the file name recipe by default.

RELATED LINKS

[Exporting layouts as graphic files](#) on page 475

Monochrome and color graphics processing

Dorico Pro applies different settings when you export monochrome and color graphics. The most appropriate setting depends on your intended purpose for the graphics.

Most musical scores are monochrome, meaning they use only black ink and are normally printed on white/near-white paper. Some educational books occasionally use colors to highlight particular notations, for example, to identify clefs, or to color notes according to their pitch. If you export graphics files and print them with your own printer, you can leave **Color** selected in the **Destination** section.

However, if you export graphics files in PDF format for direct printing on a platesetter or for further production work in a page layout program, select **Mono**, unless your layout actually contains colored elements. If you select **Mono**, Dorico Pro uses a different color space for the resulting PDF, ensuring that the printed image only uses black ink. If you choose **Color**, then the black items in your layout are exported as rich black, that is, black produced by combining multiple colored inks. This can cause problems in production when making color separations at the pre-press stage.

Dorico Pro specifies colors using the RGB color model, rather than the CMYK color model that is used by platesetters and other professional printing machines. If you have colored objects in your layouts and your layouts are printed professionally, you must post-process the graphics files that are exported from Dorico Pro in another graphics application to convert the colors from RGB to CMYK.

RELATED LINKS

[Exporting layouts as graphic files](#) on page 475

Embedding of fonts in PDF and SVG files

How fonts are handled in PDF and SVG files mainly depends on the fonts that you use in the project.

PDF Files

The music and text fonts, and their sub-sets, that are supplied with Dorico Pro are embedded in PDF files during the export. If you open the PDF files on a different computer, they look the same, even if that computer does not have the fonts installed that are used in the document. If you use different fonts, make sure that these permit embedding.

SVG Files

SVG (Scalable Vector Graphics) files do not embed fonts directly. Some font characters, such as note heads, articulations, and accidentals, are converted into outlines, so that they do not depend on the font from which they are taken. Other font characters, such as time signature and tuplet digits, are only encoded using references to the font from which they are taken. The latter also applies to regular text, such as staff labels, tempo instructions, and dynamics. This means that the SVG file looks incorrect if rendered by a web browser on a computer that does not have the fonts installed. The appearance of SVG files depends on the browser or the rendering software, and on the fonts that are installed on the computer.

To ensure that the SVG file appears correctly if embedded in a web page, you can open the SVG file in an illustration program and convert all font characters to outline paths, then re-export the SVG file and embed that file. Alternatively, you can use web fonts to ensure that the necessary fonts are available on the web server.

SVG graphics that are exported from Dorico Pro conform to the SVG Tiny 1.1 specification, which defines a subset of features in the full SVG specification.

For information about using web fonts with SVG, refer to the Help Center on the Steinberg website.

Printers

You can print layouts from Dorico Pro projects to any printer to which your computer is connected.

You can select different printers for each layout in your project. This allows you to send layouts to the most appropriate printer for their requirements. You can select a printer when **Printer** is chosen in the **Destination** section of the Print Options panel.

Dorico Pro uses the same printer as designated by the operating system by default, unless you specify another printer. In this case, the settings in the following sections in the Print Options panel can change:

- In the **Page Setup** section, the list of available paper sizes lists only paper sizes that the chosen printer provides.
- In the **Duplex Printing** section, the option for automatic duplex printing is only available if the chosen printer has this function.

NOTE

The printer menu in the **Destination** section only shows the name of a printer if all currently selected layouts are set to print to the same printer. If you select a new printer from the menu, all selected layouts are set to print to that printer.

RELATED LINKS

[Print Options panel](#) on page 470

[Printing layouts](#) on page 472

Page arrangements for printing/exporting

Dorico Pro provides several page arrangements that you can use for printing/exporting your layouts.

In the **Job Type** section of the Print Options panel, you can specify how you want the layouts to be printed/exported. You can select the following job types from the **Job Type** menu:

Normal

Prints one page on each sheet of paper. This produces single-sided pages, for example, for instrumental parts that do not have regular page turns and must be bound in a continuous line.

Spreads

Prints two pages on each sheet of paper, with odd-numbered pages on the right-hand side and even-numbered pages on the left-hand side.

You can also specify a paper size on which to print odd final pages, for example, if you are printing a layout containing five pages.

2-up

Prints two pages on each sheet of paper. The first page in the range is printed on the left-hand side of the first sheet of paper. This can be useful for printing instrument parts as it reduces the number of edges that must be bound, because pages can also be folded in half.

You can also specify a paper size on which to print odd final pages, for example, if you are printing a layout containing five pages.

Booklet

Prints two pages on each sheet of paper according to imposition requirements. This means that if the paper is folded, the pages are laid out like a book. This can be useful for scores and choir parts in particular as they often contain more pages than instrumental parts.

NOTE

You can only print booklets using the complete range of pages. You cannot define any page ranges.

NOTE

- Depending on the job type that you choose, Dorico Pro switches the page orientation automatically. The changed orientation is immediately displayed in the music area. If this is not what you want, you can override the orientation in the **Page Setup** section.
 - All of the job types allow printing either onto a single side of each sheet of paper or on both sides of the paper.
 - It is usual to print booklets, spreads, and 2-up onto paper in landscape orientation. Printing one page to each sheet typically uses portrait orientation, unless the layout itself uses landscape orientation.
-

Also in the **Job Type** section, you can choose which pages you want to print/export.

All Pages

Allows you to print/export all pages of the selected layouts.

Page Range

Allows you to set a range of pages to be printed. Choosing **Page Range** makes the value field available.

- To specify a range, enter the first page and last page separated with a dash, such as 1-4.
- To specify individual pages or separate ranges, enter each page/range separated with commas, such as 1,3,5-8.

RELATED LINKS

[Paper size and orientation setup](#) on page 483

[Printing/Exporting a page range](#) on page 474

Booklet printing

Booklets are documents printed on both sides of the paper and folded to resemble the pages in a book. When printed as a booklet, pages are reordered so that you can fold the printed pages and read the content in the same order as they were in the project.

Printing layouts as a booklet can be much quicker than printing pages single-sided or double-sided. For example, if your full score is twenty pages long and you print it on both sides automatically, you must then bind one edge of the printed pages in order to keep them together. However, if you print the full score as a booklet, you can simply fold the printed pages in the middle.

Booklet printing settings reorder pages so that they appear in the correct order on the printed page. For example, a layout containing four pages printed as a booklet is laid out as follows:

- First side: page four on the left, page one on the right
- Reverse side: page two on the left, page three on the right

If the layout you are printing as a booklet contains an odd number of pages, Dorico Pro automatically places any empty last pages at the end of the booklet. This follows the convention of showing odd-numbered pages on the right. For example, if you print a layout containing six pages as a booklet, a total of eight pages are printed with the last two pages in the booklet left blank. If you want the empty pages to be positioned differently, you can add extra pages to the layout, for example, a title page.

NOTE

- You can only print booklets using the complete range of pages. You cannot define any page ranges.
- If the order of inward pages is incorrect when you are printing booklets using manual duplexing, you can activate **Reverse order of outward pages** in the **Duplex Printing** section of the Print Options panel, which instructs Dorico Pro to output the first set of pages in the opposite order.

RELATED LINKS

[Printing layouts](#) on page 472

[Duplex printing](#) on page 481

Duplex printing

Dorico Pro allows duplex printing, which means that you can print on both sides of each sheet of paper.

If your printer supports automatic duplex printing, you can use this function in Dorico Pro. If your printer can only print on one side of each sheet of paper, there is a manual duplex printing option.

The **Print on** menu in the **Duplex Printing** section of the Print Options panel contains the following options:

One side only

Prints on one side of each sheet of paper.

Both sides manually

Prints on both sides of each sheet of paper. Use this option if your printer lacks an automatic duplex printing function. After all outward pages have been sent to the printer, a message box informs you to turn over the stack of printed pages and put them back into the printer. Click **OK** to continue printing the inward pages.

Both sides automatically

Prints on both sides of each sheet of paper automatically. This option is only available if your printer supports this type of printing.

The other menus in the **Duplex Printing** section allow you to set how the printed image is flipped when printing on the reverse side of the paper.

Flip image (portrait)



Determines how the image is flipped for reverse side printing in portrait orientation.

- **Flip automatically** uses the printer's default settings for printing on the reverse side. If you find that the printer flips on a different edge than expected, use one of the other options.
- **Flip long side** sets the printer to flip the pages on the long edge.
- **Flip short side** sets the printer to flip the pages on the short edge.

Flip image (landscape)



Determines how the image is flipped for reverse side printing in landscape orientation.

- **Flip automatically** uses the printer's default settings for printing on the reverse side. If you find that the printer flips on a different edge than expected, use one of the other options.
- **Flip long side** sets the printer to flip the pages on the long edge.
- **Flip short side** sets the printer to flip the pages on the short edge.

Reverse order of outward pages at the bottom of the section instructs Dorico Pro, when activated, to output the first set of pages in the opposite order when printing booklets using manual duplexing. This is necessary for some printers so that you do not have to reverse sort the pages manually before returning them to the printer to print the other sides.

RELATED LINKS

[Printing layouts](#) on page 472

Page sizes and paper sizes

In Dorico Pro, page sizes and paper sizes use different settings. This means that you can print layouts with any page size onto paper with a different paper size.

For each layout in your project, you can define a page size on the **Page Setup** page in **Setup > Layout Options**. This means that you define the dimensions of the layout. For printing your layout, you must usually choose a paper size that is provided by the printer that you are using.

Normally, the layout's page size and the printed paper size match. However, if you define a layout with an unusual page size that is not supported by your printer, such as 10" x 13", one of the standard page sizes for instrumental parts, you may have to print the layout onto a different

paper size. You can change the paper size in the **Page Setup** section of the Print Options panel according to your needs. As long as your printer supports sufficiently large paper for your page size settings, and they match a standard paper size, your dimensions are included in the menu. Changing the paper size has no effect on your layout's page size, and does not, therefore, affect the way the music is laid out.

If you do not select a specific paper size, Dorico Pro automatically chooses a paper size that is based on your computer's locale settings. For example, if these are set to a European country, an international ISO standard might be used, such as A4. If they are set to a North American country, one of their typical standards might be used, such as US Letter.

If you have defined a page size for your layout that is larger than a typical standard, Dorico Pro automatically chooses the next larger paper size, provided that your printer supports this. For example, if the layout's page size is larger than A4/US Letter, A3/Tabloid is used.

If you print to a different paper size than the layout's page size, Dorico Pro automatically scales the image to fit the paper. You can change this setting by specifying a custom scale factor in the **Page Setup** section.

Paper orientation

Paper orientation is the direction of rectangular paper for viewing and printing. Paper can have either landscape or portrait orientation.

Instrumental parts are most often printed using portrait orientation, as this allows two or three pages to be spread out at a time on most music stands.

Full scores for conductors are also commonly printed using portrait orientation, as this allows more staves to fit on the page than with landscape orientation. However, full scores for small ensembles might use landscape orientation as fewer staves have to fit on the page. Having more horizontal room on the page allows more bars to fit on each page, reducing the number of page turns required.

In Dorico Pro, you can set the orientation of pages independently of the paper orientation, for example, you can print portrait pages on landscape paper. You can also separately set the paper orientation of the odd final page in layouts using the **Spreads** and **2-up** page arrangements.

RELATED LINKS

[Changing the page size and orientation](#) on page 343

Paper size and orientation setup

Layouts can have different paper sizes and orientation settings.

NOTE

If you have selected **Graphics** in the **Destination** section of the Print Options panel, you can only change the paper orientation. No other options are available.

The **Page Setup** section of the Print Options panel contains the following options when you have chosen **Printer** in the **Destination** section:

Paper size

Allows you to select one of the available paper sizes from the menu. The paper sizes available depend on the capabilities of the selected printer.

Paper orientation

You can choose one of the following paper orientation options:

- **Portrait**



- **Landscape**



Print odd final page on

For **Spreads** and **2-up** job types only: If this is activated, you can select a different paper size or orientation for the odd final page.

This setting is useful when printing layouts with an odd number of pages on A3 paper in landscape orientation. For example, if your layout contains five pages, the first four pages fit onto two sheets of A3, while the fifth page would occupy only the left-hand side of a third sheet of A3. This setting allows you to print the odd final page on A4 paper in portrait orientation instead.

Fit to Paper

The whole page is scaled to fit the paper size selected. For example, if you select a layout with a page size of A4 and select a paper size of A3, pages in the layout are enlarged to fit the larger paper size.

Custom Scale

The page is scaled to the set percentage of its original size. For example, if you are printing a layout with a page size of A3, select a paper size of A4, and set **Custom Scale** to 100, the original page remains at its original size, exceeding the boundaries of the A4 paper.

RELATED LINKS

[Page arrangements for printing/exporting](#) on page 480

[Changing the page size and orientation](#) on page 343

Graphics file formats

Dorico Pro supports multiple graphics file formats as which you can export your layouts.

PDF

Stands for Portable Document Format. Exporting layouts to PDF allows you to create a platform-independent document that contains a fixed version of each layout, for example, to send to someone who does not have access to Dorico Pro.

PNG

Stands for Portable Network Graphics. PNG files are losslessly compressed, meaning they produce high-quality images.

SVG

Stands for Scalable Vector Graphics. Because SVG is an XML-based text format, it can be scaled to any size without any loss of quality. Dorico Pro renders SVG graphics using drawing instructions rather than rasterizing them, resulting in better resolutions and smaller file sizes.

TIFF

Stands for Tagged Image File Format. TIFF files are not compressed, which means their file sizes can be larger than other formats and the quality of the image is not reduced.

RELATED LINKS

[Exporting layouts as graphic files](#) on page 475

Image resolution

Image resolution refers to the number of pixels contained in an image. The larger the number of pixels, the sharper and clearer the image appears.

In Dorico Pro, you can export PNG and TIFF files with different image resolutions. The image resolution is measured in dots per inch, or “dpi”.

- **72**
- **150**
- **300**
- **600**
- **1200**

NOTE

A resolution of 72 dpi is suitable for display on screen so that you can embed the graphic in an e-mail or on a web page. If you choose 300, 600, or 1200 dpi, a high-resolution image is saved that you can include as an illustration in a word processing or desktop publishing document.

RELATED LINKS

[Exporting layouts as graphic files](#) on page 475

Annotations

Annotations provide additional information for printed or exported documents, such as the date and time it was printed. Publishers and printing agencies can use these to identify and register printed images correctly or to embed exported graphics files into a desktop publishing application.

When printing/exporting your layouts for publication, you can include typical annotations. You can also allow Dorico Pro to print or export any view options that you have activated in your project.

NOTE

Crop marks and the border can only be printed if the page size is smaller than the paper size.

The **Annotations** section of the Print Options panel contains the following options:

Crop marks

Adds short vertical and horizontal lines at each of the four corners of the page.

Border

Adds an outline around the edge of the page dimensions.

Date and time

Adds the date and time of printing at the bottom of each page.

Watermark

Adds large translucent text across the middle of each page. This is useful for indicating that this version is a draft, proof, or perusal score.

In the **Watermark** field at the bottom of the section, you can enter the text that you want to show on each page.

View options

Adds all active view options, such as signposts and note colors, to the printout or exported graphic.

Notation reference

Introduction

This notation reference contains information about the accepted conventions for presenting different notations and how to change their appearance and placement in Dorico Pro, both for individual items and by changing project-wide settings.

It also contains instructions for inputting more complex notations, such as cross-staff glissando lines, which are described in the corresponding chapter.

Tasks in the notation reference outline the default changes you can make to items, which can apply per-flow, per-layout or project-wide; for example, changing spacing gaps or the project-wide appearance of pedal lines are both project-wide changes you can make in **Engrave > Engraving Options**. Tasks also outline the individual changes you can make to items independently of your default settings, which often involve using properties in the Properties panel.

You can find basic input methods for notations in the Write mode chapter.

RELATED LINKS

[Write mode](#) on page 131

Accidentals

Accidentals show that the pitch of a note has been altered so that it does not conform to the current prevailing key signature.

In music that has no key signatures, some or all notes might require accidentals, depending on the notation convention in use.

Dorico Pro provides comprehensive duration rules that determine when accidentals are shown, and also allows you to control how accidentals are arranged in complex chords.

RELATED LINKS

[Inputting accidentals](#) on page 162

Deleting accidentals

You can delete accidentals according to their type and you can delete all accidentals from a selection of notes with different accidentals at the same time.

NOTE

These steps do not apply to cautionary accidentals, such as those shown on natural notes that follow the same notes with an accidental but in a different octave. In Dorico Pro, you can hide, show, or parenthesize cautionary accidentals in each flow and on individual notes.

PROCEDURE

1. In Write mode, select the notes whose accidentals you want to delete.
2. Delete accidentals in any of the following ways:
 - Press **0** to delete naturals.
 - Press **-** to delete flats.
 - Press **=** to delete sharps.
 - Click the button of the accidental in the Notes panel.

RESULT

The corresponding accidentals are deleted from the selected notes.

NOTE

- If a note of the same pitch appears with an accidental earlier in the bar, but that accidental has not been deleted, any subsequent notes of the same pitch assume that accidental even if it does not appear by every notehead.
- To delete accidentals from a selection of notes with different accidentals, we recommend that you revert them all to natural by pressing **0** or clicking **Natural** in the Notes panel. This is because re-inputting an accidental over a selection of notes with different accidentals adds that accidental to every note in the selection. For example, two G#s

followed by two G♭s become four G♯s if you re-input a sharp. If you click **Sharp** or press = twice, all accidentals are deleted.

RELATED LINKS

[Inputting accidentals](#) on page 162

[Hiding/Showing cautionary accidentals](#) on page 495

[Hiding/Showing or parenthesizing accidentals](#) on page 489

Hiding/Showing or parenthesizing accidentals

You can show individual accidentals in parentheses, and also hide/show accidentals individually, including cautionary accidentals shown by default. For example, you can show an accidental in parentheses on subsequent notes in tie chains that cross system/frame breaks.

PROCEDURE

1. Select the notes whose accidental appearance you want to change, or beside which you want to show cautionary accidentals. You can do this in Write mode and Engrave mode.

NOTE

You can only select individual noteheads within tie chains in Engrave mode.

2. In the Properties panel, activate **Accidental** in the **Notes and Rests** group.
3. Select one of the following options from the menu:
 - **Show**
 - **Hide**
 - **Parenthesize**

NOTE

Hiding accidentals does not affect the pitch of notes in playback.

RESULT

Accidentals on the selected notes are shown, hidden, or shown in parentheses.

TIP

- If you are hiding/showing many accidentals, it might be easier to change the accidental duration rule.
 - You can assign key commands for different accidental hiding, showing, and parenthesizing commands on the **Key Commands** page in **Preferences**.
-

RELATED LINKS

[Accidental duration rules](#) on page 493

[Preferences dialog](#) on page 51

Project-wide engraving options for accidentals

You can find options for the project-wide appearance and position of accidentals on the **Accidentals** page in **Engrave > Engraving Options**.

The options on the **Accidentals** page allow you to change the order of accidentals in chords and the precise positioning of accidentals relative to noteheads, ledger lines, and parentheses.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Stacking of accidentals

If multiple accidentals are required for a chord in a single voice, or for notes in multiple voices at the same rhythmic position, they are stacked to the left of the chord in columns.

For chords with multiple accidentals, accidentals are generally stacked as follows:

1. The highest accidental is inserted in the first column immediately to the left of the notes.
2. The lowest accidental is added to the same column, provided that it does not collide with the first accidental.
3. The remaining highest and lowest accidentals are alternated in successive columns located further left from the chord.

In Dorico Pro, additional rules help to produce a stack of accidentals that uses as few columns as possible. The following list contains some of the rules that are applied:

- Columns closer to the notes contain more accidentals than columns further from the notes.
- Accidentals on notes that are an octave apart are stacked in the same column. This also applies to accidentals that are a sixth or more apart, depending on the combination of accidentals.
- Accidentals in the same column never collide. The minimum interval between accidentals that is required to prevent collisions depends on the types of accidentals.
- Accidentals that are a second apart are arranged in adjacent columns, with the higher accidental in the right-hand column.

These rules minimize the amount of extra space that is required between successive notes or chords and ensure that accidentals appear as close as possible to the noteheads to which they apply. At the same time, they produce a contour that resembles a C-curve on the left-hand side of the chord.

TIP

You can customize the default settings for the stacking of accidentals project-wide in the **Stacking** section of the **Accidentals** page in **Engrave > Engraving Options**. For example, you can allow accidentals to be stacked without interspersions, so that accidentals appear in a diagonal line sloping downwards to the left.

RELATED LINKS

[Project-wide engraving options for accidentals](#) on page 489

Accidental stacking rules for dense chords

Dorico Pro uses special stacking calculations in dense chords with multiple accidentals to ensure legibility. Chords are considered dense when they have six or more accidentals within the span of an octave.

For dense chords, accidentals are stacked as follows:

1. The highest accidental is inserted in the first column to the left of the notes.

2. The next accidental on a note that is located at least a seventh below the highest note is stacked into the same column. This continues with the remaining notes until no more accidentals fit into the first column.
3. Steps 1 and 2 are repeated for the following columns until all accidentals are stacked.
4. The columns are grouped, interspersed, and re-stacked. This results in a stack with alternating accidentals, reminiscent of the way accidentals are arranged in a key signature.

NOTE

By default for dense chords, Dorico Pro uses a lattice arrangement of accidentals rather than the usual zig-zag arrangement. In very dense chords, the lattice arrangement can be wider and require more columns. You can change the default arrangement of all dense chords project-wide in the **Stacking** section of the **Accidentals** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for accidentals](#) on page 489

Kerning of accidental columns

Dorico Pro applies kerning to accidental columns to ensure that the columns to the left of a chord occupy as little horizontal space as possible.

In typography, kerning adjusts the space between individual characters to increase legibility. In Dorico Pro, as well as in music engraving in general, kerning allows accidentals to interlock.

EXAMPLE

If a low note is followed by a high note with an accidental, the accidental can be tucked above the low note to prevent the note spacing from being distorted.

Similarly, in the case of multiple columns of accidentals on a chord, the overall width of the stack of accidentals is reduced if, for example, a flat in the second column is kerned underneath a sharp in the first column belonging to a note a third higher. This also reduces the need to distort note spacing to accommodate accidentals.

Altered unisons

Altered unisons occur when two or more notes of the same name in the same octave have different accidentals in the same chord, such as D \sharp and D \flat .

In Dorico Pro, this is notated with a split stem, which allows both notes to appear with their corresponding accidental directly beside them. A split stem is sometimes known as a “cherry stalk” or a “tree”.

You can also have altered unisons appear with a single stem, meaning noteheads appear directly beside each other, and the two accidentals are shown beside each other to the left of the chord.

NOTE

If a chord contains notes a second interval apart and one of those notes has an altered unison, it is always shown with a split stem, regardless of your setting. This is to ensure clarity in clusters.

EXAMPLE



A single stem altered unison



A split stem altered unison

RELATED LINKS

[Inputting chords](#) on page 167

Changing how altered unisons appear

You can change how individual altered unisons appear, including within chords containing other altered unisons, and independently of your per-flow settings.

PROCEDURE

1. Select the altered unison notes whose appearance you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Split stem** in the **Notes and Rests** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

The selected altered unison notes are shown with split stems when the checkbox is activated, and with single stems when the checkbox is deactivated.

TIP

- **Split stem** applies to individual notes. You can have altered unisons appear differently within the same chord by setting their properties independently.
 - You can change the default appearance of all altered unisons in each flow independently in the **Altered unisons** section of the **Accidentals** page in **Write > Notation Options**.
-

RELATED LINKS

[Notation Options dialog](#) on page 139

Microtonal accidentals

Microtonal accidentals indicate pitches beyond the standard accepted chromatic scale in Western tonality, such as a quarter sharp or quarter flat.

You can use microtonal accidentals when you have selected a tonality system that includes microtonal accidentals, such as **Equal temperament (24-EDO)**.

The default tonality system is **Equal temperament (12-EDO)**, which you can see in the **Tonality System** section of the Key Signatures, Tonality Systems and Accidentals panel. When this option is selected, the accidentals available in the **Accidentals** section of the panel are only half-step (semitone) accidentals, such as sharp, flat, double flat, and so on. **Equal temperament (12-EDO)** does not include microtonal accidentals.

You can change the tonality system for specific passages of music, which changes the microtonal accidentals available. You can also define your own tonality systems with custom octave divisions, key signatures, and accidentals.

NOTE

Even if you do not want to use a conventional key signature, you must input an open or atonal key signature in order to change the tonality system and use microtonal accidentals.

RELATED LINKS

- [Tonality systems](#) on page 673
- [Changing the tonality system](#) on page 674
- [Custom tonality systems](#) on page 675
- [Custom accidentals](#) on page 677
- [Playback of custom tonality systems](#) on page 683

Inputting microtonal accidentals

You can input microtonal accidentals, such as quarter tone flat or three quarter tones sharp, into your project.

PREREQUISITE

You have input a key signature and selected a tonality system for that key signature that allows microtonal accidentals, such as **Equal temperament (24-EDO)**, for the section of your project where you want to input microtonal accidentals.

PROCEDURE

1. In Write mode, select the note or notes to which you want to apply a microtonal accidental.
 2. In the Key Signatures, Tonality Systems, and Accidentals panel, click the microtonal accidental you want in the **Accidentals** section.
-

RESULT

The selected microtonal accidental appears beside the selected note or notes.

NOTE

You can only input one type of accidental at a time.

RELATED LINKS

- [Tonality systems](#) on page 673
- [Changing the tonality system](#) on page 674
- [Input methods for key signatures](#) on page 186

Accidental duration rules

Accidental duration rules determine how long accidentals apply, such as within a bar, at a different octave, or just for a single note.

Dorico Pro allows you to use different accidental duration rules.

Common practice

In Dorico Pro, this is the default accidental duration rule. In common practice, an accidental applies for the duration of a bar and only to the pitch at which it is written, meaning each octave requires a separate accidental.

Second Viennese School

The Second Viennese School accidental duration rule requires writing every note with an accidental, including naturals.

Modernist

The Modernist accidental duration rule states that only notes that have been altered from the key signature show accidentals. Naturals are not shown.

RELATED LINKS

[Common practice accidental duration rule](#) on page 495

[Second Viennese School accidental duration rule](#) on page 496

[Modernist accidental duration rule](#) on page 496

Changing the accidental duration rule

You can change the accidental duration rule to the one most appropriate for each flow in your project.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.
2. In the **Flows** list, select the flows in which you want to change the accidental duration rule. By default, only the current flow is selected when you open the dialog.
3. Click **Accidentals** in the page list.
4. In the **Basic** section, choose one of the following options for **Accidental duration rule**:
 - **Common Practice**
 - **Second Viennese School**
 - **Modernist**
5. Optional: Customize the options for your chosen accidental duration rule.

TIP

Options in the **Basic** section can apply to all accidental duration rules.

6. Click **Apply**, then **Close**.
-

RELATED LINKS

[Common practice accidental duration rule](#) on page 495

[Second Viennese School accidental duration rule](#) on page 496

[Modernist accidental duration rule](#) on page 496

Double accidental cancellation

There are two generally accepted practices for the cancellation of double accidentals, which are archaic and modern. You can use either practice in each flow independently in Dorico Pro.

By default, Dorico Pro uses modern cancellation. This means that if a double sharp is cancelled by a single sharp, or a double flat is cancelled by a single flat, then no natural sign is shown in front of the single sharp or single flat, as these accidentals are unambiguous.

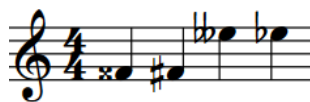
You can change how double accidentals are cancelled in each flow independently in the **Basic** section of the **Accidentals** page in **Write > Notation Options**. You can use this option with any accidental duration rule.

- If you choose **Use archaic cancellation**, natural signs are shown before new accidentals that come after double accidentals.
- If you choose **Use modern cancellation**, double accidentals are replaced immediately with a new accidental without showing a natural sign first.

EXAMPLE



Archaic cancellation



Modern cancellation

RELATED LINKS

[Notation Options dialog](#) on page 139

Common practice accidental duration rule

In common practice, an accidental affects all notes of the same pitch in the same octave within the same bar, unless it is cancelled by another accidental. If it is not cancelled, it is automatically cancelled in the following bar.

NOTE

To ensure that the cancellation is unambiguous, it is customary to add a cautionary accidental to the first note of the same pitch in the following bar.

In Dorico Pro, the common practice accidental duration rule is used by default. You can change the accidental duration rule on the **Accidentals** page in **Write > Notation Options**.

In common practice, the accidental of a note in one bar is automatically cancelled in the following bar. For example, in the key of G major, if an F# is in one bar, an F in the following bar shows a sharp sign, even though the sharp is already implied by the key signature.

When using the common practice accidental duration rule by default, Dorico Pro also displays cautionary accidentals, which are restatements of an earlier accidental. They are considered optional; that is, they are neither explicit confirmations nor cancellations, but help to eliminate ambiguities. Cautionary accidentals are also known as “courtesy accidentals”.

Cautionary accidentals are shown in the following circumstances:

- Subsequent notes within the same bar have the same note name in different octaves.
- Subsequent notes in the following bar have the same note name in the same octave.
- The first occurring note in the following bar has the same note name in any octave.
- Augmented/Diminished or double-diminished/augmented intervals are identified within the same bar.

For each of these situations, you can choose whether cautionary accidentals are shown in parentheses, shown without parentheses, or not shown at all.

RELATED LINKS

[Changing the accidental duration rule](#) on page 494

Hiding/Showing cautionary accidentals

You can hide/show cautionary accidentals if you use the common practice accidental duration rule.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.
2. In the **Flows** list, select the flows in which you want to hide/show cautionary accidentals.

By default, only the current flow is selected when you open the dialog.

3. Click **Accidentals** in the page list.
 4. In the **Basic** section, choose **Common practice** for **Accidental duration rule**.
 5. In the **Cautionary accidentals** section, choose the options that you want to apply to the selected flows.
 6. Click **Apply**, then **Close**.
-

RELATED LINKS

[Common practice accidental duration rule](#) on page 495

Second Viennese School accidental duration rule

The accidental duration rule of the Second Viennese School states that an accidental applies only to the note on which it is written. All notes show an accidental regardless of key signature, including unaltered notes which show naturals.

This accidental duration rule was used by Schoenberg and other composers of the Second Viennese School.

You can customize the options within the Second Viennese School accidental duration rule when changing the accidental duration rule, including choosing whether immediate repetitions of the same note within the same bar require a restatement of the accidental.

RELATED LINKS

[Changing the accidental duration rule](#) on page 494

Modernist accidental duration rule

The Modernist accidental duration rule states that only notes that have been altered from the key signature show accidentals. Naturals are not shown. However, accidentals that are shown only apply to the notes on which they are written, as with the Second Viennese School.

Charles Ives and Robert Crumb used this variation.

You can customize the options within the Modernist accidental duration rule when changing the accidental duration rule, including choosing whether or not the same accidental on the same pitch is restated later in the bar if the subsequent pitches occur immediately and if subsequent pitches occur after other, different notes. There is also an option controlling the restatement of accidentals within beam groups.

RELATED LINKS

[Changing the accidental duration rule](#) on page 494

Articulations

Articulations are markings that are drawn above or below notes and chords. Articulations tell a performer how to attack a note or how long to play a note relative to its notated duration.

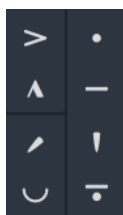
In Dorico Pro, articulations are defined as something that alters the way a note is played, in a way that is consistent across all instruments.

As instructions like bowing directions, harmonics, or tonguing apply to different instrument groups, in Dorico Pro such directions are defined as playing techniques, and can be found in the Notations panel on the right of the window.

Articulations are categorized into the following types:

- **Articulations of force**
Indicate a stronger attack at the start of notes, and include articulations such as accent and marcato. Marcato is also sometimes known as a “strong accent”. Dorico Pro shows these articulations at the start of a note or tie chain by default.
- **Articulations of duration**
Indicate a shorter duration than notated, and include articulations such as staccatissimo, staccato, tenuto, and staccato-tenuto. Staccato-tenuto is also sometimes known as a “louré”. If a note includes ties, Dorico Pro shows articulations of duration above the last note in the chain by default.
- **Articulations of stress**
Indicate notes that should be emphasized or not emphasized where that contradicts the prevailing meter, using stressed and unstressed marks. Dorico Pro shows these articulations at the start of a note or tie chain by default.

You can find articulations at the bottom of the Notes panel in Write mode.



Dorico Pro positions articulations automatically on the notehead or stem side of notes and chords, according to the musical context. A note or chord can display one of each of the three types of articulations.

You can change the effect of articulations on playback, based both on the type of instrument and the playback devices in use in the **Note Dynamics** section of the **Dynamics** page in **Play > Playback Options**.

RELATED LINKS

[Inputting articulations](#) on page 182

[Playback Options dialog](#) on page 405

Copying articulations

Articulations are automatically included if you copy notes, but they cannot be copied and pasted independently of notes.

PROCEDURE

1. In Write mode, select the notes with articulations you want to copy.
 2. Copy the notes in one of the following ways:
 - Press **R** to repeat the material directly after itself.
 - Press **Ctrl/Cmd-C**, select the position where you want to copy the selected notes, then press **Ctrl/Cmd-V**.
 - **Alt**-click the position where you want to copy the selected notes with articulations.
-

Changing articulations

You can change the articulations on notes after they have been input.

PROCEDURE

1. In Write mode, select the note whose articulation you want to change.
 2. Change the articulation in any of the following ways:
 - Press the key command of the articulation you want. For example, press **]** for staccato.
 - Click the new articulation you want in the Notes panel.
-

RESULT

The new articulation is added. This replaces any existing articulation of the same type.

RELATED LINKS

[Inputting articulations](#) on page 182
[Key commands for articulations](#) on page 183

Deleting articulations

Individual articulation markings cannot be selected and deleted separately from their notehead in Write mode, so articulations must be deleted by selecting the note or notes to which they are attached, and deselecting the articulation.

PROCEDURE

1. In Write mode, select the notes whose articulations you want to delete.
 2. Deselect the articulations in any of the following ways:
 - Press the key commands of the articulations you want to delete.
 - Click the articulations you want to delete in the Notes panel.
-

RELATED LINKS

[Key commands for articulations](#) on page 183

Project-wide engraving options for articulations

You can find options for the appearance and placement of articulations project-wide on the **Articulations** page in **Engrave > Engraving Options**.

The options on this page allow you to change the positions of articulations in detail, including whether different articulations are shown above the staff or by the notehead, the positions of articulations relative to ties and slurs, and the vertical gaps between articulations and notes/ other articulations.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Positions of articulations

There are established conventions for the position and placement of articulations relative to notes, the staff, and staff lines, which ensure articulations are always clearly visible. For the smallest articulations, such as staccato marks, correct placement relative to staff lines in particular is vital.

Articulations are placed on the notehead side by default, with the following exceptions:

- In single-voice contexts, marcato is always placed above the staff, regardless of the stem direction of the note or chord on which it is used. In multiple-voice contexts, marcato can also be placed below the staff.
- If multiple voices are active, articulations are placed at the end of the stem side of a note or chord. This clarifies which articulations belong to the up-stemmed notes and which to the down-stemmed notes.
- If a note is placed on the middle staff line or on the space immediately on either side, articulations that are less than a space in height are centered in the next unoccupied space. This normally only applies to staccato and tenuto. If a note in the middle of the staff has a staccato-tenuto articulation, the component parts of the articulation are split up and placed in separate spaces.
- If an articulation cannot fit within a staff space, or if the note is placed high or low on the staff, the articulation is placed outside the staff.
- If a note or chord is tied and the tie is placed above or below the notehead, articulations that are placed on the notehead side of a note or chord are offset by an additional 1/4 space in order to avoid the end of the tie.

Articulations on the notehead side are always centered horizontally on the notehead. This also applies to articulations on the stem side, except if the only articulation is a staccato or staccatissimo. In this case, the articulation is centered on the stem.

RELATED LINKS

[Project-wide engraving options for articulations](#) on page 499

[Changing the horizontal position of staccato marks](#) on page 501

[Moving individual articulations vertically](#) on page 501

[Changing the placement of articulations individually](#) on page 502

Order of articulations

If there are multiple articulations on the same notes, their vertical position and proximity to noteheads/stems depends on their type.

Articulations are positioned in the following order:

1. Articulations of duration are positioned closest to notehead/stems.
2. Articulations of force are positioned outside articulations of duration.
3. Articulations of stress are positioned furthest from noteheads/stems.

Order of articulations in relation to slurs

Articulations of duration are positioned as follows:

- Inside slurs that start/end on a note or chord with an articulation.
- Inside the curvature of a slur.
- Inside tuplet brackets.

Articulations of force are positioned as follows:

- Outside slurs that start/end on a note or chord with an articulation, except if they can be positioned within the staff.
- Inside the curvature of a slur if they fit between the slur and the note or stem, to which they belong, without colliding.
- Outside tuplet brackets.



Force and stress articulations outside the ends of the slur Duration articulations inside the ends of the slur

Changing the positions of articulations on tied notes

You can change where in tie chains articulations appear individually, independently of your project-wide settings. By default, articulations of force and stress are shown on the first note/chord in tie chains, while articulations of duration are shown on the last note/chord.

PROCEDURE

1. Select the tied notes/chords whose articulation position you want to change. You can do this in Write mode and Engrave mode.
 2. In the **Articulations** group of the Properties panel, activate **Pos. in tie chain** under the corresponding heading for the articulation whose position you want to change.
For example, activate **Pos. in tie chain** under the **Articulations of force** heading to change the position of accents.
 3. Choose one of the following options:
 - **First note**
 - **Last note**
 4. Optional: Repeat steps 2 and 3 to change the position of other types of articulations on the selected tied notes/chords.
-

RESULT

The position of articulations in the selected tie chains is changed.

TIP

You can change the default position of each type of articulation relative to all tie chains project-wide in the **Ties** section of the **Articulations** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for articulations](#) on page 499

Changing the horizontal position of staccato marks

You can change the default horizontal position of all staccato and staccatissimo articulations when they are placed on the stem side of notes project-wide. By default, staccato and staccatissimo articulations are centered on the stem when on the stem side.

The horizontal position of most articulations is centered on a stem or a notehead. However, if a staccato or *staccatissimo* is the only articulation, its horizontal position can also be half-centered when they are placed on the stem side.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Articulations** in the page list.
 3. In the **Horizontal Position** section, choose one of the following options for **Horizontal position of staccato on stem side**:
 - **Center on notehead**
 - **Center on stem**
 - **Half-center**
 4. Click **Apply**, then **Close**.
-

RESULT

Staccato marks are positioned project-wide according to the option selected.

RELATED LINKS

[Project-wide engraving options for articulations](#) on page 499

Moving individual articulations vertically

You can move individual articulations graphically upwards/downwards so they are closer to/further away from notes.

PROCEDURE

1. In Engrave mode, select the articulations that you want to move.
2. Move the articulations in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.
-

RESULT

The selected articulations are moved vertically.

TIP

- When you move articulations vertically, **Offset Y** in the **Articulations** group of the Properties panel is activated for the corresponding type of articulation. For example, **Offset Y** under the **Articulations of force** heading is activated when you move accents.

You can also use these properties to move articulations vertically by changing the value in the value field.

Deactivating the properties resets the selected articulations to their default positions.
 - You can change the default gaps between all articulations and their noteheads and other articulations on the **Articulations** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Project-wide engraving options for articulations](#) on page 499

Changing the placement of articulations individually

You can change whether individual articulations are placed on the notehead side or stem side of notes.

PROCEDURE

1. Select the notes/chords whose articulation placement you want to change. You can do this in Write mode and Engrave mode.
 2. In the **Articulations** group of the Properties panel, activate **Placement** under the corresponding heading for the articulations whose placement you want to change.
For example, activate **Placement** under the **Articulations of force** heading to change the placement of accents.
 3. Select one of the following options from the menu:
 - **Notehead side**
 - **Stem side**
 4. Optional: Repeat steps 2 and 3 to change the placement of other types of articulations on the selected notes/chords.
-

RESULT

The articulation is placed on the selected side of the notes or chords. If this creates a collision with other markings, such as playing techniques, Dorico Pro automatically makes adjustments to make sure all markings are clear and legible.

RELATED LINKS

[Changing the default placement of articulations](#) on page 503
[Moving individual articulations vertically](#) on page 501

Changing the default placement of articulations

You can change the default placement of all articulations according to their type, for example, if you want articulations of stress always to be placed above the staff but articulations of duration to be placed beside noteheads, both above and below the staff.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Articulations** in the page list.
3. In the **Placement** section, choose one of the following options for each articulation type:
 - **Always above**
 - **Natural placement**
4. Click **Apply**, then **Close**.

RESULT

The default placement of the corresponding types of articulations is changed project-wide. Articulations with **Natural placement** are placed on the notehead side of notes.

TIP

You can also change the default gaps between noteheads/stems and articulations and between stacked articulations in the **Vertical Position** section of the **Articulations** page.

Articulations in playback

Adding articulations to your score affects how notes sound in playback.

If you do not have a sample library, Dorico Pro still changes how a note sounds in playback if you have put an articulation on it. For example, a staccato mark causes a note to sound shorter than normal, and an accent causes a note to sound louder than normal.

The **Timing** page in **Play > Playback Options** provides options for the default effect of articulations of duration. The **Dynamics** page contains options for articulations of force.

If you do have a sample library, Dorico Pro loads the specific sample for an articulation if such a sample is included in your sample library for that instrument.

As the articulation applies to the whole note, the sample is triggered at the start of a note. This includes notes that are tie chains.

RELATED LINKS

[Playback Options dialog](#) on page 405

Bars

Bars indicate a usually regular segment of time according to the number of beats, which is usually determined by the prevailing time signature. Bars are separated from other bars to the left and the right by vertical barlines.

Bars are usually the same length and at the same position for all players, but in some music, bars of different lengths may coincide, and there are situations where some players may have no bars indicated at all.

Each bar has a number, allowing players to keep track of their place in the music and aiding rehearsal. This is especially important in music for multiple players.

RELATED LINKS

[Bar numbers](#) on page 519

[Input methods for bars and barlines](#) on page 201

Deleting bars/beats

You can delete whole bars and specific beats from your project completely by using the bars and barlines popover.

PROCEDURE

1. In Write mode, select one of the following:
 - The first bar you want to delete, or the first note or rest in that bar.
 - An item at the rhythmic position from which you want to delete beats
2. Press **Shift-B** to open the bars and barlines popover.
3. Enter - (minus), followed by the number of bars or beats you want to delete into the popover.
For example, enter -6 to delete six bars, meaning the bar you selected and the subsequent five bars, or -2q to delete two quarter note beats, starting from the selected rhythmic position.
4. Press **Return** to close the popover.

RESULT

The number of bars or beats specified is deleted.

RELATED LINKS

[Bars and barlines popover](#) on page 201

Deleting bars/beats with the system track

You can delete whole bars and selected beats from your project completely using the system track, for example, if you want to delete the last beat in the final bar for flows that begin with a pick-up bar.

PREREQUISITE

The system track is shown.

PROCEDURE

1. In the system track in Write mode, select the region that you want to delete.
2. Click **Delete** in the system track. It can also appear above the system track if your selection is narrow.



Delete button in the system track



The system track changes color when you hover over the **Delete** button.

RESULT

The selected region is deleted. Just as when Insert mode is active, music to the right of the selection moves up to fill in the gap.

NOTE

Any signposts in the selection are also deleted. This can affect the page layout, for example, by removing ossia staves whose signposts were included in the selection.

RELATED LINKS

- [System track](#) on page 275
- [Hiding/Showing the system track](#) on page 276

Deleting empty bars at the end of flows

You can delete any empty bars left at the ends of flows.

PROCEDURE

1. In Write mode, select an item in the flow you want to trim.
 2. Press **Shift-B** to open the bars and barlines popover.
 3. Enter trim into the popover.
 4. Press **Return** to close the popover.
-

RESULT

Empty bars at the end of the selected flow are deleted.

RELATED LINKS

- [Bars and barlines popover](#) on page 201
- [Splitting flows](#) on page 289

Deleting the contents of bars

You can delete just the contents of bars without deleting barlines or the bars themselves.

PROCEDURE

1. In Write mode, select the bars whose contents you want to delete.

TIP

Notes, rests, and other objects are highlighted orange when selected.

2. Press **Backspace** or **Delete**.
-

RESULT

The contents of the selected bars are deleted.

RELATED LINKS

[Large selections](#) on page 274

[Filters](#) on page 278

Changes to the length of bars

You can change the length of a bar so that its duration is longer or shorter.

You can change the length of a bar by changing its time signature. You can later hide the time signature, for example, if you are writing music with an irregular meter and you require barlines only to group material together, but not to imply any sense of meter.

RELATED LINKS

[Input methods for time signatures](#) on page 190

[Hiding/Showing time signatures](#) on page 996

Changing the width of empty bars

You can change the width of empty bars individually in Engrave mode.

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select a square handle at the rhythmic position of a barline at the start/end of an empty bar whose width you want to change.



3. Adjust the spacing in any of the following ways:
 - Press **Alt-Right Arrow** to increase the space to the left of the selected handle.
 - Press **Alt-Left Arrow** to decrease the space to the left of the selected handle.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The width of the empty bar is changed.

For example, if you select the handle of the barline on the right of a bar and nudge the handle to the left, the bar appears narrower. If you select the barline on the right of a bar and nudge the handle to the right, the bar appears wider.

RELATED LINKS

[Note spacing](#) on page 381

[Hiding/Showing bar rests in empty bars](#) on page 864

[Hiding/Showing multi-bar rests](#) on page 865

Splits in bars

You can split bars rhythmically by changing the number of beats in each bar. You can split bars visually across systems or frame breaks, which might be required in music with an irregular meter or in passages of polymeter.

Splitting bars by inputting new time signatures

You can split bars into two or more bars by changing the time signature. New time signatures apply until the next existing time signature or the end of the flow, whichever comes first.

If the new time signature does not fit completely into the given space, for example, if you wanted to replace two 4/4 bars (eight quarter notes) with either two 3/4 bars or three 3/4 bars (either six or nine quarter notes), then Dorico Pro does not override your existing time signature. Instead, the final bar is made shorter.

For example, replacing a 4/4 time signature with a 3/4 time signature two bars before an existing time signature creates two 3/4 bars and the equivalent of a 2/4 bar, as shown in this example.



However, in Insert mode, Dorico Pro inserts time at the end of the final bar of the new time signature to make sure the final bar is the correct length. For example, in the same scenario as above but with Insert mode activated, two 4/4 bars become three 3/4 bars, with the extra beat required to fill the third 3/4 bar added at the end of the phrase.



Splitting bars by inputting new barlines

You can also split bars by inputting new barlines that are not normal (single) barlines anywhere within a bar without affecting the time signature.

However, inputting a normal (single) barline anywhere within an existing bar resets the pattern of the time signature from that point onwards.

For example, selecting the third quarter note (crotchet) in a 4/4 bar and inserting a new barline causes a new 4/4 bar to start from the added barline. This leaves the equivalent of a 2/4 bar

without a time signature to the left of the barline, but the bars to the right of the added barline are in 4/4 and continue to be in 4/4 until the next time signature or the end of the flow, whichever comes first.

After a normal (single) barline is added, a signpost appears to show how it affects the time signature.



The image shows two musical staves. The left staff has two 4/4 bars, each containing a quarter rest followed by four quarter notes. The right staff has the same two bars, but a normal barline is inserted halfway through the first bar. A signpost above the barline indicates '4/4 (q, 1+1+1+1)', showing that the time signature restarts from that point.

Two 4/4 bars with quarter notes

Adding a normal barline halfway through the first 4/4 bar restarts the time signature from that point.

RELATED LINKS

- [Input methods for time signatures](#) on page 190
- [Input methods for bars and barlines](#) on page 201
- [Inserting system breaks](#) on page 359
- [Inserting frame breaks](#) on page 357
- [Inputting notes in Insert mode](#) on page 153

Combining bars

You can combine two or more bars into one, longer bar by deleting the barline between them.

PROCEDURE

1. In Write mode, select the barline you want to delete.
2. Press **Backspace** or **Delete**.

RESULT

The bars on either side of the deleted barline combine into one bar. If required, the notes inside are automatically re-beamed appropriately.

NOTE

Deleting a barline does not automatically change the time signature. To avoid confusion, we recommend that you input a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS

- [Deleting barlines](#) on page 513
- [Input methods for time signatures](#) on page 190
- [Hiding/Showing multi-bar rests](#) on page 865

Barlines

Barlines are vertical lines that cross staves in order to show how music is divided into bars, according to the time signature.

There are a number of different types of barlines that are used in different contexts:

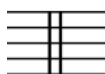
Normal (Single)

A standard single barline that spans the entire height of the staff. For single-line staves, the barline extends one space above and below the staff line by default.



Double

A double barline consists of two lines, both the width of a single barline, positioned half a space apart by default. It is often used to denote significant changes in the music, or to mark the placement of rehearsal marks, key signature changes, and tempo changes.



Triple

A triple barline consists of three lines, all the width of a single barline, positioned half a space apart by default. It is sometimes used in musicological analysis to demarcate structural units larger than a single bar.



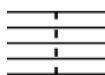
Final

A final barline consists of two lines: one of normal width, the other thick. It marks where the music ends.



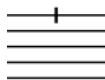
Dashed

A dashed barline has the same thickness as a normal barline, but has gaps within it to give it a dashed appearance. It is used to subdivide bars to make complex time signatures easier to read, and to differentiate editorial barlines from ones originally in the manuscript.

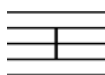


Tick

A tick barline is a short line that spans only the top line of the staff. It is useful when notating plainsong, in which context it denotes a breath or short gap between phrases, or other music with an unusual metrical structure.

**Short**

A short barline spans the middle of the staff, which on a five-line staff is between the second and fourth lines. On staves with fewer than five lines, the short barline is scaled proportionally. It is useful when notating plainsong, in which context it denotes a longer gap between phrases than a tick barline.

**Thick**

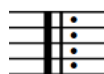
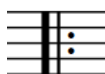
A thick barline is half a space wide by default, so it is noticeably thicker than a normal barline. This gives it a greater visual impact.

**Start repeat**

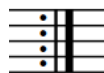
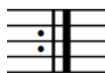
A start repeat line consists of a thick barline, followed by a normal barline, followed by one of the following arrangements of dots:

- Two dots, one each in the middle two spaces of a five-line staff
- Four dots, one each in all four spaces of a five-line staff

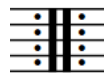
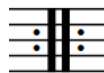
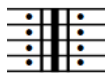
It shows the start of a repeated section. It is used alongside end repeat lines, which show the end of a repeated section.

**End repeat**

An end repeat line is the mirror of a start repeat line, so it consists of either two or four dots, followed by a normal barline, followed by a thick barline. It shows the end of a repeated section. It is used alongside start repeat lines, which show the start of a repeated section.

**End/Start repeat**

This line combines the start repeat and end repeat barlines, with either two single barlines with a single shared thick barline in the middle, or two thick barlines and no single barlines. On either side, there are either two or four repeat dots. It is used when a repeated section is immediately followed by another, separate repeated section.



RELATED LINKS

[Input methods for bars and barlines](#) on page 201

[Repeats in playback](#) on page 436

Project-wide engraving options for barlines

You can find options for the project-wide appearance of barlines on the **Barlines** page in **Engrave > Engraving Options**.

The options on the **Barlines** page allow you to change the appearance and thickness of barlines, and which barlines are used in different contexts. For example, you can change the default appearance of repeat barlines, changing the default barline shown before codas, and whether barlines join vocal staves and ossia staves.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Barline spacing](#) on page 513

[Barlines on ossia staves](#) on page 922

[Changing the barline shown before codas](#) on page 834

Per-flow notation options for barlines

You can find options for the per-flow the appearance of barlines on the **Barlines** page in **Notation Options**.

These options allow you to change which barline is shown by default at the end of each flow, and whether barlines join all staves at the end of each system and at the end of the final system in a flow.

You can open **Notation Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write > Notation Options** in Write mode or **Setup > Notation Options** in Setup mode.
- Click **Notation Options** in the **Flows** panel in Setup mode.



You can then click **Barlines** in the page list.

Changing the default barline at the end of flows

You can choose which type of barline is placed automatically at the end of each flow.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.
2. In the **Flows** list, select the flows whose default end barline you want to change.
By default, only the current flow is selected when you open the dialog.

3. Click **Barlines** in the page list.
 4. Choose one of the following options for **Automatic barline at end of flow**:
 - **Final barline**
 - **Double barline**
 - **Normal barline**
 - **Dashed barline**
 - **Thick barline**
 - **No barline**
-

RESULT

The default final barline at the end of the selected flows is changed.

TIP

You can override individual final barlines by changing their type, but you cannot delete individual final barlines.

RELATED LINKS

[Input methods for bars and barlines](#) on page 201

Hiding/Showing systemic barlines on single-staff systems

By default, systemic barlines are shown at the start of systems containing two or more staves and hidden on single-staff systems. You can hide/show systemic barlines on single-staff systems after the first system.

Showing systemic barlines on single-staff systems is a convention used in hand-copied lead sheets, usually in combination with no clefs being shown.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.
 2. In the **Flows** list, select the flows in which you want to hide/show systemic barlines after the first system.
By default, only the current flow is selected when you open the dialog.
 3. Click **Barlines** in the page list.
 4. Choose one of the following options for **Barline at start of systems following first system**:
 - **Show for one or more staves**
 - **Show for two or more staves**
 5. Click **Apply**, then **Close**.
-

Changing the barline shown at key signature changes

You can change the default barline shown at all key signature changes that occur at barlines project-wide. By default, Dorico Pro shows double barlines at key signature changes.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Barlines** in the page list.

3. In the **Key Signatures** section, choose one of the following options for **Changes of key signature at the start of the bar**:
 - **Draw double barline**
 - **Draw single barline**
 4. Click **Apply**, then **Close**.
-

RESULT

The barline shown at all key signature changes that occur at the start of bars is changed project-wide.

Deleting barlines

You can delete barlines without affecting the rhythmic positions of notes.

PROCEDURE

1. In Write mode, select the barlines you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The barline is deleted. The two bars either side of the barline combine into one bar, containing the same number of beats but without changing the time signature.

To avoid confusion, you can add a new time signature to reflect the new rhythmic duration of the bar.

RELATED LINKS

[Input methods for time signatures](#) on page 190

Barline spacing

You can find options for the default spacing of all barlines project-wide on the **Spacing Gaps** page in **Engrave > Engraving Options**.

On the **Spacing Gaps** page in **Engraving Options**, you can change project-wide values for the spaces before and after barlines, and between barlines and other staff objects, such as clefs, time signatures, or key signatures.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Project-wide engraving options for barlines](#) on page 511

Moving barlines rhythmically

You can only move barlines to new rhythmic positions after they have been input by inputting new barlines at the positions you want.

PROCEDURE

1. In Write mode, input a new barline of your preferred type at the position you want.
2. Delete the barline from the old position.

NOTE

You can complete these steps in any order. However, deleting barlines can cause note and beam groupings to change. If you are choosing a new barline position based on particular phrases, this might make it harder to find the new position you want.

RELATED LINKS

[Input methods for bars and barlines](#) on page 201

Moving barlines graphically

You can adjust the spacing between barlines and neighboring notes, time signatures, key signatures, or rests.

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select a note spacing handle at the rhythmic position of the barline.



3. Move the handle in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag it to the right/left.

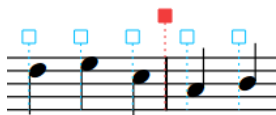
NOTE

You cannot move note spacing handles using the mouse. You can only move them using the keyboard.

RESULT

The spacing to the right/left of the barline is increased/decreased.

EXAMPLE



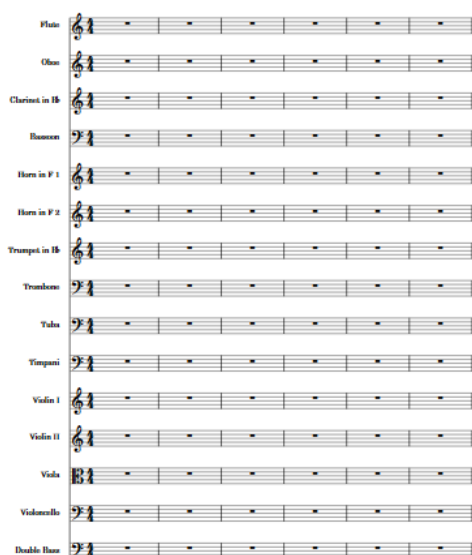
The new position of the barline after decreasing the space to its left

Barlines across staff groups

In order to make it easier to find a particular instrument within a score, barlines can extend across instrumental and staff groups.

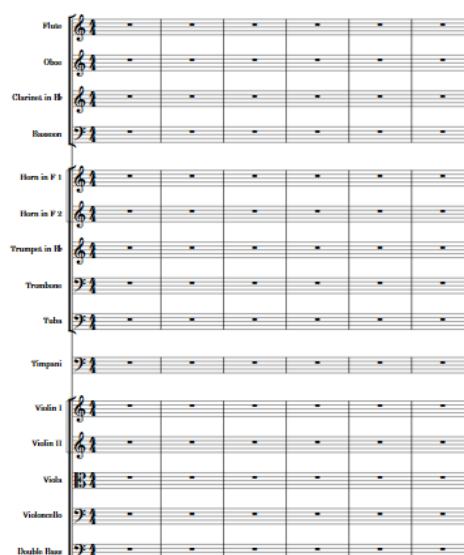
Barlines across default staff groups

When a barline only appears on individual staves, it is much harder to locate individual lines at a glance. However, when barlines continue across instrumental groups in the score, instrument families are shown as blocks, which makes finding an instrument much easier.



A musical score snippet showing 17 individual staves. Each staff has a barline at the end of the first measure. The instruments listed on the left are: Flute, Oboe, Clarinet in Bb, Bassoon, Horn in F 1, Horn in F 2, Trumpet in Bb, Trombone, Tuba, Tympani, Violin I, Violin II, Viola, Violoncello, and Double Bass.

Barlines on individual staves



A musical score snippet showing 17 staves grouped into 10 instrument families. Each family is enclosed in a vertical bracket. A single barline extends across all staves within each family. The instrument families are: Flute, Oboe, Clarinet in Bb, Bassoon, Horn in F 1, Horn in F 2, Trumpet in Bb, Trombone, Tuba, and Tympani. The Violin I, Violin II, Viola, Violoncello, and Double Bass staves are not bracketed together.

Barlines across instrumental groups

Barlines extend across staff groups automatically when they are joined by a bracket. Which staves are included in a bracket depends on the instrumentation and context, but usually staves for instruments from the same family, such as woodwind or strings, are bracketed together.

By default, Dorico Pro brackets staves according to their instrument family. This means that in projects with only a few instruments, barlines do not extend across the whole ensemble, because all the instruments are from different families.

Custom barline groups

You can create custom barline joins and bracket groups by manually arranging your players into groups. If one or more players included in your group were previously in another group, any remaining instruments in their previous group remain grouped.

You can put a single player in its own player group so they appear separately, for example, to separate the soloist from the remainder of the ensemble in a concerto.

You can also input custom barline joins to determine the staves across which individual barlines extend.

RELATED LINKS

[Changing bracket grouping according to ensemble type](#) on page 559

[Brackets according to project template categories](#) on page 60

[Adding groups of players](#) on page 115

[Adding players to groups](#) on page 116

[Deleting player groups](#) on page 116

Showing barlines across all staves at time signature changes

You can join all staves with a barline at time signature changes in individual layouts, regardless of your bracketing style.

PROCEDURE

1. Select the time signature changes where you want to join all staves with a barline. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Barline joins all staves** in the **Time Signatures** group.

RESULT

All staves in the layout currently open in the music area are joined by a barline at the selected time signature changes.

Inputting custom barline joins

You can input custom barline joins at any position that change which staves are joined with barlines.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select an item on the top staff you want to join with a barline, at the start of the system from which you want this change to apply.
2. **Ctrl/Cmd**-click an item on the bottom staff you want to join with a barline.
3. In the Formatting panel, click **Change barline joins** in the **Bracketing** group.

RESULT

All staves between and including the staves on which you selected items are joined by a barline until the next existing bracket and barline change or the end of the flow, whichever comes first. A signpost appears at the start of the system in which you selected items.

If necessary, any existing barline joins are adjusted to accommodate the new barline join.

NOTE

You cannot move bracket and barline change signposts, as they are intended to apply to system start positions. However, they can appear partway through systems if, for example, you move system breaks. When a bracket and barline change signpost is positioned partway through a system, the corresponding change only takes effect from the start of the next system.

EXAMPLE

Divisi cello staves with default staff grouping

Divisi cello staves with separate barline joins across each instrument

RELATED LINKS

[Signposts](#) on page 281

[Resetting bracket and barline changes](#) on page 562

[Deleting bracket and barline changes](#) on page 563

Deleting barline joins individually

You can delete individual barline joins independently of other barline joins and bracket/brace grouping changes at the same rhythmic position, which splits selected barline joins into showing separate barlines on each staff.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select the barline joins you want to delete.
2. Press **Backspace** or **Delete**.

RELATED LINKS

[Deleting bracket and barline changes](#) on page 563

[Resetting bracket and barline changes](#) on page 562

Lengthening/Shortening custom barline joins

You can lengthen/shorten custom barline joins vertically to change the staves across which they span, for example, if you added a new player below a barline join and want to extend the barline join to that staff.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select a handle at either the top or bottom of each barline join you want to lengthen/shorten.

TIP

You only need to select a handle on one barline join for each bracket and barline change, as they apply from their signpost until the next existing change or the end of the flow, whichever comes first.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them to the staff above.
 - Press **Alt-Down Arrow** to move them to the staff below.
-

RESULT

The selected barline joins are lengthened/shortened to staves above/below. This affects the staves included in the barline joins on all systems to which the corresponding bracket and barline changes apply.

NOTE

Only one barline join can exist on each staff, they cannot overlap. If any part of a selected barline join collides with another barline join when it is lengthened/shortened, the other barline join is shortened to accommodate this.

You can undo this action, which restores the previous length of any shortened barline joins.

RELATED LINKS

[Deleting bracket and barline changes](#) on page 563

[Resetting bracket and barline changes](#) on page 562

Bar numbers

Bar numbers provide a crucial reference point for music that has multiple players, and make the chronological sequence of the music clear. They indicate where players are in the piece, which allows them to co-ordinate themselves easily in rehearsals and concerts.

Bar numbers can also be useful when preparing parts and scores, as you can use bar numbers and rehearsal marks to help you quickly compare a part to the score and check it is correct.

In Dorico Pro, bar numbers appear automatically, following the most common practice of showing a bar number at the start of each system in scores and parts by default.

However, sometimes it is useful to show a bar number for every bar, which is frequently done for film music scores. You can also show bar numbers at a regular interval, such as every five bars, but this can be misleading as it can give the impression that those bars are significant, particularly if bar numbers are shown within an enclosure.

RELATED LINKS

[Changing the bar number frequency](#) on page 520

[Changing the bar number enclosure type](#) on page 522

Appearance of bar numbers

You can change different aspects of the appearance, frequency, and position of bar numbers in three places in Dorico Pro and in each layout independently.

Different aspects of the appearance of bar numbers are controlled in different places, which are:

- The **Bar Numbers** page in **Setup > Layout Options** for aspects such as the bar number frequency and enclosure type.
- The **Bar Numbers** page in **Engrave > Engraving Options** for aspects such as the dimensions of enclosures.
- The **Paragraph Styles** dialog for the formatting of the fonts used for bar numbers.

Layout Options

On the **Bar Numbers** page in **Setup > Layout Options**, you can change the following aspects of the appearance and position of bar numbers:

- Paragraph style used for bar numbers in the selected layouts
- Bar number frequency
- Placement above/below the staff
- Distance from the staff and from other objects
- Horizontal position
- Enclosure type
- Hiding/Showing bar numbers at rehearsal marks
- Hiding/Showing the first bar number when bar numbers are shown every bar

You can change options for bar numbers for each instrument layout and full score layouts independently of each other within the dialog. For example, you can use different paragraph styles for bar numbers in different layouts, and show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

Engraving Options

On the **Bar Numbers** page in **Engrave > Engraving Options** you can choose whether repeated sections affect bar numbers or not, change the case of letters in subordinate bar numbers, and change the thickness and padding values for bar number enclosures. This affects all layouts that show bar numbers in enclosures.

Paragraph Styles dialog

Bar numbers use paragraph styles to control the appearance of their fonts and justification, so that you can use different paragraph styles in full score layouts compared to part layouts. For example, in large orchestral scores it is often necessary to make bar numbers much larger than required in the part layouts, so that they are still legible even when the staff size is very small. It is also common to use a bold plain font for bar numbers in the full score but italic bar numbers in part layouts.

You can change different aspects of the default bar number paragraph styles, such as their font size, in the **Paragraph Styles** dialog. These changes affect all layouts, but you can make as many paragraph styles as you like, for example, if you want bar numbers in some part layouts to appear bold but use italics in other part layouts.

- You can open the **Paragraph Styles** dialog in Engrave mode by choosing **Engrave > Paragraph Styles**.

RELATED LINKS

[Changing the bar number enclosure type](#) on page 522

[Layout Options dialog](#) on page 90

[Engraving Options dialog](#) on page 299

[Paragraph Styles dialog](#) on page 366

Changing the bar number frequency

You can change how frequently bar numbers appear in each layout independently of other layouts. For example, you can have bar numbers appear with different frequencies in full score layouts compared to individual part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the bar number frequency.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Frequency** subsection, choose one of the following options for **Show bar numbers**:
 - **Every system**
 - **Every n bars**
 - **Every bar**
 - **None**
5. Optional: If you chose **Every n bars**, set a custom frequency for bar numbers by changing the value for **Interval**.

6. Click **Apply**, then **Close**.
-

RESULT

The frequency of bar numbers in the selected layouts is changed.

Changing the **Interval** value changes how frequently bar numbers are shown. For example, setting an interval value of 10 means that bar numbers are shown every tenth bar.

RELATED LINKS

[Appearance of bar numbers](#) on page 519

Changing the bar number paragraph styles

You can change the formatting of the paragraph styles used for bar numbers. By default, there is a paragraph style for bar numbers in full score layouts and another for bar numbers in part layouts.

PROCEDURE

1. In Engrave mode, choose **Engrave > Paragraph Styles** to open the **Paragraph Styles** dialog.
 2. In the paragraph style list, select one of the following bar number paragraph styles:
 - **Bar numbers (parts)**
 - **Bar numbers (score)**
 3. Optional: Select one of the available styles from the **Parent** menu.
If you select a parent style, an activated switch is shown beside all the options that are different in the selected paragraph style compared to its parent style.
 4. Activate and change the options you want for the selected paragraph style.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The selected bar number paragraph style is changed. This affects the appearance of bar numbers in all layouts that use the selected style.

TIP

You can also make additional bar number paragraph styles, as each layout can use a different paragraph style for bar numbers.

RELATED LINKS

[Appearance of bar numbers](#) on page 519

[Paragraph Styles dialog](#) on page 366

Changing the bar number paragraph style used in layouts

You can choose which paragraph style is used for bar numbers in each layout independently. By default, bar numbers in full score layouts use one paragraph style and bar numbers in part layouts use a different paragraph style.

PREREQUISITE

If you want to use a custom paragraph style for bar numbers in some layouts, you have already created it in the **Paragraph Styles** dialog.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the paragraph style used for bar numbers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Bar Numbers** in the page list.
 4. In the **Appearance** subsection, select a paragraph style from the **Paragraph style** menu.
 5. Click **Apply**, then **Close**.
-

RESULT

The selected paragraph style is used for all bar numbers in the selected layouts.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

Changing the bar number enclosure type

If you want bar numbers to stand out, you can enclose them in a rectangular or circular enclosure. You can change the bar number enclosure type in each layout independently of other layouts.

For example, you can have bar numbers appear with rectangle enclosures in full score layouts but with no enclosures in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the bar number enclosure type.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Bar Numbers** in the page list.
 4. In the **Appearance** subsection, choose one of the following options for **Enclosure type**:
 - **None**
 - **Rectangle**
 - **Circle**
 5. Click **Apply**, then **Close**.
-

RESULT

Bar numbers in the selected layouts are shown within your selected enclosure type. The size of the enclosure is relative to the font size of the bar numbers, but the size and shape of the enclosure are also determined by your padding values.

EXAMPLE

10

Bar number with no enclosure

10

Bar number with a rectangle enclosure

10

Bar number with a circle enclosure

RELATED LINKS

[Layout Options dialog](#) on page 90

Bar number enclosure size and padding values

In the **Enclosure** subsection of the **Bar Numbers** page in **Engrave > Engraving Options**, there are a number of options to control the shape and size of bar number enclosures.

Rectangle bar number enclosure

The figure shows a rectangle bar number enclosure with default settings. The minimum height and minimum width are both 2 spaces, horizontal padding is half a space, and minimum bottom and minimum top padding are both 1/8 of a space.

10

Adjusting the minimum values can help make bar number enclosures more consistent project-wide, as the default values can allow their size to vary significantly, depending on the size and shape of the bar number inside. This might make a narrow bar number less obvious to a conductor. Increasing **Minimum width** to reduce the difference in size can create a more consistent visual effect.

3 *280*

Bar numbers with rectangle enclosures, default minimum width

3 *280*

Bar numbers with rectangle enclosures, minimum width increased to 5

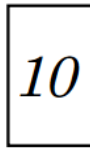
Minimum width

Sets a minimum value for the width of enclosures. In this example, the value was increased from 2 spaces to 6 spaces.

10

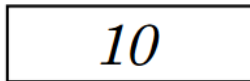
Minimum height

Sets a minimum value for the height of enclosures. In this example, the value was increased from 2 spaces to 6 spaces.



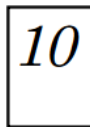
Minimum horizontal padding

Sets a minimum value for the distance between the two sides of the enclosure and the bar number within it. In this example, the value was increased from 1/2 a space to 4 spaces.



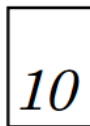
Minimum bottom padding

Sets a minimum value for the distance between the bottom line of the enclosure and the bar number within it. In this example, the value was increased from 1/8 of a space to 2 spaces.



Minimum top padding

Sets a minimum value for the distance between the top line of the enclosure and the bar number within it. In this example, the value was increased from 1/8 of a space to 2 spaces.



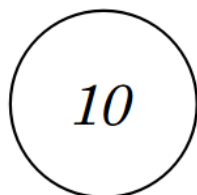
Circle bar number enclosure

The figure shows a circle bar number enclosure with default settings. The minimum diameter is 2 spaces, and the minimum padding is 1/6 of a space.



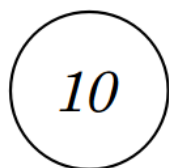
Minimum diameter

Sets a minimum value for the diameter of the enclosure. In this example, the value was increased from 2 spaces to 8 spaces.



Minimum padding

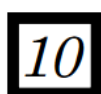
Sets a minimum value for the distance between the enclosure line and the bar number within it. In this example, the value was increased from 1/6 of a space to 1 space.



All enclosures

Enclosure line thickness

Sets the thickness of enclosure lines for both rectangle and circle enclosure types. The default is 1/8 of a space. The examples have a thickness of 1/2 a space.



NOTE

Changing the **Enclosure line thickness** changes the thickness of bar number enclosures in all layouts in the project. Changing any padding values for rectangle enclosures affects all layouts with rectangle enclosures, and changing any padding values for circle enclosures affects all layouts with circle enclosures.

Bar numbers in parts

You can show bar numbers differently in each layout, including using different font sizes, fonts, frequency, and enclosure types. Parts often require differently formatted bar numbers compared to full score layouts.

By default in Dorico Pro, there are two paragraph styles for bar numbers: one for full score layouts and one for part layouts, but initially both paragraph styles have the same settings. You can change the settings of these paragraph styles independently, for example, if you want to set the paragraph style for bar numbers in part layouts to use a bold italic font but set the paragraph style for bar numbers in full score layouts to use a plain font with a much larger font size.

In addition to changing the appearance of bar number fonts, you can change the following aspects of the appearance and position of bar numbers independently in each layout:

- Bar number frequency
- Minimum distance from staff and other objects
- Horizontal position
- Enclosure type

For example, you can show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

NOTE

Changing values for enclosure sizes, padding values, and line thickness changes the corresponding aspect of bar number enclosures in all layouts in the project.

RELATED LINKS

[Changing the bar number paragraph style used in layouts](#) on page 521

[Changing the bar number paragraph styles](#) on page 521

[Changing the bar number frequency](#) on page 520

[Changing the distance between bar numbers and the staff/other objects](#) on page 527

Hiding/Showing bar number ranges on multi-bar rests

You can hide/show bar number ranges on multi-bar rests, for example, to make it clear in part layouts the bars in which players do not play. Multi-bar rests can include bar repeat regions, if you have chosen to consolidate bar repeat regions as well as empty bars into multi-bar rests.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show bar number ranges on multi-bar rests.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. In the **Showing and Hiding** subsection, activate/deactivate **Show ranges of bar numbers under multi-bar rests and consolidated bar repeats**.
5. Click **Apply**, then **Close**.

RESULT

Bar number ranges are shown beneath multi-bar rests and consolidated bar repeats in the selected layouts when the option is activated, and hidden when it is deactivated.

TIP

You can change the bar number range separator and the default distance between bar numbers ranges and the staff in the **Multi-bar Rests** section of the **Rests** page in **Engrave > Engraving Options**.

RELATED LINKS

[Hiding/Showing multi-bar rests](#) on page 865

Hiding/Showing guide bar numbers

You can hide/show guide bar numbers on every bar and above every system in page view and galley view independently, for example, to make it easier to check the bar number in scores with many staves. Guide bar numbers are not printed.

PROCEDURE

- Hide/Show guide bar numbers in any of the following ways:
 - To hide/show guide bar numbers in page view, choose **View > Bar Numbers > Page View**.
 - To hide/show guide bar numbers in galley view, choose **View > Bar Numbers > Galley View**.

RESULT

Guide bar numbers are shown for every bar and above every staff in the corresponding view type when a tick appears beside the corresponding option in the menu, and hidden when no tick appears.

Positions of bar numbers

Bar numbers are typically shown at the start of each system, above the staff, and aligned with the initial barline. You can change the default positions and frequency of bar numbers in each layout independently on the **Bar Numbers** page in **Layout Options**, and you can move individual bar numbers in Engrave mode.

For example, you might want to show bar numbers every bar in full score layouts but only at the start of each system in part layouts.

NOTE

Bar numbers can only be shown at one position per system. You cannot show bar numbers above/below multiple staves in a single system.

RELATED LINKS

[Changing the placement of bar numbers relative to the staff](#) on page 528

Changing the horizontal position of bar numbers

You can change the horizontal position of bar numbers in each layout independently. For example, you can have bar numbers centered in the middle of bars in full score layouts but centered on barlines in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the horizontal position of bar numbers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Bar Numbers** in the page list.
 4. In the **Horizontal Position** subsection, choose one of the following options for **Horizontal position**:
 - **Centered on barline**
 - **Centered on bar**
 5. Click **Apply**, then **Close**.
-

RESULT

Centered on barline shows bar numbers above barlines, at the top left of the bar.

Centered on bar shows bar numbers above the staff, in the middle of the bar.

Changing the distance between bar numbers and the staff/other objects

You can change the minimum distance between bar numbers and the staff, and set a separate value for the distance between bar numbers and other objects, in each layout independently. For

example, you can position bar numbers further from the staff/other objects in full score layouts than in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the minimum distance of bar numbers from the staff.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Bar Numbers** in the page list.
4. Optional: In the **Placement** subsection, change the value for **Minimum distance from staff**.
The default value is 2 spaces.
5. Optional: In the **Placement** subsection, change the value for **Minimum distance from other objects**.
The default value is 3/4 of a space.
6. Click **Apply**, then **Close**.

RESULT

If you increase the values, bar numbers are positioned further away from the staff and/or other objects, either above or below the staff depending on your setting for **Placement relative to staff**. If you decrease the values, bar numbers are positioned closer to the staff and/or other objects.

NOTE

These options affect the minimum distance between bar numbers and the staff and other objects, so bar numbers might be positioned further away than this to avoid collisions.

Changing the placement of bar numbers relative to the staff

You can change the side of the staff on which bar numbers appear for each layout independently. For example, bar numbers can appear below the staff in full score layouts but above the staff in individual part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the bar number placement.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Bar Numbers** in the page list.
 4. In the **Placement** subsection, choose one of the following options for **Placement relative to staff**:
 - **Above**
 - **Below**
 5. Click **Apply**, then **Close**.
-

RESULT

The placement of bar numbers relative to the staff is changed in the selected layouts.

Moving bar numbers graphically

You can move individual bar numbers graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the bar numbers you want to move.
2. Move the bar numbers in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

RESULT

The selected bar numbers are moved graphically.

TIP

The following properties in the **Time Signatures** group of the Properties panel are activated automatically when you move bar numbers in the corresponding directions:

- **Bar number X** moves bar numbers horizontally.
- **Bar number Y** moves bar numbers vertically.

You can also use these properties to move bar numbers graphically by changing the values in the value fields.

Deactivating the properties resets the selected bar numbers to their default positions.

RELATED LINKS

[Adding bar number changes](#) on page 531

[Changing the horizontal position of bar numbers](#) on page 527

[Changing the distance between bar numbers and the staff/other objects](#) on page 527

Hiding bar numbers at time signatures shown at system object positions

You can choose to hide bar numbers at the same rhythmic position as time signatures shown at system object positions, as the resulting collision can be difficult to resolve in a visually clear way when bar numbers are centered on barlines.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide bar numbers at time signatures shown at system object positions.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Bar Numbers** in the page list.
4. In the **Showing and Hiding** subsection, activate/deactivate **Show bar numbers at time signatures at system object positions**.
5. Click **Apply**, then **Close**.

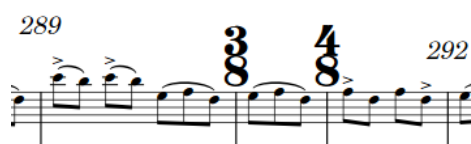
RESULT

Bar numbers are shown at time signatures shown at system object positions when the option is activated, and hidden when it is deactivated.

EXAMPLE



Bar numbers shown at time signatures at system object positions



Bar numbers hidden at time signatures at system object positions

RELATED LINKS

[Time signatures](#) on page 981

[Large time signatures](#) on page 986

Bar number changes

Bar numbers follow a continuous sequence, with each bar having a unique bar number that continues from the previous bar number. However, you can make manual changes to the bar number sequence, including changing to a subordinate sequence.

In Dorico Pro, you can make the following types of changes to bar number sequences using the **Insert Bar Number Change** dialog:

Primary

Adds a change to the main bar number sequence, which the bars in your project follow in a continuous sequence in each flow separately by default.

Subordinate

Adds a secondary bar number sequence that uses letters rather than numbers to indicate the sequence. This can be useful in situations where a new version of a piece has been created with more bars inserted, but the original bar numbers are required.

Don't Include

Excludes the selected bar from the current bar number sequence. If bar numbers are shown every bar, no bar number is shown in bars in which you have chosen **Don't Include**.

Continue Primary

Returns the bar number sequence to the **Primary** sequence without counting intervening bars, for example, after a section of bars following the **Subordinate** bar number sequence.

RELATED LINKS

[Subordinate bar numbers](#) on page 532

Adding bar number changes

You can manually add bar number changes to bar number sequences, for example, if you want bar numbers in the second flow in your project to appear to continue the sequence from the first flow, rather than start again from bar one.

PROCEDURE

1. In Write mode or Engrave mode, select one of the following:
 - An item in the bar from the beginning of which you want to change the bar number sequence.
 - An existing bar number or barline from which you want to change the bar number sequence.
2. Choose **Edit > Bar Numbers > Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.
3. Choose one of the following options for **Type**:
 - **Primary**
 - **Subordinate**
 - **Don't Include**
 - **Continue Primary**
4. Optional: If you chose **Primary** or **Subordinate**, change the bar number where you want the bar number sequence change to start by changing the value in the corresponding value field.
5. Click **OK** to save your changes and close the dialog.

RESULT

The bar number sequence changes, starting from the beginning of the bar in which you selected an item, or from the position of a selected bar number or barline.

This affects the corresponding bar number sequence from the changed bar number until the next bar number change, or until the end of the flow.

Deleting bar number changes

You can delete any bar number changes you have added.

PROCEDURE

1. In Write mode, select the bar number changes you want to delete.
2. Press **Backspace** or **Delete**.

RESULT

The bar number changes are deleted. Subsequent bars follow the previous bar number sequence until the next bar number change, or until the end of the flow.

Subordinate bar numbers

Subordinate bar numbers are useful for numbering repeat endings, and for situations when the music is being altered, but the original bar numbers cannot be changed.


For example, you can use subordinate bar numbers to show where music has been added if a previous, shorter version has already been rehearsed. In this situation, players have likely started to associate certain parts of the piece with particular bar numbers, so if four bars need to be added after bar **10**, they would be numbered **10a** to **10d**, after which the bar number continues from **11** exactly as it did before the new bars were added.

They might also be useful if you want different bar numbers for a repeat ending.

Subordinate bar numbers are shown with lower case letters by default, but you can present them as either uppercase or lowercase letters.

A square box containing the text "4a" in a serif font.

Lowercase subordinate bar number

A square box containing the text "4A" in a serif font.

Uppercase subordinate bar number

RELATED LINKS

[Changing the appearance of subordinate bar numbers](#) on page 533

Adding subordinate bar numbers

You can create a subordinate bar number sequence that is independent of your primary bar number sequence. This can be useful if you want to insert new bars without changing the bar numbers of existing subsequent bars.

PROCEDURE

1. In Write mode or Engrave mode, select one of the following:
 - An item in the bar from the beginning of which you want subordinate bar numbers to start.
 - An existing bar number or barline from which you want subordinate bar numbers to start.
2. Choose **Edit > Bar Numbers > Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.
3. Choose **Subordinate** for **Type** to activate the **Subordinate** value field.
4. Change the first letter in the subordinate bar number sequence by changing the value in the **Subordinate** value field.
The corresponding alphabetical letter is shown to the right of the value field. For example, entering 1 into the value field is shown as **a**, 2 appears as **b**, and so on.
5. Click **OK** to save your changes and close the dialog.

RESULT

The subordinate bar number sequence starts from the bar in which you selected an item, or from the position of a selected bar number or barline. It has the same bar number as the bar immediately before, but with subordinate alphabetical letters.

For example, if you start a subordinate bar number sequence from what was originally bar 5, the sequence starts from 4a and continues until the next specified bar number change, or until the end of the flow.

Returning to the primary bar number sequence

You can specify the point where you want to return to the primary bar number sequence after a section of subordinate bar numbers.

PROCEDURE

1. In Write mode or Engrave mode, select one of the following:
 - An item in the bar from the beginning of which you want to return to the primary bar number sequence.
 - An existing bar number or barline from which you want to return to the primary bar number sequence.
2. Choose **Edit > Bar Numbers > Add Bar Number Change** to open the **Insert Bar Number Change** dialog. You can also choose this option from the context menu.
3. Choose **Continue Primary** for **Type**.
Text indicating the new bar number appears below the value fields for **Primary** and **Subordinate**. For example, **Primary sequence will continue from bar 5**.
4. Click **OK** to save your changes and close the dialog.

RESULT

The primary bar number sequence resumes from the bar in which you selected an item, or from the position of a selected bar number or barline.

TIP

You do not have to add subordinate bar number changes in chronological order. You can enter a return to the primary bar number sequence first, before adding the subordinate bar number sequence.

Changing the appearance of subordinate bar numbers

You can show subordinate bar numbers as either lowercase or uppercase letters.

PROCEDURE

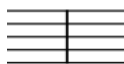
1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Bar Numbers** in the page list.
 3. In the **Sequence** subsection, select how you want subordinate numbers to appear:
 - **Lower case** (default)
 - **Upper case**
-

Bar numbers and repeats

By default in Dorico Pro, repeats are not included in the bar number count. For example, if the first ending ends in bar 10, the second ending starts in bar 11, even though the first section is repeated and therefore more than ten bars have been played.

Including repeats in the bar number count, so that bar numbers reflect the total number of bars played rather than the number of bars written on the page, can make music with multiple playthroughs clearer, as you can refer to a specific bar number for each playthrough instead of, for example, "bar eight the third time round".

2 (12)



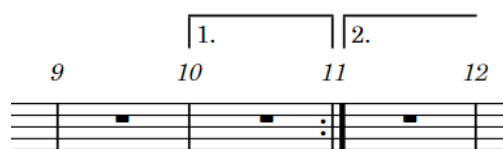
Bar number for subsequent repeat shown in parentheses beside the initial bar number

In Dorico Pro, you can include repeats in the bar number count automatically; you do not have to input bar number changes manually. This applies to any presentation of multiple playthroughs, including repeat endings and repeat markers, such as D.C. al Coda.

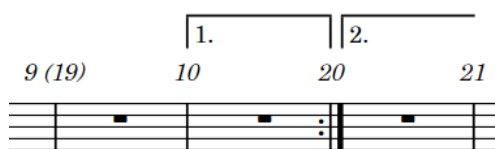
Because it is important that all players refer to the same bar numbers, this affects all layouts project-wide.

When you include repeats in the bar number count, multiple bar numbers apply to the same notated bars. To reflect this, Dorico Pro shows the initial bar number as normal but adds bar numbers for subsequent repeats to the right by default. You can change which playthroughs are included in bar numbers, and the appearance of bar numbers for subsequent repeats, in each layout independently. By default, they are shown in parentheses.

EXAMPLE



Bar numbers not counting repeats with only initial bar numbers shown



Bar numbers counting repeats with bar numbers for subsequent repeats shown alongside the initial bar numbers

RELATED LINKS

[Changing the appearance of bar numbers for subsequent repeats](#) on page 535

[Adding bar number changes](#) on page 531

Including/Excluding repeats from the bar number count

You can choose to include/exclude repeats from the bar number count in all layouts project-wide. By default, repeats are excluded from the bar number count.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Bar Numbers** in the page list.
3. In the **Repeats** subsection, choose one of the following options for **Bar numbering for repeated sections**:
 - **Count repeats**
 - **Do not count repeats**
4. Click **Apply**, then **Close**.

RESULT

Repeats are included in the bar repeat count when you choose **Count repeats**, and excluded from the bar repeat count when you choose **Do not count repeats**.

Changing which playthroughs are shown in bar numbers

In projects that contain repeats, you can change which playthroughs are shown in bar numbers in each layout independently, for example, if some players want to see bar numbers for all playthroughs in their parts but others only want to see the last repeat.

NOTE

This does not affect the overall bar number count, only which bar numbers are shown.

PREREQUISITE

Repeat sections are included in the bar number count.

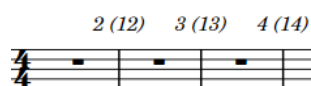
PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change which playthroughs are shown in bar numbers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Bar Numbers** in the page list.
 4. In the **Repeats** subsection, choose one of the following options for **Count repeats**:
 - **All repeats**
 - **First repeat only**
 - **Last repeat only**
 5. Click **Apply**, then **Close**.
-

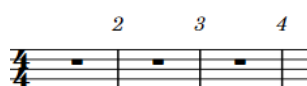
RESULT

The playthroughs shown in bar numbers in the selected layouts are changed.

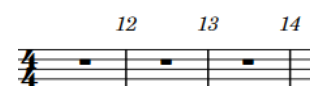
EXAMPLE



Bar numbers with all repeats shown



Bar numbers with first repeat only shown



Bar numbers with last repeat only shown

RELATED LINKS

[Bar numbers and repeats](#) on page 533

Changing the appearance of bar numbers for subsequent repeats

When the bar number count includes repeats, bar numbers for subsequent repeats are shown beside the initial bar numbers. They are parenthesized by default, but you can change the prefix and suffix of bar numbers for subsequent repeats in each layout independently.

PREREQUISITE

Repeat sections are included in the bar number count.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.


2. In the **Layouts** list, select the layouts in which you want to change the appearance of bar numbers for subsequent repeats.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Bar Numbers** in the page list.
 4. Optional: In the **Repeats** subsection, enter the prefix you want into the **Prefix** field.
This field starts with a space by default so there is a gap between the initial bar number and the subsequent repeat bar number.
 5. Optional: Enter the suffix you want into the **Suffix** field.
 6. Click **Apply**, then **Close**.
-

RESULT

The appearance of bar numbers for subsequent repeats in the select layouts is changed. For example, if you want multiple bar numbers for the same bar to be separated by pipes, enter | into the **Prefix** field and nothing into the **Suffix** field.


EXAMPLE

2 (12)



Bar number for subsequent repeat with parentheses for suffix/prefix

2 | 12



Bar number for subsequent repeat with pipe for prefix

Beaming

A beam is a line that connects notes with tails to show rhythmic grouping, which varies according to the metrical structure of the current time signature.

This way of grouping notes helps performers calculate quickly exactly how to play their given rhythm and helps them follow both their part and, if applicable, the conductor.

If appropriate for the current meter and position in the bar, beams are automatically formed in Dorico Pro when you input two or more adjacent notes or chords that are an eighth note (quaver) or shorter in duration.



Multiple beam groups in a 6/8 time signature

There are many different accepted standards for how to present beams, so Dorico Pro offers a number of customizing options. You can find these options on the **Beams** page in **Engrave > Engraving Options**.

You can find options that control how notes are grouped into beam groups by default in each flow on the **Beam Grouping** page in **Write > Notation Options**.

RELATED LINKS

[Inputting notes](#) on page 149

[Per-flow changes to beam grouping defaults](#) on page 539

[Engraving Options dialog](#) on page 299

[Notation Options dialog](#) on page 139

Beaming notes together manually

You can beam notes together manually, including notes across barlines as well as system/frame breaks, for example, if you want to beam a phrase differently to how it is usually beamed in the current time signature.

Beams by default stay within bars and systems, so to have beams cross barlines, system breaks, and frame breaks, you must force the phrase to beam together.

PROCEDURE

1. Select the notes you want to beam together. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Beaming > Beam Together**. You can also choose this option from the context menu.
-

RESULT

The selected notes are beamed together, even if they cross barlines or system/frame breaks. If there are notes either side of the new beam group that were previously beamed to part or all of your selection, they either beam together as separate beams, or appear unbeamed. This depends on how many notes are left either side in the bar, and on the beam grouping settings for the flow.

NOTE

Even if part of the beamed group previously had a centered beam, the new beam is not centered.

RELATED LINKS

[Creating fanned beams](#) on page 552

Unbeaming notes

You can separate all notes in a beamed group so that each note shows its own tail, for example, when fast rhythms have syllabic text settings.

PROCEDURE

1. Select the notes you want to make unbeamed. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Beaming > Make Unbeamed**. You can also choose this option from the context menu.
-

Changing the direction of partial beams

Dorico Pro automatically inputs a partial beam if one is required. You can change on which side of stems individual partial beams appear.

PROCEDURE

1. Select the notes whose partial beam direction you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Partial beam direction** in the **Beaming** group.
 3. Choose one of the following options:
 - **Left**
 - **Right**
-

RESULT

The partial beam appears on the corresponding side of the stem.

EXAMPLE



Partial beam direction **Left**



Partial beam direction **Right**

Beam groups

Notes are commonly beamed as regular groups to help reflect the meter. You can control how notes are beamed in multiple ways in Dorico Pro.

- You can set beam grouping defaults in each flow in your project independently in **Notation Options**.
- You can set beam groups by controlling subdivisions of time signatures.
- You can change beam groups individually using properties in the Properties panel, and by choosing **Edit > Beaming** and selecting one of the available options.

RELATED LINKS

[Beaming notes together manually](#) on page 537

Per-flow changes to beam grouping defaults

You can find options to control the default beam grouping rules in each flow independently on the **Beam Grouping** page in **Notation Options**.

Dorico Pro has sophisticated underlying rules for producing beam groupings that follow the accepted conventions of music theory, including crossing the half-bar in time signatures like 4/4, beaming all eighth notes together in 3/4, beam groups that include tuplets, and many other situations.

There are alternative conventions for some of these rules, which you can change for each flow in your project independently on the **Beam Grouping** page in **Notation Options**.

You can open **Notation Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write > Notation Options** in Write mode or **Setup > Notation Options** in Setup mode.
- Click **Notation Options** in the **Flows** panel in Setup mode.



Beams according to time signatures

Default beam groupings are determined by the time signature, which you can customize by specifying the subdivision of beats within bars and by changing your per-flow beam grouping settings in **Notation Options**.

Dorico Pro has default beaming settings for common time signatures, based on general conventions and your chosen settings. For example, although the time signatures of 3/4 and 6/8 contain the same number of beats, they imply different meters and so are beamed differently. In 3/4, phrases of eighth notes are beamed together within each bar and phrases of other durations are beamed in quarter notes (crotchets) by default, but in 6/8, phrases are beamed in dotted quarter notes.

For situations where you want to control the beam grouping in more detail, you can input a custom time signature with an explicit rhythmic subdivision. Dorico Pro then automatically beams phrases according to this subdivision. For example, entering [7]/8 into the time signatures popover means all seven eighth notes (quavers) are beamed together, whereas entering [2+2+3]/8 subdivides the seven eighth notes into two, then two, then three.

NOTE

The duration of beam groups in Dorico Pro depends on the beat grouping in the current time signature and your per-flow beam grouping settings in **Write > Notation Options**.

RELATED LINKS

[Note and rest grouping](#) on page 553

[Creating custom beat groupings for meters](#) on page 554

Splitting beam groups

You can split beams and secondary beams into two beam groups at specific rhythmic positions. You can also split secondary beams within beamed groups.

PROCEDURE

1. Select the noteheads to the right of where you want to split beams. You can do this in Write mode and Engrave mode.
2. Split the beam or secondary beam in one of the following ways:
 - Choose **Edit > Beaming > Split Beam**.
 - Choose **Edit > Beaming > Split Secondary Beam**.

TIP

You can also choose these options from the context menu.

RESULT

Beams/Secondary beams are split to the left of each selected note, but the notes either side of the split remain grouped if there are at least two beamed notes on each side that can be in a beam group.

NOTE

To unbeam the entire selection and give all notes in the group individual tails, you can make all notes unbeamed.

RELATED LINKS

[Unbeaming notes](#) on page 538

Resetting beam grouping

You can remove all changes made to the beam grouping of notes and chords. This can also be useful if, for example, MusicXML files you have imported have incorrect beaming.

PROCEDURE

1. Select the notes/chords whose beaming you want to reset. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Beaming > Reset Beaming**. You can also choose this option from the context menu.
-

RESULT

Beam grouping is reset to your default settings in **Notation Options** for the current flow and time signature.

Beam placement relative to the staff

You can change the staff-relative placement of the stems within beams, so that beams appear on the other side of the staff to their default placement.

The default placement of beams relative to the staff is determined by the staff positions of the notes within the beamed group.

This means that the note furthest from the middle line of the staff determines the placement of the beam, although there are exceptions to this rule and other considerations that can influence the placement of beams relative to the staff.

Changing the placement of beams relative to the staff involves changing the direction of the stems in the beam. Therefore, Dorico Pro categorizes changing the placement of beams relative to the staff as a stem change.

Changing the placement of beams relative to the staff

You can change on which side of the staff a beam appears by forcing the stem direction to change.

PROCEDURE

1. Select at least one note in each of the beamed phrases whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
2. Force the stem direction of notes in the selected beams in any of the following ways:
 - Choose **Edit > Stem > Force Stem Up**.
 - Choose **Edit > Stem > Force Stem Down**.

TIP

You can also choose these options from the context menu.

RESULT

The beam appears on the side of the staff that corresponds to its forced stem direction.

Removing beam placement changes

You can undo changes to the placement of beams relative to the staff in order to remove the stem direction change. This reverts selected beams to their default placement.

PROCEDURE

1. Select at least one note in each of the beamed phrases whose placement change relative to the staff you want to remove. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Stem > Remove Forced Stem**. You can also choose this option from the context menu.
-

RESULT

The selected beams revert to their default staff-relative placement.

Beam slants

The slant of a beam controls how steeply the beam deviates from horizontal, according to the pitches of the notes within the beamed group.

- When the last note of the phrase is higher than the first, the beam slants upwards.

- When the last note of the phrase is lower than the first, the beam slants downwards.
- If the group makes a concave shape, where inner notes are closer to the beam than the outer ones at either end of the beam, then the beaming is horizontal by default.
Beams are also horizontal if all the pitches are the same, or for certain patterns of repeated pitches.

When a beam is drawn inside the staff, each end of the beam, meaning the end of the stem of the note at either end of the beam, must be snapped to a staff line position. A beam line may sit on a staff line, be centered on a staff line, or hang from a staff line. Ted Ross describes these three positions as “sit”, “straddle”, and “hang” respectively in “Teach Yourself the Art and Practice of Music Engraving”.



A phrase containing multiple different beam slants and directions

The amount by which a beam slants is typically determined by the interval between the first and last note in the beamed group, provided the pattern of notes in the beam does not dictate a horizontal beam instead. Smaller intervals require a shallower slant and larger intervals require a steeper one.

However, the desired amount of slant is not the only factor that must be considered. The innermost beam line should not come too close to the innermost notehead, and the beam itself, if possible, should be positioned relative to the staff lines such that it does not form a wedge. A wedge is a tiny triangle formed by the horizontal staff line, the vertical stem, and the angled line of the slanted beam, which can be visually confusing.

Determination of the amount of slant for a beam is therefore a balancing act that must weigh up several factors: the desired amount of slant, valid snapping positions for each end of the beam, ensuring a minimum distance between the note closest to the beam and the innermost beam line, and avoiding wedges where possible.

You can change the default settings for how beams appear project-wide.

- You can specify the minimum stem length for notes of different durations on the **Notes** page in **Engrave > Engraving Options**.
- You can set ideal beam slants on the **Beams** page in **Engrave > Engraving Options**.

You can also change the beam slants of individual beams.

Changing beam slants

You can change the slants, or angles, of individual beams.

PROCEDURE

1. In Engrave mode, select the square handles on the beam corners of the beams whose slants you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

You can also select the beams first, and then select the handles.

-
2. Move the handles in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

3. Optional: Repeat steps 1 and 2 to move the other end of the selected beams.
-

RESULT

The slants of the selected beams are changed

TIP

- You can also use **Beam direction** in the **Beaming** group of the Properties panel to change the slant of beams. The property is available when you select noteheads within the beam group, and its options all ensure that beam ends are positioned correctly relative to staff lines.
 - You can set ideal beam slants for all beams project-wide on the **Beams** page in **Engrave > Engraving Options**.
-

Centered beams

Centered beams are positioned between high and low notes within the same beamed group, typically drawn in the middle of the staff or between the staves of grand staff instruments.

Centered beams are also known as “kneed” or “elbowed” beams due to their often angular shape.



When a beamed phrase spans a large pitch range, normal beams are often positioned very close to some notes in the phrase but very far from other notes in the phrase, making some stems very long. Having a centered beam in a phrase that spans a large pitch range can reduce the maximum distance between noteheads and the beam, but can also place the beam within the staff, which can obscure staff lines.



A phrase with high and low notes with default beaming



The same phrase with high and low notes, but with a centered beam

RELATED LINKS

[Changing the placement of beams relative to the staff](#) on page 541

Creating centered beams

You can make beams appear in the middle of staves, with high notes above the beam and lower notes below the beam.

NOTE

As this action requires changing the direction of some stems in order to appear correctly, it is located in the **Stem** submenu rather than **Beaming** in the **Edit** menu.

PROCEDURE

1. Select at least one note in each of the beams you want to center. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Stem > Force Centered Beam**. You can also choose this option from the context menu.
-

RESULT

Beams are centered between the notes in the selected beam groups.

If you select notes in multiple beams, each beam is centered separately. If you want to create a single centered beam, you can beam the notes in those beam groups together. You can do this both before and after centering the beams.

NOTE

Dorico Pro automatically angles the beam based on the shape of the phrase, but you can change the angles or slants of beams manually.

RELATED LINKS

[Beaming notes together manually](#) on page 537

[Changing beam slants](#) on page 542

Removing centered beams

You can remove centered beams and revert beams to their default placements either above or below the phrase.

PROCEDURE

1. Select at least one note in each centered beam that you want to revert to the default placement. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Stem > Remove Centered Beam**. You can also choose this option from the context menu.
-

RESULT

The centered beams are removed.

Creating cross-staff beams

Cross-staff beams work in a similar way to normal beams, but allow a phrase that covers a wide pitch range to be shown on two staves. You can create cross-staff beams by inputting all notes in the phrase on one staff and crossing some notes to appear on another staff.

PREREQUISITE

You have input a phrase on one staff.

PROCEDURE

1. Select the notes you want to cross to another staff. You can do this in Write mode and Engrave mode.

NOTE

You can only cross notes to other staves in multi-staff instruments.

2. Cross the notes to other staves in any of the following ways:
 - To cross notes to the staff above, press **N**.
 - To cross notes to the staff below, press **M**.
-

RESULT

The selected notes are shown on a different staff, with a cross-staff beam shown if the notes are part of a beam group. This does not change the staff to which the notes belong.

NOTE

- When crossing notes to a staff that already contains notes, the stem direction of the existing notes on the staff can change. This is due to how multiple voices at the same rhythmic position are handled. Therefore, you may have to change the stem direction of notes manually.
 - You can reset notes to appear on their default staff by selecting them and choosing **Edit > Cross Staff > Reset to Original Staff**.
 - If you want notes to belong to a different staff, you can move them to another staff.
-

EXAMPLE

The image shows two staves of musical notation. The top staff contains a sequence of notes with stems pointing up. The bottom staff, marked with a forte (*sf*) dynamic, contains notes with stems pointing down. A cross-staff beam connects notes between the two staves, with the notes themselves positioned on their original staves.

Notes shown on their original staves

The image shows the same two staves as in the previous example. In this version, some notes from the top staff have been moved to the bottom staff, and some notes from the bottom staff have been moved to the top staff. The notes are now positioned on the staff they were moved to, and the cross-staff beam connects them across the original staff lines.

Cross-staff beams created by crossing some notes to the other staff

RELATED LINKS

[Moving notes to other staves](#) on page 286

[Notes crossed to staves with existing notes in other voices](#) on page 1043

[Note positions in multiple-voice contexts](#) on page 1039

[Changing the stem direction of notes](#) on page 946

Optical spacing for cross-staff beams

Normally, the human eye perceives the evenness of rhythmic spacing according to the distance between noteheads. However, for cross-staff beams we consider the distance between stems, rather than the noteheads, to be even/uneven.



Default spacing: The distance between noteheads is optimized.



Optical spacing for cross-staff beaming: the distance between stems is optimized.

Changing to optical cross-staff beam spacing

You can make the stems in cross-staff beams, rather than the noteheads, evenly spaced in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts that you want to change to optical cross-staff beam spacing.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Note Spacing** in the page list.
 4. Activate **Use optical spacing for beams between staves**.
 5. Click **Apply**, then **Close**.
-

Cross-staff beam placement in multiple staves

When instruments have three or more staves, cross-staff beams can be placed in multiple ways. For example, the beam can be placed between the top and the middle staves, and also between the middle and bottom staves.

If a beam only crosses two staves, the cross-staff beam goes between those two staves.

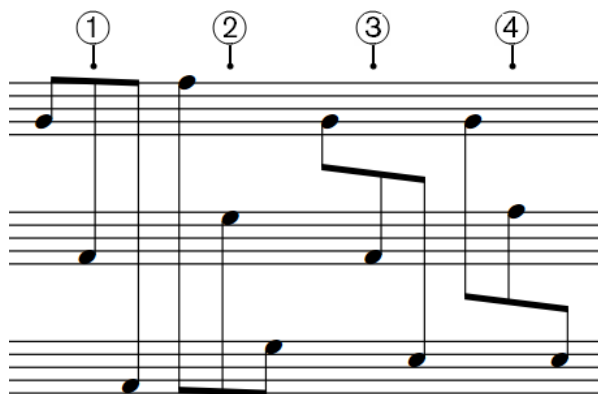


A cross-staff beam across the upper two staves on an instrument with three staves



A cross-staff beam across the lower two staves on an instrument with three staves

If a beam group contains notes on all three staves, the placement of the beam depends on the stem directions of the notes in each staff.



- 1 If all notes in the beam group are stem-up, the beam is placed above the top staff.
- 2 If all notes in the beam group are stem-down, the beam is placed below the bottom staff.
- 3 If notes are stem-down on the top staff and stem-up on the bottom two staves, the beam is placed between the top and middle staves.
- 4 If notes are stem-down on the top two staves and stem-up on the bottom staff, the beam is placed between the bottom and middle staves.

NOTE

If you have not specified stem directions, Dorico Pro might place the beam above/below the staff into which the notes were originally input, even if the stem directions mean it should be placed between other staves.

If you want the beam to be placed between specific staves, you can change the stem directions of notes in the beam group.

RELATED LINKS

[Changing the stem direction of notes](#) on page 946

Beam corners

Beam corners can occur when a change of stem direction within a beam is combined with a break in the secondary beam group. This can be at the end of a subdivision or at a change in rhythmic speed.

Beam corners do not follow accepted rules regarding the order and rhythmic meaning of secondary beams, and can be confusing for the reader.



Dorico Pro avoids beam corners by analyzing the pitches and stems within a phrase, and implementing stem directions that avoid a beam corner.

Secondary beams

Secondary beams are the lines that are added between the primary beam and the notehead as the rhythmic division gets smaller.

The primary beam is the outermost beam line that joins all of the notes in the beamed group. Depending on the durations of the notes in the beamed group, the primary beam may in fact be two or more lines; that is, for notes of a 16th or shorter in duration.

Secondary beams are additional beam lines that join only some of the notes in the group, creating subdivisions of the beam in order to make the metrical groupings of the beam clearer.



A phrase of 64th notes, with secondary beams subdivided to show 16th and eighth note groups

You can set per-flow options for how secondary beams appear on the **Beam Grouping** page in **Write > Notation Options**.

Changing the number of beam lines in secondary beams

You can change the number of beam lines shown in secondary beams individually, independently of your default setting for the current flow.

PROCEDURE

1. Select the notes to the right of where you want to change the number of secondary beaming lines. You can do this in Write mode and Engrave mode.
2. Optional: If any of the notes you selected do not immediately follow existing splits in the secondary beam, split the secondary beams in any of the following ways:
 - In the Properties panel, activate **Split secondary beam** in the **Beaming** group.

NOTE

The **Beaming** group is only shown in the Properties panel if your selection only contains notes.

- Choose **Edit > Beaming > Split Secondary Beam**. You can also choose this option from the context menu.
3. In the Properties panel, select the note value that corresponds to the number of beam lines you want shown from the **Split secondary beam** menu.
-

RESULT

The number of beam lines shown immediately to the left of each selected note is changed.

NOTE

- The number of beam lines shown at a split in the secondary beam cannot be the same or greater than the number of beam lines in the secondary beam. For example, if you split a secondary beam containing 64th notes, the maximum number of beam lines shown at the split in that beam is three, the equivalent of 32nd notes.
 - You can change the default number of secondary beam lines shown in each flow independently on the **Beam Grouping** page in **Write > Notation Options**.
-

Resetting changes to the number of secondary beam lines

You can reset any changes you have made to the number of beam lines shown in secondary beams and return them to their default appearance.

PROCEDURE

1. Select the notes to the right of where you want to reset the number of secondary beam lines. You can do this in Write mode and Engrave mode.
 2. Reset your changes to the number of secondary beam lines in any of the following ways:
 - In the Properties panel, deactivate **Split secondary beam** in the **Beaming** group.
 - Choose **Edit > Beaming > Reset Beaming**. You can also choose this option from the context menu.
-

Tuplets within beams

Tuplets that contain notes that produce beams are also beamed together, but special beam grouping rules apply to tuplets within beams that also contain non-tuplet notes.

The default setting for a tuplet in a beamed group with secondary beams is to split the secondary beam and to show the tuplet with a bracket. The primary beam is not split.

You can alter the appearance of the bracket by selecting the bracket and changing relevant properties in the **Tuplets** group of the Properties panel.



Tuplets in beam groups with secondary beams are beamed together with a split secondary beam by default.

The default setting for a tuplet in a beamed group with only a primary beam is to separate the tuplet entirely. However, you can change this setting on the **Beam Grouping** page in **Notation Options**.



Eighth note (quaver) tuplets are not beamed together with subsequent non-tuplet eighth notes by default.

RELATED LINKS

[Tuplets on page 1007](#)

Stemlets

Stemlets are short stems that extend from beams to rests within beam groups. They can help make music easier to read, as they help to maintain a regular pattern of stems within beams.

In the examples, beaming all notes and rests together to show the boundaries of quarter note (crotchet) beats makes the syncopation of the notes easier to read. The stemlets on the rests help make clear where within the quarter note beats each note occurs.



A syncopated phrase without stemlets



The same phrase with stemlets

You can change the default appearance of stemlets in each flow, and you can show stemlets in individual beams.

Showing stemlets in beam groups

You can show stemlets on rests in beam groups individually, independently of your default setting for showing stemlets in the current flow.

PROCEDURE

1. Select the notes you want to beam together with stemlets shown on rests.
For example, to show a stemlet on a rest between two notes, select both notes. To show a stemlet on a rest at the end of a beamed phrase, select all notes in the beam and the rest.
2. Choose **Edit > Beaming > Stemlets > Force Stemlet Beam**. You can also choose this option from the context menu.

RESULT

The selected notes are beamed together with stemlets shown on rests within the beam group.

NOTE

- If you later reset the beaming of the selected group, stemlets revert to your default setting for the flow.
- You can choose to show stemlets on rests in all beamed groups in each flow on the **Beam Grouping** page in **Write > Notation Options**.

EXAMPLE



Stemlet with only the rest selected



Stemlet with notes either side selected



Stemlets shown with all notes and rests in beam group selected

Removing stemlets from beam groups

You can remove stemlets from rests in beam groups individually, independently of your default setting for showing stemlets in the current flow.

PROCEDURE

1. Select at least one note in each of the beam groups from which you want to remove stemlets on rests.
2. Choose **Edit > Beaming > Stemlets > Suppress Stemlet Beam**. You can also choose this option from the context menu.

RESULT

Stemlets are removed from all rests in the selected beams.

NOTE

- Removing stemlets from beams does not reset the selected beams to your default beam grouping for the flow.
- You can choose not to show stemlets on rests in all beam groups in each flow on the **Beam Grouping** page in **Write > Notation Options**.

EXAMPLE



Beam group showing stemlets



Beam group with suppressed stemlets

RELATED LINKS

[Resetting beam grouping](#) on page 540

Fanned beams

Fanned, or “feathered”, beams show either an *accelerando* or *rallentando* by having multiple beam lines either converging on, or diverging from, a single beam line at the other end.

A single beam can have multiple changes of direction within it.

The grouping can use either two or three beams, with three beams indicating a greater change of speed than two beams. The slowest part of the phrase is where the beams converge, and the fastest is where the beams are the most spread out.

EXAMPLE



Fanned beam accelerando with three lines



Fanned beam accelerando with two lines



Fanned beam rallentando with three lines



Fanned beam rallentando with two lines

Creating fanned beams

You can create fanned beams across a group of any notes that can be beamed, such as eighth notes (quavers), 16th notes (semiquavers), and 32nd notes.

PROCEDURE

1. Select the notes you want to include in a fanned beam. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Beaming > Create Fanned Beam > [Direction and number of lines]**. You can also choose these options from the context menu.
For example, choose **Edit > Beaming > Create Fanned Beam > Accelerando (Three Lines)** for an accelerando fanned beam with three lines.
-

RESULT

The selected notes are joined with a fanned beam with a single slope, whatever their original duration.

Changing the direction within fanned beams

You can change the direction of fanned beams within phrases to indicate tempo changes.

PROCEDURE

1. In Engrave mode, select the notehead at each rhythmic position where you want to change the direction of the fanned beam slope. You can select multiple positions within phrases.
 2. In the Properties panel, activate **Change fanned beam direction** in the **Beaming** group.
-

EXAMPLE



Fanned beam with multiple changes of direction

Note and rest grouping

There are generally accepted conventions for how notes and rests of different durations are notated and grouped in different contexts.

In Dorico Pro, notes are automatically notated to fit within bars and are grouped according to your per-flow settings.

Depending on the prevailing time signature, there can be many different ways to beam notes together. For example, you might want to beam all notes in the bar together in time signatures that cannot be divided in half and are often not divided at all, such as 3/4.

Tied notes are affected by your note and rest grouping settings, as there are different conventions for how notes within tie chains should be divided to indicate significant beat boundaries within bars, and in which contexts they can cross beat boundaries.

Similar options apply to dotted notes, which are often notated as a single dotted note if they start at the beginning of bars, but as a tie chain that shows significant beat boundaries in the bar if they start part-way through bars.

You can change the default note grouping and beam grouping settings for your project on the **Note Grouping** and **Beam Grouping** pages in **Write > Notation Options**.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Notation Options dialog](#) on page 139

[Per-flow changes to beam grouping defaults](#) on page 539

Conventions for beam grouping according to meter

According to accepted conventions, notes are beamed differently in different time signatures to make the meter clear and easily readable.

For example, music in 3/4 is beamed in one group of six eighth notes (quavers), whereas music in 6/8 is beamed in two groups, each the value of a dotted quarter note (crotchet). Although these two time signatures describe the same rhythmic value, the implicit meter within them is different, and so the beam grouping is different.



Default beam grouping in 3/4



Default beam grouping in 6/8

For irregular time signatures, such as 5/8 or 7/8, Dorico Pro beams notes by default according to the most common practices for those time signatures.



Default beam grouping in 5/8



Default beam grouping in 7/8

RELATED LINKS

[Per-flow changes to beam grouping defaults](#) on page 539

Creating custom beat groupings for meters

If your music requires a different beat grouping for a particular meter than the default setting for that time signature, you can specify your preferred beat grouping within the time signature. You can choose whether or not the time signature shows this custom beat grouping.

NOTE

The duration of beam groups in Dorico Pro depends on the beat grouping in the current time signature and your per-flow beam grouping settings in **Write > Notation Options**. For example, entering [1+1+1+1]/4 into the time signatures popover inputs a time signature with four quarter note (crotchet) groups. Because this creates a time signature with a half-bar, beam grouping options for time signatures with a half-bar apply.

PROCEDURE

1. In Write mode, select an item at the rhythmic position where you want to input a time signature with a custom beam grouping.
2. Press **Shift-M** to open the time signatures popover.
3. Enter the division you want in square brackets into the popover.
For example, to divide a 7/8 time signature into 2+3+2, enter [2+3+2]/8 into the popover.
To divide a 5/4 time signature into 2+3 rather than 3+2, enter [2+3]/4 into the popover.
4. Input the time signature and close the popover in one of the following ways:
 - To input a time signature on all staves, press **Return**.
 - To input a time signature on the selected staff only, press **Alt-Return**.

RESULT

The time signature specified is input and beam and beat grouping in subsequent bars follows the division you specified. The time signature appears either as a single number, such as 7/8, or showing the beat groups, such as 2+3+2/8, depending on your setting on the **Time Signatures** page in **Engrave > Engraving Options**.

TIP

You can change the appearance of numerators in individual time signatures so that they show a single number or beat groups independently of your project-wide settings.

RELATED LINKS

[Per-flow changes to beam grouping defaults](#) on page 539

[Project-wide engraving options for time signatures](#) on page 982

[Time signature styles](#) on page 988

[Changing the numerator style of time signatures](#) on page 989

Brackets and braces

Brackets and braces are thick straight and curved lines in the left-hand margin that show instrument groupings.

Brackets

A bracket is a thick black line, the width of a beam, that groups staves together, most commonly according to instrument family. It often has winged ends that point inwards towards the score.

It is always positioned directly to the left of a systemic barline. If secondary brackets are used in addition to a bracket, they are positioned further away from the start of the system to allow space for the bracket.



An example of a bracket, connecting instruments in the string family. A sub-bracket connects the two violin lines.

In Dorico Pro, barlines join the same staves that are joined by brackets and braces, meaning that bracketed groups of staves and braced pairs of staves appear with barlines extending across the group.

Braces

A brace is a wavy or curly line that joins multiple staves belonging to the same instrument, such as the piano or harp. If necessary, a brace can extend to three or more staves, although two is most common.

The brace is also sometimes used instead of a sub-bracket to show groupings of identical instruments within a family whose staves are joined by a bracket.

It is positioned outside the systemic barline, and if used in place of a sub-bracket, outside of the bracket as well.



A brace connecting two piano staves

NOTE

Staves with braces cannot show sub-brackets or sub-sub-brackets.

RELATED LINKS

[Barlines across staff groups](#) on page 515

[Player groups](#) on page 115

[Adding groups of players](#) on page 115

[Secondary brackets](#) on page 556

Secondary brackets

Secondary brackets extend beyond brackets, allowing you to mark groups of staves within a bracketed group. You can show secondary brackets as a brace positioned outside the bracket or as a sub-bracket in Dorico Pro.

Secondary bracket as a sub-bracket

By default, secondary brackets appear as sub-brackets: thin lines with square corners that extend beyond the bracket.



You can change how thick the lines of sub-brackets are, and the distance between sub-brackets and the systemic barline, in the **Sub-brackets** subsection of the **Design** section of the **Brackets and Braces** page in **Engrave > Engraving Options**.

Secondary bracket as a brace

Secondary brackets can also appear as a brace instead of a sub-bracket.



You can change the distance between braces and brackets in the **Sub-brackets** subsection of the **Design** section of the **Brackets and Braces** page in **Engraving Options**.

RELATED LINKS

[Custom staff grouping](#) on page 559

[Inputting custom bracket/brace groups](#) on page 560

Sub-sub-brackets

Sub-sub-brackets are a tertiary level of staff grouping with the same design as sub-brackets. They are positioned outside of both brackets and sub-brackets, allowing you to mark groups of staves within bracketed and sub-bracketed groups. Sub-sub-brackets can only appear as brackets in Dorico Pro.

Sub-sub-brackets cannot extend beyond their sub-bracket and cannot be shown on staves with a brace as either the primary or secondary group.



You can change how thick the lines of sub-sub-brackets are, their width, and their design in the **Sub-sub-brackets** subsection of the **Design** section of the **Brackets and Braces** page in **Engrave > Engraving Options**.

RELATED LINKS

[Custom staff grouping](#) on page 559

[Inputting custom bracket/brace groups](#) on page 560

Project-wide engraving options for brackets and braces

You can find options for the project-wide appearance of brackets and braces on the **Brackets and Braces** page in **Engrave > Engraving Options**.

The options on the **Brackets and Braces** page allow you to change which instruments are bracketed together, and change the design of brackets.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Changing the appearance of bracket ends

You can change the appearance of all bracket ends project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Brackets and Braces** in the page list.
3. In the **Design** section, choose one of the following options for **Bracket end design**:

- **Wings** (default)



- **Horizontal line**



- **None**



Brackets according to ensemble type

In Dorico Pro, the default staff grouping settings for staves are determined by the ensemble type chosen for the project. This affects which staves are bracketed together and joined by barlines.

The following ensemble types are available on the **Brackets and Braces** page in **Engrave > Engraving Options**:

No brackets

All staves appear separately, with no brackets.

Orchestral

Staves are bracketed according to their instrument family. This is the default setting.

Small ensemble

All staves in the project are bracketed together.

Wind band

Staves are bracketed according to their instrument type. For example, Flute 1 and Flute 2 are bracketed together, but separately from the other woodwind instruments.

Big band

Staves are bracketed according to their instrument family, except for brass instruments, which are all bracketed according to their instrument type.

Rhythm section instruments are bracketed together.
Percussion and timpani are bracketed together.

British brass band

Brass instruments are bracketed according to their instrument type, except for horns and trumpets, which are bracketed together.

Any other instruments in the score are bracketed according to their instrument family.

Percussion and timpani are bracketed separately.

NOTE

Vocal staves are never joined by barlines, even when the ensemble type in the project brackets vocal staves together.

RELATED LINKS

[Brackets according to project template categories](#) on page 60

Changing bracket grouping according to ensemble type

You can change which staves are included in brackets by changing the project-wide setting for ensemble type.

The default setting is **Orchestral**. We recommend that you change this setting for projects containing small ensembles.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Brackets and Braces** in the page list.
 3. In the **Approach** section, choose one of the following options for **Ensemble type**:
 - **No brackets**
 - **Orchestral**
 - **Small ensemble**
 - **Wind band**
 - **Big band**
 - **British brass band**
-

RELATED LINKS

[Barlines across staff groups](#) on page 515

Custom staff grouping

In Dorico Pro, custom staff grouping allows you to change which staves are joined with brackets, braces, sub-brackets, sub-sub-brackets, and barlines if your project requires staff grouping not included in the default bracketing settings.

Any changes to the default staff grouping are shown as bracket and barline change signposts, which also show the rhythmic position from which the changes apply. They only affect the staff grouping in the current layout.

If bracket and barline change signposts are positioned at the start of a system, the corresponding staff grouping changes apply from that system onwards. If the signpost is positioned partway through a system, the change takes effect from the following system.

A bracket and barline change signpost indicating sub-sub-brackets have been added to separate the divisi cello parts and barlines only join staves of the same instrument type rather than all strings.

NOTE

For best results, we recommend that you input any bracket/brace grouping or barline join changes you want only after adding any extra staves, ossia staves, or additional instruments you want and with all staves shown in the layout. You can hide empty staves again after inputting the changes.

We also recommend that you input any bracket/brace grouping or barline join changes you want at the beginning of the flow, and add any subsequent changes in chronological order. We do not recommend starting at the end of the flow.

RELATED LINKS

[Signposts](#) on page 281

[Inputting custom barline joins](#) on page 516

[Barlines across staff groups](#) on page 515

Inputting custom bracket/brace groups

You can input custom bracket/brace grouping changes at any position that change which staves are grouped with brackets, sub-brackets, sub-sub-brackets, and braces.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select an item on the top staff you want to group with a bracket/brace, at the start of the system from which you want this change to apply.
2. **Ctrl/Cmd**-click an item on the bottom staff you want to group with a bracket/brace.

3. In the Formatting panel, click one of the following in the **Bracketing** group:
 - **Insert bracket**
 - **Insert sub-bracket**
 - **Insert sub-sub-bracket**
 - **Insert brace**

RESULT

All staves in the current layout between and including the staves on which you selected items are joined by the bracket or brace you chose until the next existing bracket and barline change or the end of the flow, whichever comes first. A signpost appears at the start of the system in which you selected items.

If necessary, any existing bracket or brace groupings are adjusted to accommodate the new group as brackets/braces cannot overlap.

NOTE

You cannot move bracket and barline change signposts, as they are intended to apply to system start positions. However, they can appear partway through systems if, for example, you move system breaks. When a bracket and barline change signpost is positioned partway through a system, the corresponding change only takes effect from the start of the next system.

EXAMPLE

The image displays two musical score examples for Divisi cello staves. The left example shows the default staff grouping, where a single bracket groups the first two staves of each section (Vc. I and Vc. II). The right example shows sub-sub-brackets added to group the staves more precisely, with a callout box 'Bracket and Barline Change' pointing to a signpost on the first staff of the second system.

Divisi cello staves with default staff grouping

Divisi staves with sub-sub-brackets added

RELATED LINKS

[Signposts](#) on page 281

Lengthening/Shortening custom brackets/braces

You can lengthen/shorten custom brackets/braces vertically to change the staves across which they span, for example, if you added a new player below a bracket group and want to extend the bracket to that staff.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select a handle at either the top or bottom of each bracket/brace you want to lengthen/shorten.

TIP

You only need to select a handle on one bracket/brace for each bracket and barline change, as they apply from their signpost until the next existing change or the end of the flow, whichever comes first.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them to the staff above.
 - Press **Alt-Down Arrow** to move them to the staff below.
 - Click and drag them upwards/downwards to staves above/below.
-

RESULT

The selected brackets/braces are lengthened/shortened to staves above/below. This affects the staves included in the brackets/braces on all systems to which the corresponding bracket and barline changes apply.

NOTE

Only one bracket/brace can exist on each staff, they cannot overlap. If any part of a selected bracket/brace collides with another bracket/brace when it is lengthened/shortened, the other bracket/brace is shortened to accommodate this.

You can undo this action, but the previous length of any shortened brackets/braces is only restored if you lengthened/shortened brackets/braces using the keyboard.

Resetting bracket and barline changes

You can reset custom changes to bracket/brace grouping and barline joins after a passage with custom grouping/joins to revert subsequent systems to the project-wide staff grouping settings.

PREREQUISITE

Graphic Editing is selected in the Engrave toolbox.

PROCEDURE

1. In Engrave mode, select an item at the rhythmic position where you want to reset staff grouping.
 2. Choose **Engrave > Reset Bracketing**.
-

RESULT

Staff grouping, including both bracket/brace grouping and barline join changes, is reset to the project-wide staff grouping sections from the selected rhythmic position until the next existing bracket and barline change or the end of the flow, whichever comes first. A signpost appears at the rhythmic position of the selected item.

If you selected an item partway through a system, staff grouping is not reset until the start of the next system.

TIP

You can also reset changes to bracket/brace grouping and barline joins independently of each other by using the **Change bracketing** and **Change barlines** properties in the **Bracket and**

Barline Changes group of the Properties panel. When they are set to **Auto**, the corresponding part of the selected changes is reset.

RELATED LINKS

[Brackets according to ensemble type](#) on page 558

Deleting bracket and barline changes

You can delete custom changes to bracket/brace grouping and barline joins, for example, if you change your mind about where you want to reset the bracket/brace grouping.

PROCEDURE

1. Select the bracket and barline change signposts that you want to delete. You can do this in Write mode and Engrave mode.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected bracket and barline changes are deleted. Staff grouping on any corresponding systems follows either the previous bracket and barline change or the project-wide staff grouping settings if there is no previous bracket and barline change.

TIP

- In Engrave mode, you can also select the brackets/braces you want to delete.
 - You can also delete individual barline joins independently of other barline joins and bracket/brace grouping changes at the same rhythmic position.
-

RELATED LINKS

[Brackets according to ensemble type](#) on page 558

[Deleting barline joins individually](#) on page 517

Chord symbols

Chord symbols describe the vertical harmony of the music at a specific moment. They are frequently used in jazz and pop music, where players often improvise around chord progressions.

Depending on the style of music, there are different conventions regarding how to present chord names.

RELATED LINKS

[Input methods for chord symbols](#) on page 213

Chord components

Chord symbols consist of a root and a quality, with intervals, alterations, and an altered bass note included if required.

Root

The root note of the chord, expressed either as a note name or as a specific degree of a scale.

Quality

Defines the type of chord, such as major, minor, diminished, augmented, half-diminished, or with added note, such as six or nine.

Interval

Chord symbols can include one or more added intervals, such as a major seventh or ninth. Intervals in chord symbols are also known as “extensions”.

Alterations

Define notes in chords that are different to what is normally expected of that chord. For example, a sharpened fifth, flattened ninth, suspensions, or omissions.

Altered bass note

A chord symbol has an altered bass note if the lowest pitch of a chord is not its root note, such as Cm7b5/Eb.

Project-wide engraving options for chord symbols

You can find options for the project-wide appearance and position of chord symbols on the **Chord Symbols** page in **Engrave > Engraving Options**.

The options on the **Chord Symbols** page in **Engraving Options** allow you to change the appearance of different types of chords, including the order and arrangement of accidentals and alterations, and their default positions.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Chord symbol appearance presets

There are many conventions for the appearance of chord symbols, so Dorico Pro provides a choice of preset conventions that you can use and edit.

For example, you can edit default preset chord symbols, you can edit individual chord symbols without changing the default appearance for that chord symbol, and you can edit individual components within chord symbols.

You can find chord symbol presets at the top of the **Chord Symbols** page in **Engraving Options**.

Chord symbol preset example	Chord symbol preset name
$B^b\text{maj}7(\sharp_{11}/\sharp_9)/F$	Default
$B^b\text{maj}7(\sharp_9 \sharp_{11})/F$	Boston
$B^b\text{MA}7(\sharp_{11}/\sharp_9)/F$	Brandt-Roemer
$B^b\Delta_{+9}^{+11}/F$	Indiana
$B^b\text{Maj}7_{+9}^{+11}/F$	New York
$\frac{b7\Delta_{\sharp_9}^{\sharp_{11}}}{4}$	Nashville
$B^b\text{MA}7(\sharp_{11}/\sharp_9)/F$	Jazz Standards
$\frac{B^b\text{maj}7_{+9}^{+11}}{F}$	Ross
$B^b\text{M}7(\sharp_{11}/\sharp_9)\text{on}F$	Japanese

These presets use specific combinations of the options on the **Chord Symbols** page. You can also adjust these options individually to suit your requirements.

Default uses a set of symbols intended to be as unambiguous as possible. For example, **Default** avoids the use of symbols for major seventh, augmented, diminished, and half-diminished. This is the default preset for new projects.

Custom is automatically selected when you change any of the preset options on the **Chord Symbols** page.

RELATED LINKS

[Edit Chord Symbol Appearance dialog](#) on page 568

[Edit Chord Symbol Component dialog](#) on page 569

Project Default Chord Symbol Appearances dialog

The **Project Default Chord Symbol Appearances** dialog allows you to edit the default appearance of chord symbols. This changes the appearance of chord symbols project-wide.

- You can open the **Project Default Chord Symbol Appearances** dialog by clicking **Edit** in the **Project Default Appearances** section of the **Chord Symbols** page in **Engrave > Engraving Options**.



Project Default Chord Symbol Appearances dialog

The **Project Default Chord Symbol Appearances** dialog contains the following sections:

1 Enter a chord symbol

Allows you to enter the chord symbol whose default project-wide appearance you want to edit. Click **Add Project Default** or press **Return** to add the chord symbol to the **Project Default Appearances** list, which allows you to edit the chord symbol in the editor.

2 Project Default Appearances list

Contains the chord symbols whose project default appearance you have edited in the project.

You can delete changes to the project default appearance of chord symbols by clicking **Delete** in the action bar.



3 Single Overrides list

Contains the chord symbols whose individual appearance you have overridden in the project.

You can promote your edits to individual chord symbols to be the project default appearance for that chord symbol by clicking **Promote to Project Default** in the action bar.



You can reset single overrides to the project default appearance for that chord symbol by clicking **Remove Overrides** in the action bar.



4 Editor

Allows you to arrange and edit the components that make up the chord symbol. You can use the controls at the bottom of the dialog, and you can also move individual components in any of the following ways after selecting them in the editor:

- Press the standard key commands for moving items. For example, press **Alt-Right Arrow** to move components to the right, or press **Ctrl/Cmd-Alt-Right Arrow** to move components to the right by larger increments.
- Click and drag each component.

NOTE

You cannot move the first component in chord symbols.

In addition to using **Scale**, you can also change the size of components by clicking and dragging the square handle in the top right corner after selecting a component in the editor.

5 Controls

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.
- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.
- **Scale** changes the size of components. Increasing the value increases the size of components proportionally, decreasing the value decreases the size of components proportionally.
- **Reset X offset** resets the horizontal position of the selected component.
- **Reset Y offset** resets the vertical position of the selected component.
- **Reset Scale** resets the size of the selected component.

6 Alternative component presentations

Contains alternative ways of presenting the component selected in the editor.

Allows you to create new components and edit existing components by clicking the respective button in the action bar.

- **Add Component**



- **Edit Component**



Clicking either button opens the **Edit Chord Symbol Component** dialog, in which you can create new chord symbol components and edit existing chord symbol components.

RELATED LINKS

[Chord symbol appearance presets](#) on page 565

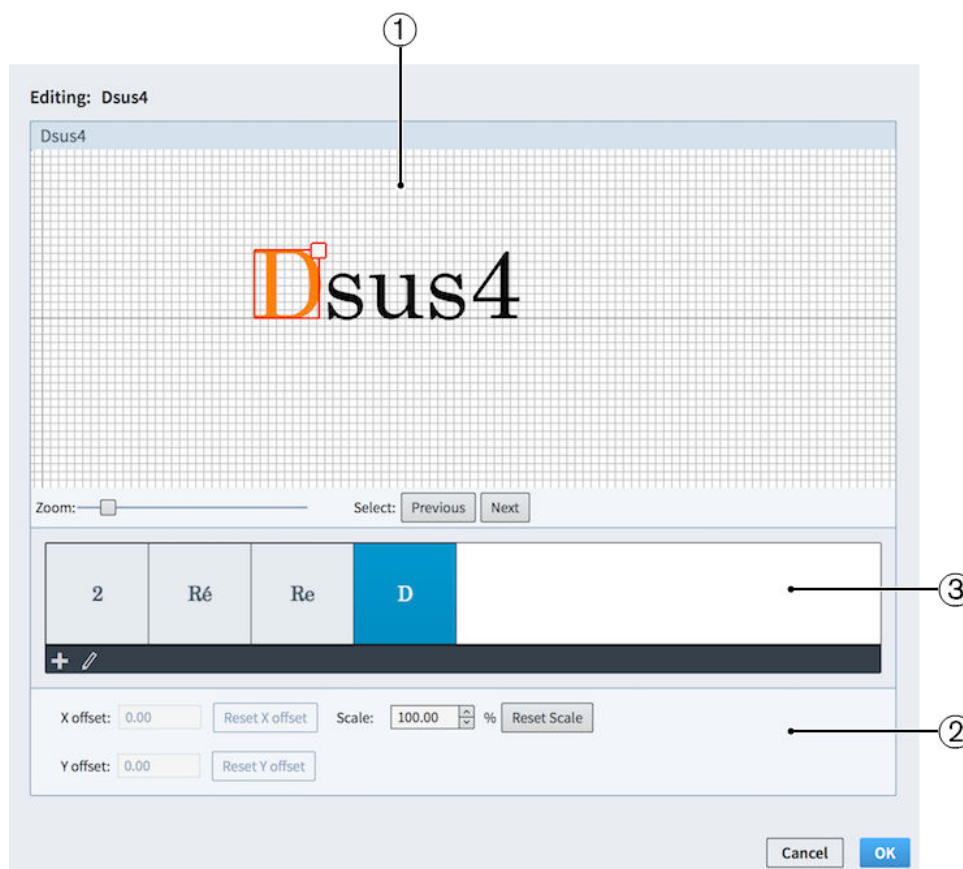
[Edit Chord Symbol Component dialog](#) on page 569

Edit Chord Symbol Appearance dialog

The **Edit Chord Symbol Appearance** dialog allows you to edit the appearance and arrangement of individual chord symbols, without changing the project default appearance of that chord symbol.

You can open the **Edit Chord Symbol Appearance** dialog in the following ways:

- In Engrave mode, select a chord symbol and press **Return**.
- In Engrave mode, double-click a chord symbol.



Edit Chord Symbol Appearance dialog

The **Edit Chord Symbol Appearance** dialog contains the following sections:

1 Editor

Allows you to arrange and edit the components that make up the chord symbol.

As well as using the controls at the bottom of the dialog, you can move individual components in any of the following ways after selecting them in the editor:

- Press the standard key commands for moving items. For example, press **Alt-Right Arrow** to move components to the right, or press **Ctrl/Cmd-Alt-Right Arrow** to move components to the right by larger increments.
- Click and drag each component.

NOTE

You cannot move the first component in chord symbols.

In addition to using **Scale**, you can also change the size of components by clicking and dragging the square handle in the top right corner after selecting a component in the editor.

2 Controls

Allow you to move individual components and change their size. You can also reset their position and size.

- **X offset** moves components horizontally. Increasing the value moves components to the right, decreasing the value moves components to the left.
- **Y offset** moves components vertically. Increasing the value moves components upwards, decreasing the value moves components downwards.
- **Scale** changes the size of components. Increasing the value increases the size of components proportionally, decreasing the value decreases the size of components proportionally.
- **Reset X offset** resets the horizontal position of the selected component.
- **Reset Y offset** resets the vertical position of the selected component.
- **Reset Scale** resets the size of the selected component.

3 Alternative component presentations

You can create new components and edit existing components by clicking the respective button in the action bar.

- **Add Component**



- **Edit Component**



Clicking either button opens the **Edit Chord Symbol Component** dialog, in which you can create new components and edit existing components.

RELATED LINKS

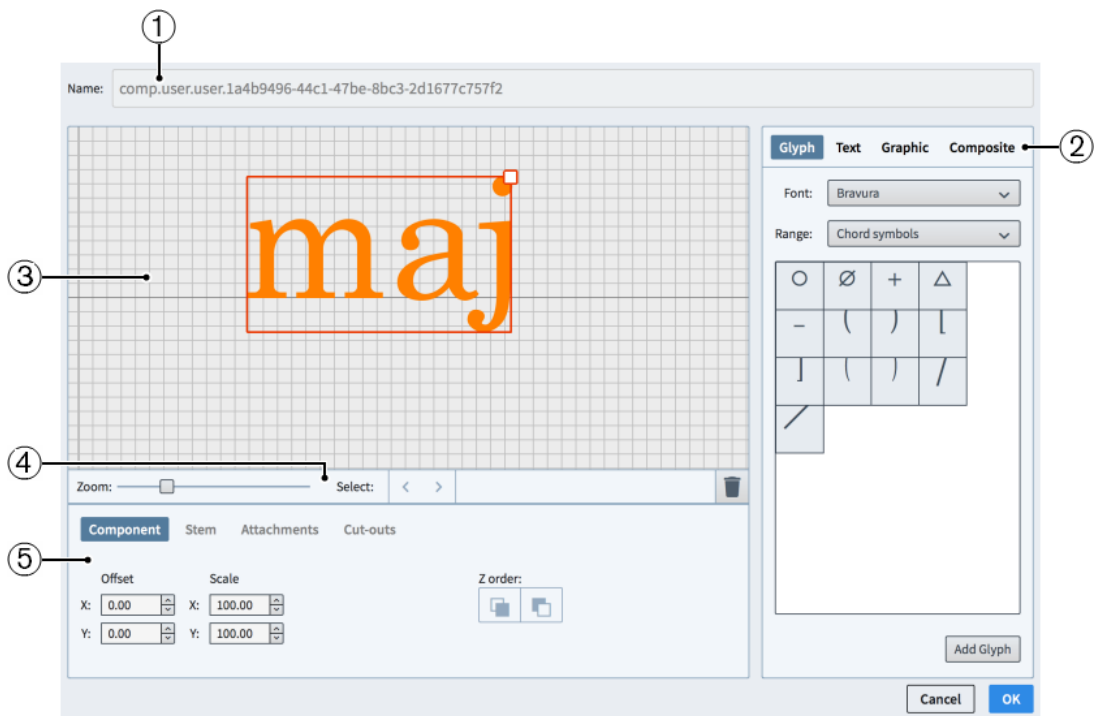
[Chord symbol appearance presets](#) on page 565

Edit Chord Symbol Component dialog

The **Edit Chord Symbol Component** dialog allows you to create custom components and edit existing components for both individual chord symbols and for project default chord symbols.

You can open the **Edit Chord Symbol Component** dialog by clicking either **Add Component** or **Edit Component** in the alternative component presentations action bar in the following dialogs:

- **Project Default Chord Symbol Appearances** dialog
- **Edit Chord Symbol Appearance** dialog



Edit Chord Symbol Component dialog

The **Edit Chord Symbol Component** dialog contains the following sections:

1 Name

Contains an automatically generated name for the chord symbol component. You cannot change this name.

2 Component selector

Allows you to choose components to add to your chord symbol component. You can add different types of components by clicking the respective tab titles.

- **Glyph**, for example, ♯ or ♭. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the chord symbol component.

NOTE

A full list of the different ranges of glyphs is available on the SMuFL website.

- **Text**, including numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the chord symbol component.
- **Graphic**: Allows you to load a new graphics file, or select an existing graphic from the **Select existing** list, in SVG, PNG, or JPG format. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the chord symbol component.
- **Composite**: Allows you to select a composite from the list. Click **Add Composite** to add the selected composite to the chord symbol component.

3 Editor

Allows you to arrange and edit the components that make up your chord symbol component. You can arrange and edit components using the controls at the bottom of the dialog.

4 Editor action bar

Contains selection and view options for the editor.

- **Zoom**
Allows you to change the zoom level in the editor.
- **Select**
Allows you to select the next/previous component.
- **Delete**



Deletes the selected component.

5 Controls

Contains controls that allow you to edit individual components. Controls are divided into tabs according to the aspect of the selected component they affect. For chord symbols, only the **Component** and **Attachments** tabs are available as the other tabs do not apply to chord symbols.

The **Component** tab contains the following options:

- **Offset:** Controls the position of the selected component. **X** moves it horizontally, **Y** moves it vertically.
- **Scale:** Controls the size of the selected component. For graphics, **X** controls its width, **Y** controls its height.

NOTE

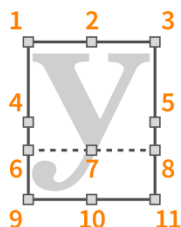
Although some components scale their height and width independently, others retain their aspect ratio, meaning only one value affects their overall size.

- **Z order:** Allows you to **Bring Forward** or **Send Backward** the selected component in relation to other components when they overlap.

The **Attachments** tab is only available if the chord symbol component comprises at least two separate components. It contains the following options:

- **Attachment from:** Sets the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.
- **Attachment to:** Sets the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.



The attachment points have the following names in the **Edit Chord Symbol Component** dialog:

- 1 **Top Left**
- 2 **Top Center**
- 3 **Top Right**
- 4 **Middle Left**

- 5 **Middle Right**
- 6 **Baseline Left** (text only)
- 7 **Baseline Center** (text only)
- 8 **Baseline Right** (text only)
- 9 **Bottom Left**
- 10 **Bottom Center**
- 11 **Bottom Right**

RELATED LINKS

[Chord symbol appearance presets](#) on page 565

[Project Default Chord Symbol Appearances dialog](#) on page 566

[Edit Chord Symbol Appearance dialog](#) on page 568

Setting single chord symbol overrides as the project default

You can set single overrides you have made to individual chord symbols as the project default appearance for that chord symbol.

PROCEDURE

1. Open the **Project Default Chord Symbol Appearances** dialog.
2. Select the single override that you want to set as project default in the **Single Overrides** list.
3. Click **Promote to Project Default**.



RESULT

The selected single chord symbol override becomes the default appearance for that chord symbol.

NOTE

This cannot be undone. If you want to revert your changes, you must delete the chord symbol from the **Project Default Appearances** list.

RELATED LINKS

[Project Default Chord Symbol Appearances dialog](#) on page 566

Resetting the appearance of chord symbols with single overrides

You can reset the appearance of chord symbols you have overridden individually to the project default appearance for that chord symbol.

PROCEDURE

1. Open the **Project Default Chord Symbol Appearances** dialog.
2. Select the single override that you want to reset in the **Single Overrides** list.
3. Click **Remove Overrides**.



RESULT

All individual changes to the chord symbol are removed. It now follows the project default appearance for that chord symbol.

RELATED LINKS

[Project Default Chord Symbol Appearances dialog](#) on page 566

Changing chord symbol fonts

You can change the formatting of the text fonts used for chord symbols project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
2. Select one of the following fonts from the **Font style** menu:
 - **Chord Symbols Altered Bass Separator Font**
 - **Chord Symbols Font**
 - **Chord Symbols Music Text Font**

TIP

When using the option to show the word “on” instead of a slash or line to separate a chord from its altered bass note, you can edit the font used for that word by editing **Chord Symbols Altered Bass Separator Font**.

NOTE

We recommend that you do not edit **Chord Symbols Music Text Font**, which is set to Bravura Text by default. This can only be set to a SMuFL-compliant font intended for use in text-based applications.

3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Click **OK** to save your changes and close the dialog.
-

Transposing chord symbols

Chord symbols can be transposed, and appear at the appropriate transposed pitch when shown on transposing instruments.

PROCEDURE

1. In Write mode, select the chord symbols you want to transpose.
 2. Choose **Write > Transpose** to open the **Transpose** dialog.
 3. Change the transposition using the options in the dialog.
 4. Click **OK** to save your changes and close the dialog.
-

RESULT

The selected chord symbols are transposed.

TIP

You can show chord symbols at the appropriate transposed pitch for transposing instruments in the current layout, rather than at concert pitch, by choosing **Edit > Transposed Pitch**.

RELATED LINKS

[Making layouts transposing/concert pitch](#) on page 123

Hiding/Showing chord symbols

You can hide/show chord symbols in the current layout without deleting them.

PROCEDURE

1. Select the chord symbols or chord symbol signposts you want to hide/show. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Hidden** in the **Chord Symbols** group.
-

RESULT

Chord symbols are hidden when the property is activated, and shown when the property is deactivated.

Signposts are shown at the positions of each chord symbol so you can always find them again. However, signposts are not printed by default.

TIP

- If you do not want to show chord symbol signposts, choose **View > Signposts > Chord Symbols**. Chord symbol signposts are shown when a tick appears beside **Chord Symbols** in the menu, and hidden when no tick appears.
 - You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**, which applies to chord symbols, playing techniques, and time signatures.
-

RELATED LINKS

[Signposts](#) on page 281

Hiding/Showing the root and quality of chord symbols

You can hide the root and quality of chord symbols if they follow another chord symbol with the same root and quality, but have a different altered bass note.

PROCEDURE

1. Select the chord symbols whose root and quality you want to hide. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Hide root and quality** in the **Chord Symbols** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

The root and quality of the selected chord symbols are hidden when the checkbox is activated, and shown when the checkbox is deactivated.

When the property is deactivated, chord symbols follow your project-wide setting.

TIP

You can choose to show the root and quality of chord symbols always, even if successive chord symbols have the same root and quality, in the **Altered Bass Notes** section of the **Chord Symbols** page in **Engrave > Engraving Options**.

Positions of chord symbols

By default, chord symbols are centered horizontally on the middle of the front notehead in the first voice column, at the rhythmic position to which they are attached.

NOTE

The front notehead is the notehead on the correct side of the stem at that rhythmic position.

Their vertical positions in full scores is determined by the staves above which they are set to appear. This also affects in which part layouts chord symbols appear.

Alignment of chord symbols relative to notes and chords

You can change whether chord symbol text is left-aligned above the notehead, center-aligned above the notehead, or right-aligned above the notehead, although right-aligned typically produces unclear results.

You can change the horizontal alignment of chord symbols by choosing an option for **Horizontal alignment relative to note, chord or rest** in the **Position** section of the **Chord Symbols** page in **Engraving Options**.

You can also override this for an individually selected chord symbol by activating **Alignment** in the **Chord Symbols** group of the Properties panel and selecting an option from the menu.

Alignment of chord symbols across the system

Chord symbols are aligned at the same vertical position across the width of the system by default. You can deactivate **Align chord symbols across width of system** in the **Position** section of the **Chord Symbols** page in **Engraving Options** if you want each chord symbol to be positioned above the staff independently.

RELATED LINKS

[Project-wide engraving options for chord symbols](#) on page 564

[Changing the staves above which chord symbols appear](#) on page 577

[Changing the layouts in which chord symbols appear](#) on page 577

Moving chord symbols rhythmically

You can move chord symbols to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the chord symbols you want to move.

NOTE

When using the mouse, you can only move one chord symbol rhythmically at a time.

2. Move the chord symbols according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

- Click and drag the chord symbol to the right/left.
-

RESULT

The selected chord symbols are moved to new rhythmic positions.

NOTE

Only one chord symbol can exist at each rhythmic position. If a chord symbol passes over another chord symbol as part of its move, the existing chord symbol is deleted.

You can undo this action, but any chord symbols deleted in the process are only restored if you moved the chord symbol using the keyboard.

Moving chord symbols graphically

You can move chord symbols graphically without affecting the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the chord symbols you want to move.
2. Move the chord symbols in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected chord symbols are moved graphically, without affecting the rhythmic positions to which they are attached.

TIP

Start offset in the **Chord Symbols** group of the Properties panel is activated automatically when you move chord symbols.

- **Start offset X** moves chord symbols horizontally.
- **Start offset Y** moves chord symbols vertically.

You can also use this property to move chord symbols graphically by changing the values in the value fields.

Deactivating the property resets the selected chord symbols to their default positions.

Changing the staves above which chord symbols appear

You can change the players above whose staves chord symbols appear. By default, chord symbols appear above the staves belonging to rhythm section instruments, such as keyboards, guitars, and bass guitars.

PROCEDURE

1. In Setup mode, select a player in the **Players** panel above which you want to hide/show chord symbols.
2. Right-click the player and choose one of the following options from the context menu:
 - **Chord Symbols > Show For All Instruments**
Chord symbols are shown above the staff of the selected player.
 - **Chord Symbols > Show For Rhythm Section Instruments**
Chord symbols are shown above the staff of the selected player if it is a rhythm section instrument.
 - **Chord Symbols > Hide For All Instruments**
Chord symbols are not shown above the staff of the selected player.

RESULT

Chord symbols are hidden/shown above the staff of the selected player. For example, if you choose **Show For All Instruments**, chord symbols can now appear above the selected player in the full score and any corresponding part layouts, depending on the layouts in which chord symbols are shown in your project.

TIP

You can choose to show chord symbols between the two staves of grand staff instruments, such as piano, in the **Position** section of the **Chord Symbols** page in **Engrave > Engraving Options**.

Changing the layouts in which chord symbols appear

You can change which layouts show chord symbols. By default, chord symbols appear both in full score and part layouts for rhythm section instruments.

NOTE

If chord symbols are not set to appear for any instrument in the current layout, signposts are shown above the top staff.

PROCEDURE

1. In Setup mode, select a player in the **Players** panel.
 2. Right-click the player and choose one of the following options from the context menu:
 - **Chord Symbols > Show in Full Score and Parts**
Chord symbols are shown above the staff of the selected player in all layouts that include the player.
 - **Chord Symbols > Show in Full Score Only**
Chord symbols are only shown above the staff of the selected player in full score layouts and not in any part layouts.
 - **Chord Symbols > Show in Parts Only**
Chord symbols are only shown above the staff of the selected player in part layouts and not in full score layouts.
-

Changing the enharmonic spelling of chord symbols

You can respell a chord symbol for transposing instruments, for example, to choose a simpler enharmonic equivalent spelling. This changes the enharmonic spelling of chord symbols in all layouts with the same transposition.

PROCEDURE

1. In Write mode, open a layout with the transposition for which you want to respell chord symbols.
2. Select the chord symbol you want to respell.
3. Press **Return** to open the chord symbols popover for the selected chord symbol. The existing entry for the chord symbol is shown inside the popover.
4. Change the root name of the chord, but leave other details as they were, such as quality, interval, or alterations.
For example, change just the root of $D\flat\text{maj}13$ from $D\flat$ to $C\sharp$.

RESULT

The spelling of the chord symbol is altered for all instruments with the same transposition. For example, changing the spelling of a chord symbol for a Clarinet in $B\flat$ also changes the spelling of that chord symbol in a Trumpet in $B\flat$ layout.

Showing chord symbols as modes

You can show individual chord symbols as their modal equivalent if one exists for that chord symbol.

PROCEDURE

1. Select the chord symbols you want to show as a mode. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Show as mode** in the **Chord Symbols** group.
3. Select the mode you want from the menu.

RESULT

The selected chord symbols are respelled according to the selected mode. This does not affect the notes included in the chord symbols.

Resetting the enharmonic spelling of chord symbols

You can remove enharmonic spelling overrides for chord symbols. You can remove overrides for the current instrument only, or for all instruments to which the chord symbol applies.

PROCEDURE

1. In Write mode, select the chord symbol you want to respell.
2. Press **Return** to open the chord symbols popover for the selected chord symbol. The existing entry for the chord symbol is shown inside the popover.
3. Reset the enharmonic spelling of the chord symbol in any of the following ways:
 - To remove the enharmonic spelling override for a chord symbol for the instrument above which the popover appears, enter **Alt-S** into the chord symbols popover.
 - To remove all enharmonic spelling overrides for a chord symbol for all instruments, enter **Shift-Alt-S** into the popover.

Chord symbols imported from MusicXML

Chord symbols are imported from MusicXML files. However, chords that specify Neapolitan, Italian, French, German, Pedal, Tristan, and Other values for the kind of element are ignored during import, as there is no information to specify what notes these chord symbols are meant to describe.

Clefs

Clefs are the symbol at the start of every system that give the notes on the staff context; that is, the clef tells you which note of the scale applies to each line or space of the staff.

For example, the treble clef is also known as a “G clef”, because the spiral shape in the middle centers around G, normally the one above middle C.



The other common clefs are:

- The bass clef, or F clef, in which two dots are shown either side of the line corresponding to F, normally the F below middle C.
Middle C uses one ledger line below staves with treble clefs, and one ledger line above staves with bass clefs.
- The C clef, in which the center of the bracket to the right of the clef’s thick vertical line is positioned on the line that corresponds to C, normally middle C.

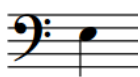
The C clef today is commonly used at two positions on the staff:

- On the middle line of the staff, commonly called the alto clef.
- On the line above the middle line of the staff, commonly called the tenor clef.

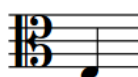
To minimize the number of ledger lines required, these clefs are used to match the register of the instrument for which they are used.



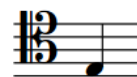
The E below middle C shown in a treble clef



The E below middle C shown in a bass clef



The E below middle C shown in a C (alto) clef



The E below middle C shown in a C (tenor) clef

In Dorico Pro, clefs and octave lines are both contained in the Clefs panel on the right of the window. Three sections of the panel apply to clefs:

- **Common Clefs**, including treble clef, bass clef, alto clef, and tenor clef.
- **Uncommon Clefs**, including tab, French violin clef, treble clef octave above, treble clef octave below, and so on.
- **Archaic Clefs**, including baritone bass clef, mezzo-soprano clef, and soprano clef, which are not commonly used any more.

RELATED LINKS

[Input methods for clefs and octave lines](#) on page 219

General placement conventions for clefs

Clefs are placed at the start of every system, with a small gap between the start of the staff and the left edge of the clef. Their vertical placement must be precise, as this signifies which pitches are intended by the subsequent notes on the staff.

Clef changes that occur during a piece are usually smaller than the clefs shown at the start of each system. If clef changes occur at the start of a new system or page, a cautionary clef is shown at the end of the previous system to ensure the performer notices the change of clef.

Wherever possible, clef changes should not be positioned in the middle of tie chains. Changing the clef changes the position of the tied note on the staff, which could easily cause a performer to misread the tie as a slur and play two different notes. You can input clef changes in the middle of tie chains in Dorico Pro, but we recommend that you position clef changes either before or after tie chains.

RELATED LINKS

[Tie chains](#) on page 968

[Input methods for clefs and octave lines](#) on page 219

Project-wide spacing gaps for clefs

You can change the minimum gaps between objects, including clefs, on the **Spacing Gaps** page in **Engrave > Engraving Options**.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

The following minimum values directly relate to clefs:

- **Gap after barline before clef, key or time signature**
- **Gap after initial clef**
- **Gap to the left of clef, cancellation naturals or grace notes before note or barline**
- **Gap after clef change**

Other values may have an effect on the position of clefs, but they also affect other objects.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Moving clefs rhythmically

You can move clefs to new rhythmic positions after they have been input.

TIP

You can change the default positions of clefs relative to notes or barlines by changing the project-wide values for spacing gaps on the **Spacing Gaps** page in **Engrave > Engraving Options**.

PROCEDURE

1. In Write mode, select the clefs you want to move.

NOTE

- You cannot select an initial clef at the start of the flow or clefs shown automatically at the start of each system.

- When using the mouse, you can only move one clef rhythmically at a time.
2. Move the clefs according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the clef to the right/left.

RESULT

The selected clefs are moved to new rhythmic positions. They take effect from their new positions until the next clef, or the end of the flow, whichever comes first.

NOTE

- You can only move clefs along staves. If you want to move a clef across staves, you must delete the clef and input a new clef on the other staff.
 - Only one clef can exist at each rhythmic position, except for clefs that only apply to single staves. If a clef passes over another clef as part of its move, the existing clef is deleted.
- You can undo this action, but any clefs deleted in the process are only restored if you moved the clef using the keyboard.

RELATED LINKS

[Input methods for clefs and octave lines](#) on page 219

Moving clefs graphically

You can move individual clefs graphically without affecting the positions of any other items.

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select the square handle above the clef you want to move.



A circular handle appears beside the clef.

3. Press **Tab** to select the circular handle.



4. Move the handle in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.

NOTE

- If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- You cannot move note spacing handles with the mouse, you can only move them using the keyboard.
-

RESULT

The clef is moved graphically to the right/left, without affecting other items at the same rhythmic position.

TIP

You can also change **Spacing offset** in the **Clefs** group of the Properties panel to move clefs horizontally. However, this also affects global note spacing around the rhythmic position of the clef.

The **Spacing offset** property in the **Clefs** group of the Properties panel is not available when **Note Spacing** is activated.

RELATED LINKS

[Note spacing](#) on page 381

Deleting clefs

You can delete clefs without affecting the pitches of notes. Notes are automatically respelled according to the previous clef on the staff.

NOTE

You cannot delete an initial clef at the start of the flow or clefs shown automatically at the start of each system. If you do not want any clef to appear on a staff, you can input an invisible clef.

PROCEDURE

1. In Write mode, select the clefs you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected clefs are deleted. Any music on the staff is respelled according to the previous clef, up until the next existing clef or the end of the flow.

RELATED LINKS

[Input methods for clefs and octave lines](#) on page 219

Default size of clef changes

You can change the default scale factor of all clef changes project-wide.

The default **Clef change scale factor** is 2/3. You can change the default clef change size on the **Clefs** page in **Engrave > Engraving Options**.

Increasing the scale factor makes clef changes appear larger, decreasing the scale factor makes clef changes appear smaller. This does not affect the size of clefs at the start of each system.

The smallest scale factor that you can input is 1/8. There is no maximum limit. However, for example, a scale factor of more than 30 causes a single clef to take up most of an A4 page, which is rarely beneficial.

Changing the position of clefs relative to grace notes

By default, clefs are not positioned between a note and its grace note. Dorico Pro automatically positions clefs correctly and updates their position according to what you input. However, in some circumstances you might want to position clefs between a note and its grace note.

PROCEDURE

1. Select the clef whose position you want to change. You can do this in Write mode and Engrave mode.
2. Choose **Edit > Clef Position > After Grace Notes**. You can also choose this option from the context menu.

RESULT

The clef is positioned between a note and its grace note.

NOTE

You can reset the position of clefs relative to grace notes by selecting the clefs whose position you want to reset and choosing **Edit > Clef Position > Reset Clef Position**. You can also choose this option from the context menu.

Setting different clefs for concert/transposed pitch

You can set clef changes to show a different clef in concert pitch layouts compared to transposed pitch layouts. For example, if you want a clef change on a Bass Clarinet staff to appear as a treble clef in the part layout but as a bass clef in the full score layout.

NOTE

- This only applies to clefs you have input, as you cannot select initial clefs or the clefs shown automatically at the start of each system.
- Many instruments in Dorico Pro show different clefs in full score and part layouts by default. You can select the appropriate instrument type from the instrument picker when adding or changing instruments.

PROCEDURE

1. Select the clefs whose concert/transposed pitch versions you want to change. You can do this in Write mode and Engrave mode.
2. Choose one of the following options:
 - To change the concert pitch version of the selected clefs, choose **Edit > Clef > Concert Pitch > [Clef]**.
 - To change the transposed pitch version of the selected clefs, choose **Edit > Clef > Transposed Pitch > [Clef]**.

TIP

You can also choose these options from the context menu.

RESULT

The clefs shown at the selected clef changes in layouts of the corresponding transposition are changed up to the next existing clef change or the end of the flow, whichever comes first.

NOTE

Clef changes appear in all layouts. It is not possible to show clef changes only in one layout.

RELATED LINKS

[Transposing instruments](#) on page 104

[Adding instruments to players](#) on page 104

[Changing instruments](#) on page 106

[Instrument picker](#) on page 85

Transposing clefs

Transposing clefs indicate that notes are played in a different register to the one notated. A number above the clef indicates that notes are played higher than notated, while a number below the clef indicates that notes are played lower than notated.

Of these clefs, only the treble clef 8 below is still commonly used for tenor vocal parts.



RELATED LINKS

[Transposing instruments](#) on page 104

[Making layouts transposing/concert pitch](#) on page 123

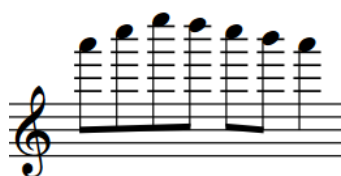
[Concert vs. transposed pitch](#) on page 123

Octave lines

Octave lines indicate where notes are played higher/lower than they appear in the score or part.

Octave lines are dashed or dotted horizontal lines with an italic numeral at the start. The numeral indicates the number of pitches by which the phrase is changed, such as 8 for one octave and 15 for two octaves.

Octave lines that indicate notes are played higher than notated are placed above the staff, while octave lines that indicate notes are played lower than notated are placed below the staff.



A treble clef phrase notated at pitch



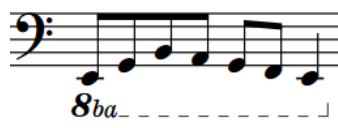
The treble clef phrase with an octave above line



The treble clef phrase with a two octaves above line



A bass clef phrase notated at pitch



The bass clef phrase with an octave below line



The bass clef phrase with a two octaves below line

In Dorico Pro, pitches are adjusted automatically when an octave line is present. You do not have to change the register of the notes within the line.

You can use octave lines across a few notes, a single phrase, or multiple phrases, but they must not confuse the contour of the music. If used excessively and for inappropriate sections, octave lines can mask the shape of the original melody. However, careful usage of octave lines can make music easier to read quickly as the performer has fewer ledger lines to count.



An angular phrase with no octave lines



The same phrase with many octave lines, which distort the overall shape of the phrase.



The same phrase with just two octave lines to reduce ledger lines. They do not change the overall shape of the phrase.

It is generally best to use a different clef for a whole phrase if appropriate for that instrument, or to input an octave line for the whole phrase in order to ensure the shape and register are clear to the performer.

Octave lines should be horizontal, meaning they can take up significant vertical space, as octave lines are usually placed outside all other notations. However, they can be placed within slurs and tuplet brackets if the slur or tuplet bracket is longer than the octave line.

Octave lines can continue across system and page breaks. It is customary to show the numeral again at the start of each system as a reminder. Cautionary octave line numerals are usually parenthesized and the suffix is optional.

RELATED LINKS

[Input methods for clefs and octave lines](#) on page 219

Project-wide engraving options for octave lines

You can find options for the project-wide appearance of octave lines on the **Octave Lines** page in **Engrave > Engraving Options**.

The options on this page allow you to change the appearance of continuation lines, continuation labels, the numeral at the start of octave lines, the position of octave lines relative to accidentals and noteheads, and their staff-relative placement.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Lengthening/Shortening octave lines

You can lengthen/shorten octave lines after they have been input.

PROCEDURE

1. In Write mode, select the octave lines you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one octave line at a time.

2. Lengthen/Shorten the selected octave lines in any of the following ways:
 - To lengthen them by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
 - To shorten them by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.
 - To snap the end of a single octave line to the next notehead, press **Ctrl/Cmd-Shift-Alt-Right Arrow**.
 - To snap the end of a single octave line to the previous notehead, press **Ctrl/Cmd-Shift-Alt-Left Arrow**.

NOTE

- You can only lengthen/shorten octave lines by the current rhythmic grid value when multiple octave lines are selected.
 - When using the keyboard, you can only move the end of octave lines. You can move the start of octave lines by moving the whole line, or by clicking and dragging the start handle.
-

- Click and drag the circular handle at the start/end of a single octave line to noteheads to the right/left.
-

RESULT

Single octave lines are lengthened/shortened according to the current rhythmic grid value or to the next/previous notehead, whichever is closer.

Multiple octave lines are lengthened/shortened according to the current rhythmic grid value.

Changing the angles of octave lines

You can change the angles of octave lines in multiple places, for example, if you want to add corners to allow an octave line to follow the shape of an angular phrase more closely to save vertical space.

PROCEDURE

1. In Write mode or Engrave mode, select one of the following:
 - Individual notes/chords within octave lines where you want to add single corners.
2. Change the angles in one of the following ways:
 - To add a single corner at the position of each selected note, choose **Edit > Octave Line > Add Corner**.
 - To angle the octave line across the range of selected notes, choose **Edit > Octave Line > Make Angled**.

NOTE

We do not recommend selecting adjacent notes, as this can distort the dashes in octave lines.

- An even number of adjacent notes across which you want to angle the octave line.

TIP

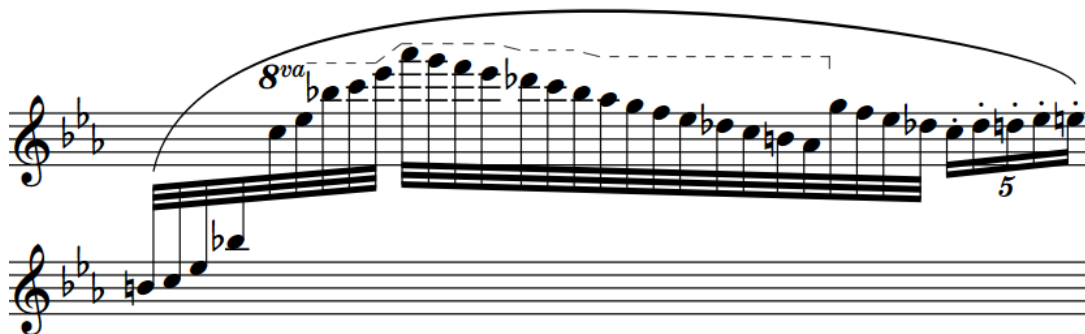
You can also choose these options from the context menu.

RESULT

If you added corners to individual notes, Dorico Pro compares the furthest note from the staff at each selected rhythmic position to the height of the previous note/chord and adds a corner with a suitable angle.

If you angled the octave line across a range of selected notes, Dorico Pro adjusts the angle of the octave line in order to fit around changes in height in the selected range.

EXAMPLE



An octave line with multiple corners, allowing it to fit better under the slur

Resetting the angles of octave lines

You can reset the angles and corners of octave lines to return them to a single horizontal line.

PROCEDURE

1. Select the notes within the octave lines at the positions of the angles/corners you want to reset. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Octave Line > Remove Corner/Angle**. You can also choose this option from the context menu.
-

RESULT

The angles and corners of octave lines above/below the selected notes are reset. This does not affect any other angles in the same octave lines above/below unselected notes.

Positions of octave lines

By default, octave lines that indicate notes are played higher than written are placed above the staff, while octave lines that indicate notes are played lower than written are placed below the staff.

You can move octave lines to new rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move octave lines graphically in Engrave mode, but this does not change the rhythmic positions to which they apply.

You can change the default positions of all octave lines project-wide on the **Octave Lines** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for octave lines](#) on page 587

[Tucking index properties](#) on page 594

Moving octave lines rhythmically

You can move octave lines to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the octave lines you want to move.

NOTE

When using the mouse, you can only move one octave line rhythmically at a time.

2. Move the octave lines to the next or previous notehead on the staff, while maintaining their total durations, in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the octave line to the right/left.
-

RESULT

The octave lines are moved to noteheads to the right/left along the staff. The octave lines now apply to the notes at their new positions. If an octave line passes over another octave line as part of its move, the existing line is unaffected as multiple octave lines can exist at the same rhythmic position.

NOTE

Octave lines can only be moved along staves. If you want to move an octave line across staves, you must delete the octave line and input a new octave line on the other staff.

RELATED LINKS

[Input methods for clefs and octave lines](#) on page 219

Moving octave lines graphically

You can move octave lines graphically without changing the rhythmic positions to which they apply. You can move each end of octave lines independently, meaning you can also adjust the graphical lengths of individual octave lines.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:
 - Whole octave lines
 - The start/end handles of octave lines

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the octave lines or handles in any of the following ways:
 - Press **Alt-Right Arrow** to move octave lines and handles to the right.
 - Press **Alt-Left Arrow** to move octave lines and handles to the left.
 - Press **Alt-Up Arrow** to move octave lines and start handles upwards.
 - Press **Alt-Down Arrow** to move octave lines and start handles downwards.

NOTE

You cannot move the end handles on octave lines upwards/downwards, you can only move them to the right/left.

You can move the start handles on octave lines upwards/downwards but this also moves the whole octave line.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag whole octave lines upwards/downwards.
 - Click and drag handles on octave lines to the right/left.
-

RESULT

The selected octave lines or handles are moved to new graphical positions.

TIP

The following properties in the **Octave Lines** group of the Properties panel are activated automatically when you move octave lines in the corresponding directions:

- **Start X offset** moves the start of octave lines horizontally.
- **End X offset** moves the end hooks of octave lines horizontally.
- **Y offset** moves whole octave lines vertically.

For example, if you move a whole octave line to right, both handles are moved, so **Start X offset** and **End X offset** are both activated. You can also use all three properties to move and lengthen/shorten octave lines graphically by changing the values in the value fields.

Deactivating the properties resets the selected octave lines to their default positions.

Changing the alignment of octave line numerals relative to notes

You can change whether the left edge, center, or right edge of individual octave line numerals is aligned with the first note to which each octave line applies.

PROCEDURE

1. Select the octave lines whose numeral alignment relative to notes you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **L alignment** in the **Octave Lines** group.
 3. Select one of the following options from the menu:
 - **Left**
 - **Center**
 - **Right**
-

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you select **Right**, the right edge of the selected octave line numerals is aligned with the first noteheads to which the octave lines apply.

Changing the position of octave line numerals relative to accidentals

You can change whether the numerals at the start of individual octave lines are positioned on noteheads or accidentals, independently of your project-wide setting.

PROCEDURE

1. Select the octave lines whose numeral alignment relative to accidentals you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **L position** in the **Octave Lines** group.

3. Choose one of the following options:
 - **Notehead**
 - **Accidental**
-

RESULT

The alignment of the numerals of the selected octave lines is changed. For example, if you choose **Accidental**, the octave line numerals are aligned with the accidental on the first noteheads to which the octave lines apply.

TIP

You can change the default alignment of all octave line numerals project-wide in the **Horizontal Position** section of the **Octave Lines** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for octave lines](#) on page 587

Changing the placement of octave lines relative to the staff

You can change the side of the staff on which individual octave lines appear.

PROCEDURE

1. Select the octave lines whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Placement** in the **Octave Lines** group.
 3. Choose one of the following options:
 - **Above**
 - **Below**
-

RESULT

The selected octave lines appear above/below the staff.

Deleting octave lines

You can delete octave lines without deleting notes and other items.

PROCEDURE

1. In Write mode, select the octave lines you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected octave lines are deleted. Any notes to which the deleted octave lines previously applied are shown at either concert pitch or transposed pitch, depending on your current setting for the layout.

RELATED LINKS

[Input methods for clefs and octave lines](#) on page 219

[Making layouts transposing/concert pitch](#) on page 123

Octave lines in Engrave mode

In Engrave mode, each octave line has three square handles. You can use these handles to move the start/end of octave lines graphically, and to lengthen/shorten octave line hooks.



An octave line in Engrave mode

- The start handle moves the start of octave lines graphically. You can move this handle to the right/left.

NOTE

When using the keyboard, you can also move this handle upwards/downwards. This moves the whole octave line.

- The top end handle moves the end of octave lines graphically. You can move this handle to the right/left.
- The bottom end handle changes the length of the hook. You can move this handle upwards/downwards.

Lengthening/Shortening octave line hooks

You can change the length of individual octave line hooks, independently of your project-wide setting.

PROCEDURE

1. In Engrave mode, select the hook handles on the octave lines whose hooks you want to lengthen/shorten.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The length of the selected octave line hooks is changed.

TIP

- **Hook length** in the **Octave Lines** group of the Properties panel is activated automatically when you move octave line hooks. You can also use this property to lengthen/shorten octave line hooks by changing the value in the value field.

Deactivating the property resets the selected octave lines to their default hook length.

- You can change the default hook length for all octave lines project-wide by changing the value for **Octave line hook length**, which you can find by clicking **Advanced Options** in the **Appearance** section of the **Octave Lines** page in **Engrave > Engraving Options**.
-

Tucking index properties

The tucking index of notations determines their position relative to other notations in the vertical stacking order when multiple notations exist at the same rhythmic positions.

In most published music, the order in which items appear relative to each other is consistent. Dorico Pro uses established conventions to determine the position and placement of notations automatically. For example, where slurs and tuplet brackets exist at the same positions, Dorico Pro calculates their placement based on their relative lengths. If the slur is longer than the tuplet bracket, the slur is placed outside the tuplet bracket; if the tuplet bracket is longer than the slur, the slur is placed inside the tuplet bracket.

However, rules for the order and placement of articulations, slurs, tuplets, and octave lines frequently vary, based on their lengths and musical context. Therefore, you can override the automatic order and manually change the order in which they appear in specific contexts.

To allow you this flexibility, slurs, octave lines, and tuplets all have **Tucking index** properties in their respective Properties panel groups.

NOTE

Articulations are considered alongside these notations when calculating the stacking order, but do not have a tucking index property.

A **Tucking index** value of 0 positions items closest to notes. The higher the number, the further away the item is positioned from notes in the stacking order.

Changing the vertical stacking order of octave lines

You can change the placement of individual octave lines relative to other objects in the vertical stack by changing their tucking index value.

According to general convention, octave lines are placed outside all other objects, but there are some instances where they can go inside other objects, for example, inside a slur if that slur is longer than the octave line.

PROCEDURE

1. In Engrave mode, select the octave lines whose placement in the vertical stack you want to change.
 2. In the Properties panel, activate **Tucking index** in the **Octave Lines** group.
 3. Change the value in the value field.
0 positions items closest to notes. The higher the number, the further the item is positioned from notes in the stacking order.
-

RESULT

The placement of the selected octave lines in the vertical stacking order is changed.

Cues

Cues are passages of music shown in instrumental parts that are played by a different player, usually to help orientate players before entries or solos following a significant passage of rests.

Cues can also be used to assist with co-ordination or tuning between players, or to indicate material that the player might be asked to double.

In Dorico Pro, you can input correctly formatted cues quickly using the cues popover. Cues are automatically input into a new voice, with bar rests shown alongside cues to make sure the player reading the cue understands that they do not play the cued music. Clefs are automatically input in cues as required, including restorative clefs.



A cue in a violin part showing music from a Bassoon 1 part

Dorico Pro features dynamic cues that are linked to the original source material, meaning cues are updated in real time if the source material changes.

The instrument whose music is included in a cue is known as the source instrument. The instrument whose part contains a cue from another instrument is known as the destination instrument.

RELATED LINKS

[Inputting cues](#) on page 268

[Cue contents](#) on page 601

[Note spacing](#) on page 381

[Changing note spacing from specific points](#) on page 385

[Viewing options for cues](#) on page 611

General placement and notation conventions for cues

Cues are usually notated using notes of a smaller size than normal notes, with the name of the cued instrument indicated at the start of the passage.

It is generally accepted that full-sized rests are shown above/below cues to reinforce that the player reading the cue does not play these notes.

Cues might exclude some notations that are present in the source instrument. However, cues normally include slurs, articulations, and dynamics, as these often help the player reading the cue to identify passages.

Depending on the register of the cued instrument and the range of each cue passage, clef changes might also be needed at the start of cues.

RELATED LINKS

[Cue labels on page 602](#)

[Clef changes in cues on page 609](#)

[Notations in cues on page 605](#)

[Changing the notations included in cues on page 605](#)

Rhythmic cues

Rhythmic cues only show the rhythm of the source instrument, whether it is pitched or unpitched, and are positioned above the staff by default. By default, cues from unpitched percussion source instruments are input as rhythmic cues.

Rhythmic cues do not show clef changes, accidentals, or ledger lines. They also do not show octave transpositions in their cue labels, even when the destination instrument is octave transposing. Their default position outside staff lines ensures they can never be misread as containing pitched material.

You can change existing cues into rhythmic cues and vice versa. This causes cues that were originally from pitched source instruments to show only the rhythm, which can be helpful when multiple instruments play the same rhythm together but on different notes, such as in big band music with large unison chords. In this context, showing the pitches of a single instrument in the group could be misleading as the destination instrument might think this indicates a distinctive melody. You can then change the cue label to include information about the instruments playing the rhythm in the cue.

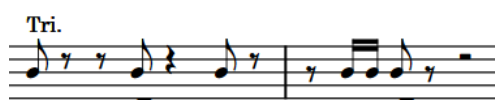
By default, cues from unpitched percussion source instruments are input as rhythmic cues. If you want to save vertical space, you can change them to cues from unpitched percussion source instruments. This positions them on the middle line of the staff by default.

You can change the default staff positions for rhythmic cues and cues from unpitched percussion source instruments in the **Rhythmic Cues** and **Unpitched Instruments** sections of the **Cues** page in **Engrave > Engraving Options**.

You can also change the staff position of rhythmic cues and cues from unpitched percussion source instruments individually.



A rhythmic cue



A cue from an unpitched percussion source

RELATED LINKS

[Changing the text shown in cue labels on page 603](#)

[Changing the staff position of cues from unpitched percussion source instruments on page 597](#)

Changing existing cues to rhythmic cues

Cues normally show pitched material played by a specific instrument. However, you can change existing cues showing pitched material into rhythmic cues that only show the rhythm of the cued music. This can be helpful for passages where many instruments play the same distinctive rhythm together.

PROCEDURE

1. Select the cues you want to change into rhythmic cues. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Rhythmic cue** in the **Cues** group.
-

RESULT

The selected cues are shown as rhythmic cues. They are automatically positioned above the staff according to your setting for **Distance from space above staff** in the **Rhythmic Cues** section of the **Cues** page in **Engrave > Engraving Options**.

NOTE

Deactivating **Rhythmic cue** returns the selected cues back to normal cues. This includes cues from unpitched percussion instruments that are automatically input as rhythmic cues.

If you deactivate **Rhythmic cue** for cues from unpitched percussion instruments, the cues are positioned on the middle line of the staff by default.

RELATED LINKS

[Inputting cues](#) on page 268

[Changing the text shown in cue labels](#) on page 603

Changing the distance between rhythmic cues and the staff

You can change the distance between individual rhythmic cues and the staff, independently of your project-wide setting.

PROCEDURE

1. Select the cue label of the rhythmic cues whose distance from the staff you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Distance** in the **Cues** group.
 3. Change the value in the value field.
-

RESULT

The position of the selected cues is changed according to the new value. For example, entering 0 positions rhythmic cues in the space immediately above the top line on the staff. Higher values increase the distance between rhythmic cues and the staff.

TIP

You can change the default distance between all rhythmic cues and the top line of the staff project-wide on the **Cues** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for cues](#) on page 601

Changing the staff position of cues from unpitched percussion source instruments

You can change the staff position of cues from unpitched percussion source instruments individually, independently of your project-wide setting.

By default, cues from unpitched percussion source instruments that are not rhythmic cues are positioned on the middle line of staves.

PROCEDURE

1. Select the cue label of the cues from unpitched percussion source instruments whose staff position you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Unpitched notes pos.** in the **Cues** group.
 3. Change the value in the value field.
-

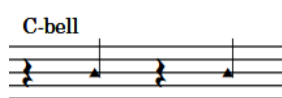
RESULT

The staff position of the selected cues is changed according to the new value. For example, 0 is the middle line of the staff, 4 is the top line of the staff, and -4 is the bottom line of the staff.

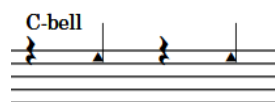
TIP

You can change the default staff position of all cues from unpitched percussion source instruments project-wide on the **Cues** page in **Engrave > Engraving Options**.

EXAMPLE



Unpitched cue on the middle line of the staff (default)



Unpitched cue at a higher staff position

RELATED LINKS

[Project-wide engraving options for cues](#) on page 601

Changing the octave of cues

You can change the octave in which cues are shown so the cue fits better on the staff of the destination instrument. This can be useful if the source instrument plays in a significantly different octave to the destination instrument.

PROCEDURE

1. In the music area, open the layout in which you want to change the octave of cues.
 2. Select the cues whose octave you want to change. You can do this in Write mode and Engrave mode.
 3. In the Properties panel, activate **Octave shift** in the **Cues** group.
 4. Change the value in the value field.
-

RESULT

The octave of the selected cues is changed. For example, 1 shifts the cue up one octave, and -1 shifts the cue down one octave.

If octave transpositions are shown in the cue labels, they are automatically updated.

EXAMPLE



Cue with no octave change



Cue with an octave above line

Hiding/Showing octave transpositions in cue labels

By default, octave transpositions are included in cue labels when you shift the octaves at which cues are shown. You can hide/show octave transpositions in cue labels individually, independently of your project-wide setting.

PROCEDURE

1. Select the cue labels in which you want to hide/show octave transpositions. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Show octave transposition** in the **Cues** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Octave transpositions are shown in the selected cue labels when the checkbox is activated, and hidden when the checkbox is deactivated.

Deactivating the property returns cue labels to your project-wide setting.

TIP

You can show/hide octave transpositions in all cue labels project-wide on the **Cues** page in **Engrave > Engraving Options**.

RELATED LINKS

[Changing the information included in cue labels project-wide](#) on page 602

Moving cues

You can move cues to new rhythmic positions after they have been input. This changes the material shown in cues to reflect the material at the corresponding rhythmic positions in the source instrument.

PROCEDURE

1. In Write mode, select the cues you want to move.

NOTE

When using the mouse, you can only move one cue at a time.

2. Move the cues, while maintaining their total durations, in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

- Click and drag the cue to the right/left, according to the rhythm in the source instrument.
-

RESULT

If a single cue is selected, it is moved to the right/left, depending on the rhythm in the source instrument.

If multiple cues are selected, they are moved to the right/left, according to the current rhythmic grid value.

RELATED LINKS

[Overlapping cues](#) on page 607

[Hiding/Showing cues in layouts](#) on page 606

Lengthening/Shortening cues

You can change the length of cues after they have been input. This changes the material shown in cues to reflect the material at the corresponding rhythmic positions in the source instrument.

PROCEDURE

1. In Write mode, select the cues you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one cue at a time.

2. Lengthen/Shorten the cues in any of the following ways:

- To lengthen them by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
- To shorten them by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.
- Press **Ctrl/Cmd-Shift-Alt-Right Arrow** to lengthen a single cue to the next notehead of the source instrument.
- Press **Ctrl/Cmd-Shift-Alt-Left Arrow** to shorten a single cue to the previous notehead of the source instrument.

NOTE

- When multiple cues are selected, you can only lengthen/shorten cues by the current rhythmic grid value.
 - Key commands lengthen/shorten items by moving their end only.
-
- Click and drag the circular handle at the start/end of a single cue to the right/left.
-

RESULT

The selected cues are lengthened/shortened.

NOTE

You can lengthen cues so that they overlap with other existing cues, as multiple cues can exist at the same rhythmic position. However, their stem directions are not automatically adjusted so you might have to change them manually.

RELATED LINKS

[Overlapping cues](#) on page 607

[Overriding default stem directions in single-voice cues](#) on page 607

[Moving cues](#) on page 599

Deleting cues

You can delete individual cues without deleting the corresponding notes in the source instrument or other instruments containing the same cue.

PROCEDURE

1. In Write mode, select one of the following:
 - The cues you want to delete.
 - The signposts of cues you want to delete that are not shown in the current layout.
2. Press **Backspace** or **Delete**.

RESULT

The selected cues are deleted from all the layouts containing the affected instruments. For example, deleting a cue in a piano part also deletes the cue from the piano staff in corresponding full score layouts.

Project-wide engraving options for cues

You can find options for the project-wide appearance, content, and position of cues on the **Cues** page in **Engrave > Engraving Options**.

The options on the **Cues** page allow you to change the size, appearance, placement, and precise position of cues. You can also decide which notations are included in all cues, set the default spacing of cues, and set the default staff position of rhythmic cues and cues from unpitched percussion source instruments.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Note spacing](#) on page 381

[Changing existing cues to rhythmic cues](#) on page 596

[Rhythmic cues](#) on page 596

Cue contents

The content of individual cues can appear differently in each layout, independently of other layouts and without changing the source material, if you make changes in a layout that does not contain the source instrument.

Music in cues is dynamically linked to the music in the source instrument. Any changes you make to the source music are automatically shown in the cue, but you cannot change the pitch or duration of notes within the cue. This ensures that cues are an accurate reflection of the notes being played by the cued instrument.

You can make graphical changes to the music in cues without affecting the corresponding music in the source instrument. For example, you can adjust the placement of slurs and the angles of glissando lines, lengthen/shorten stems in cues, and respell accidentals. You can also change the note spacing scale factor of cues for whole layouts and from specific points in individual layouts.

NOTE

Graphical changes to cues are layout-specific. For example, if you make changes to a cue within a full score layout that also contains the source instrument, your changes to the cue affect the corresponding material in the source instrument and other instruments with the same cue in the

layout. However, if you make changes to a cue in a part layout that only contains the destination instrument, the corresponding material in the part layout of the source instrument is not affected.

It is also possible to change the enharmonic spelling of notes in cues in Engrave mode in the same way as changing the enharmonic spelling of normal notes. If you respell notes in cues in the part layout of the destination instrument, the spelling of notes in the source instrument is not affected. For example, you can change the enharmonic spelling of notes in cues in transposing instrument layouts to avoid double accidentals.

IMPORTANT

If you respell notes in cues in a layout that also contains the source instrument, the enharmonic spelling is also changed in the source instrument.

RELATED LINKS

[Respelling accidentals](#) on page 163

[Slurs in Engrave mode](#) on page 879

[Lengthening/Shortening stems](#) on page 947

[Note spacing](#) on page 381

[Note Spacing Change dialog](#) on page 386

[Changing note spacing from specific points](#) on page 385

Cue labels

Cue labels usually indicate the source instrument from which the music is taken, but can also include other information, such as the transposition interval for transposing instruments. This information can help players identify both where the sound is coming from in the ensemble and the type of sound to listen for.

By default, cue labels in Dorico Pro use abbreviated instrument names, exclude instrument transpositions, include octave transpositions, and do not show an additional label at the end of cues to indicate where players enter after cues. Additional labels showing “Play” at the end of cues are sometimes used in jazz scores, where it is customary not to show bar rests alongside cues. Showing additional labels at the ends of cues can also be useful in film music, where cues are often included in parts as an option that the player might be asked to play.

You can change the information and text shown in cue labels both project-wide and on an individual basis in Dorico Pro.

NOTE

If you want to hide/show cue labels at the start/end of cues individually, you can use the following properties in the **Cues** group of the Properties panel:

- **Start text** applies to labels at the start of cues.
 - **End text** applies to labels at the end of cues.
-

Changing the information included in cue labels project-wide

You can change the information included as text in cue labels project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Cues** in the page list.
3. In the **Cue Labels** section, change any of the following options:

- **Instrument name in label**
 - **Instrument pitch or transposition**
 - **Octave transposition**
 - **Additional label at end of cue**
4. Click **Apply**, then **Close**.
-

RESULT

The information included in cue labels is changed project-wide.

TIP

You can also change cue labels individually. For example, if two instruments are playing in unison, you can change the cue label that shows the name of one of the instruments to include both instrument names.

Changing the text shown in cue labels

You can override the text shown in cue labels individually. For example, if two instruments are playing in unison, you can change the cue label that shows the name of one of the instruments to include both instrument names.

You can also show additional labels at the ends of individual cues, even if your project-wide setting is to show no additional labels.

PROCEDURE

1. Select the cue labels whose text you want to override. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate the following properties, individually or together, in the **Cues** group:
 - **Start text**
 - **End text**
 3. Enter the text you want to be shown in the corresponding cue labels into each value field. For example, to indicate that two violinists are playing the same material but an octave apart, you might enter *Vln.I & Vln.II coll'ottava* in the value field for **Start text**.
 4. Press **Return**.
-

RESULT

The cue labels of the selected cues are changed to show the text you entered.

Deactivating the properties returns the corresponding cue labels of the selected cues to their default text.

NOTE

Deactivating properties permanently deletes any custom text entered.

Changing the placement of cue labels relative to the staff

You can change the placement of individual cue labels relative to the staff, independently of your project-wide setting.

PROCEDURE

1. Select the cue labels whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Placement** in the **Cues** group.
3. Choose one of the following options:
 - **Above**
 - **Below**

RESULT

The selected cue labels appear above/below the staff.

TIP

- Deactivating **Placement** returns the selected cue labels to their default placement.
 - You can change the default placement of all cue labels relative to the staff project-wide on the **Cues** page in **Engrave > Engraving Options**.
-

Moving cue labels graphically

You can move individual cue labels graphically without affecting the rhythmic positions of the cue. You can move cue labels at the start and end of cues independently of each other.

PROCEDURE

1. In Engrave mode, select the cue labels you want to move.
2. Move the cue labels in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

-
- Click and drag them in any direction.
-

RESULT

The selected cue labels are moved to new graphical positions.

TIP

Offset in the **Cues** group of the Properties panel is activated automatically when you move cue labels.

- **Offset X** moves cue labels horizontally.
- **Offset Y** moves cue labels vertically.

You can also use this property to move cue labels by changing the values in the value fields. The same property applies to cue labels both at the start and end of cues.

Deactivating the property resets the selected cue labels to their default positions.

Notations in cues

It is beneficial to include musically significant notations from the source instrument in cues, as they can help players identify the cued music more easily. However, only certain notations are included in cues to avoid overloading players with too much information.

By default, Dorico Pro includes the following notations in cues:

- Slurs
- Articulations
- Ornaments
- Playing techniques
- Lyrics (for vocal music)

You can also include dynamics and text in cues, but these are not included by default as this information is not usually required to help identify the cued material.

NOTE

Playing techniques that only indicate important information for the source instrument, such as bowing marks for string players, are not included in cues.

To be included in cues, playing techniques must exist within the range of the cued material. For example, slurs must begin and end within the cued material to be included in cues.

Similarly, pizzicato markings are not shown in cues if they are input before the first cued note. However, pizzicato strings sound significantly different to bowed strings, so omitting this information could prevent the player reading the cue from identifying it.

NOTE

If important playing technique information does not exist within the range of cued material, we recommend that you include this information in the corresponding cue labels.

RELATED LINKS

[Changing the text shown in cue labels](#) on page 603

Changing the notations included in cues

You can change the notations included in individual cues, such as slurs and playing techniques, independently of your project-wide settings.

PROCEDURE

1. Select the cue labels of the cues whose included notations you want to change. You can do this in Write mode and Engrave mode.
 2. In the **Cues** group of the Properties panel, activate the property for each notation that you want to include in, or exclude from, the selected cues.
 3. Activate/Deactivate the corresponding checkboxes.
-

RESULT

The corresponding notations are included in cues when the checkboxes are activated, and excluded from cues when the checkboxes are deactivated.

NOTE

- Playing techniques that only indicate important information for the source instrument, such as bowing marks for string players, are not included in cues.

- You can change which notations are included in all cues project-wide on the **Cues** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Project-wide engraving options for cues](#) on page 601

[Changing the text shown in cue labels](#) on page 603

Hiding/Showing cues in layouts

You can input cues in any layout, but by default cues do not appear in full score layouts, as cues are normally only shown in instrumental parts. You can hide/show cues in each layout in your project independently of other layouts.

Cue signposts are shown in full score layouts by default in page view. In galley view, the cued music appears in addition to cue signposts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show cues.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Players** in the page list.
 4. In the **Cues** section, activate/deactivate **Show cues**.
 5. Click **Apply**, then **Close**.
-

RESULT

All cues in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

If cues are hidden, signposts show where they begin.

NOTE

- You can hide individual cues in layouts where cues are shown, but you cannot show individual cues in layouts where cues are hidden.
 - You can hide/show cue signposts by choosing **View > Signposts > Cues**. Cue signposts are shown when a tick appears beside **Cues** in the menu, and hidden when no tick appears.
-

Hiding cues individually

You can hide individual cues in layouts in which cues are shown, but you cannot show individual cues in layouts where cues are hidden.

PROCEDURE

1. In the music area, open the layout in which you want to hide individual cues.
 2. Select the cues you want to hide. You can do this in Write mode and Engrave mode.
 3. In the Properties panel, activate **Hide** in the **Cues** group.
-

RESULT

The selected cues are hidden when **Hide** is activated. Signposts are shown at the positions of each cue so you can always find them again. However, signposts are not printed by default.

Deactivating **Hide** shows the selected cues again.

Stem direction in cues

Notes in cues normally have the same stem direction, as cues usually highlight lines containing only one voice. Cues are shown by default with bar rests alongside them to indicate that the player reading the cue does not play those notes.

If cues contain music in multiple voices, the original stem directions of the source music are used. For single-voice cues, Dorico Pro determines the default stem direction depending on the pitches in the cue. Stems point downwards when most notes in the cue are at positions below the middle line of the staff, and upwards when most notes in the cue are at positions above the middle line of the staff.

TIP

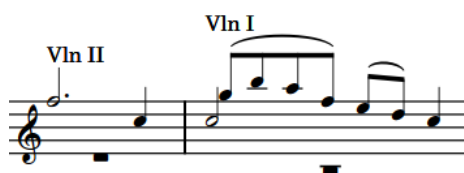
You can override the stem directions of notes in single-voice cues individually.

Overlapping cues

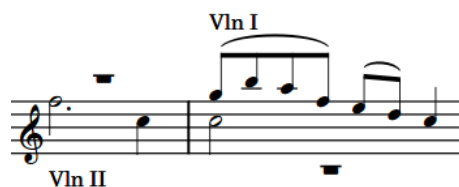
Sometimes it is helpful to give players multiple consecutive cues so they can follow passages of music more easily. Dorico Pro allows cues to overlap in order to give you flexibility over how to give useful information in cues to players.

However, the stem directions of cues are not automatically adjusted when they exist at the same rhythmic position as other cues. For example, if you want to show a melody passing from Violin 1 to Violin 2 that requires the two cues to overlap, and both instruments are shown in up-stem voices by default, then the two cues appear with up-stem notes.

You can override the default stem directions of cues individually to make overlapping cues easier to read.



Default stem directions in two overlapping cues



Overridden stem directions in the cue containing lower notes so that its notes are down-stem

Overriding default stem directions in single-voice cues

You can override the default stem directions of individual single-voice cues.

PROCEDURE

1. In the music area, open the layout in which you want to override the default stem direction of selected cues.
 2. Select the cue labels or cue signposts of the cues whose stem direction you want to change. You can do this in Write mode and Engrave mode.
 3. In the Properties panel, activate **Voice direction** in the **Cues** group.
 4. Choose one of the following options:
 - **Force stems up**
 - **Force stems down**
-

RESULT

The stem direction of all notes in the selected cues is changed.

Deactivating **Voice direction** returns the selected cues back to their default stem direction.

Ties in cues

If cues begin in the middle of sustained notes, ties are shown joining to the first note in cues. Similarly, if cues end in the middle of sustained notes, ties are shown proceeding from the final notes in cues.

For monophonic instruments, these ties are normally positioned correctly by default. However, in complex cases, such as cues involving chords, the positions of these ties can require some adjustment.

You can edit ties that start before/end after cues in the same way as normal ties in Engrave mode.

RELATED LINKS

[Changing the position/shape of ties](#) on page 973

Rests in cues

If cues start/end partway through bars, they are padded with cue-sized rests up to bar boundaries or up to the next played entry, whichever comes first. This ensures it is clear to the player how the rhythm of the cue fits within the current time signature and how it relates to their existing material.

By default, full-sized bar rests also appear throughout cued passages. This makes it clear that the performer does not play the cued notes.

Full-sized bar rests are automatically positioned according to the stem direction of the notes in the cue. If cues use up-stem notes, bar rests are positioned below cued notes. If cues use down-stem notes, bar rests are positioned above the cued notes.

You can choose not to show bar rests alongside cues. For example, this can be appropriate in some jazz scores, or in scores where the cues are provided as potential passages for doubling.

TIP

You can adjust the vertical position of full-sized bar rests individually using **Rest pos.** in the **Notes and Rests** group of the Properties panel.

RELATED LINKS

[Moving rests vertically](#) on page 866

Hiding/Showing padding rests in cues

You can hide/show padding rests around individual cues. Padding rests fill up bars when cues start/end partway through bars, so that the full duration of each bar is clear.

PROCEDURE

1. Select the cue labels or cue signposts of the cues whose padding rests you want to hide/show. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Hide rests around cue** in the **Cues** group.
-

RESULT

Padding rests around the selected cues are hidden when **Hide rests around cue** is activated, and shown when it is deactivated.

RELATED LINKS

[Implicit vs. explicit rests](#) on page 860

Hiding/Showing bar rests in cues

You can hide/show bar rests alongside all cues in each flow in your project.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-N** to open **Notation Options**.
 2. In the **Flows** list, select the flows in which you want to hide/show bar rests.
By default, only the current flow is selected when you open the dialog.
 3. Click **Rests** in the page list.
 4. In the **Rests in additional voices** section, choose one of the following options for **Bar rests in cues**:
 - **Show bar rests**
 - **Omit bar rests**
 5. Click **Apply**, then **Close**.
-

RESULT

Bar rests alongside cues are hidden/shown in all layouts in the selected flows in your project.

RELATED LINKS

[Moving rests vertically](#) on page 866

Clef changes in cues

If the music for the source instrument is in a different clef from the destination instrument, Dorico Pro automatically inputs a clef change at the start of cues to match the clef used by the source instrument, and a restorative clef change at the end of cues to match the original clef used by the destination instrument.

Clef changes at the start of cues are positioned differently to normal clef changes.

Cues starting at the beginning of bars

Clef changes appear to the right of barlines.

Restorative clef changes at the ends of cues are positioned like normal clef changes.

Cues crossing system breaks

Original clefs of destination parts are shown in their usual positions at the start of new systems.

Clefs required for cues appear immediately before the first note of the new system, to the right of key signatures and time signatures.

When there are multiple adjacent cues, clef changes are created as needed:

- If two adjacent cues use the same clef that is different than the clef in the destination instrument, a single clef change appears at the start of the first cue, with a restorative clef at the end of the second cue.
- If cues overlap, and the second cue requires a different clef than the first, Dorico Pro creates a clef change at the start of the second cue.

- If there are two adjacent cues, the first of which uses a different clef than the destination instrument, and the clef property for the second cue is set to **None**, then the clef change that restores the destination instrument's original clef appears at the end of the first cue.

You can override this automatic behavior for individual clefs using either **Concert clef** or **Transposed clef** in the **Cues** group of the Properties panel, depending on whether the layout currently open in the music area uses concert or transposed pitch.

Dorico Pro can show the following clefs in cues:

- **None**
- **Treble**
- **Alto**
- **Tenor**
- **Bass**

NOTE

- If you select **None**, the clef of the destination instrument is used instead of the clef of the source instrument.
 - Any clef changes that occur in the source instrument in the middle of cued passages are not included in the cue in the destination instrument.
-

Changing the clef shown in cues

You can change the clef shown in individual cues, independently of your project-wide settings.

You can show different clefs for the same cue in each layout in which it appears. For example, you can show a cue with a treble clef in a full score layout but with a bass F clef in the corresponding part layout.

PROCEDURE

1. In the music area, open the layout in which you want to change the clef shown in cues.
2. Select the cues whose clef you want to change. You can do this in Write mode and Engrave mode.
3. In the Properties panel, activate one of the following properties in the **Cues** group:
 - **Concert clef**: shown if the layout uses concert pitch
 - **Transposed clef**: shown if the layout uses transposed pitch
4. Select one of the following clefs from the menu:
 - **None**: uses the clef of the destination instrument instead of the clef of the source instrument.
 - **Treble**
 - **Alto**
 - **Tenor**
 - **Bass**

The same clefs are available for each property.

RESULT

The clef shown in the selected cues is changed.

TIP

You can change whether the clef of the source instrument or destination instrument is used in all cues project-wide on the **Cues** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for cues](#) on page 601

Viewing options for cues

You can highlight cues and/or show cued material in a different color to normal notes in your project to help you identify cues more easily as you are working.

NOTE

In layouts where cues are not shown, cues are indicated by signposts. You can hide/show cue signposts by choosing **View > Signposts > Cues**. Cue signposts are shown when a tick appears beside **Cues** in the menu, and hidden when no tick appears.

RELATED LINKS

[Signposts](#) on page 281

[Hiding/Showing cue note colors](#) on page 612

Hiding/Showing cue highlights

You can hide/show highlights on bars where cues exist, which can help you get an overview of where you have already added cues and which instruments are used as the source of cues.

Bars containing cues on destination instrument staves are shown with a translucent yellow highlight, and the corresponding bars on the source instrument staves are shown with a translucent blue highlight.

As you zoom out, the highlights become more opaque. This is especially useful when viewing full score layouts in galley view.

PREREQUISITE

Cues are shown in the current layout. If cues are not shown, no highlights appear and cues are only indicated by signposts.

PROCEDURE

- Choose **View > Highlight Cues**.
-

RESULT

Highlights on bars containing cues are shown when a tick appears beside **Highlight Cues** in the menu, and hidden when no tick appears.

EXAMPLE

Hiding/Showing cue note colors

You can show the material in cues, including notes and rests, in gray to help you identify cues. Cued material cannot be edited directly.

PREREQUISITE

Cues are shown in the current layout. If cues are not shown, they are only indicated by signposts.

PROCEDURE

- Choose **View > Note and Rest Colors > Cues**.
-

RESULT

Material in cues appears gray when a tick appears beside **Cues** in the menu. When no tick appears, they follow any other note and rest color settings you have selected.

EXAMPLE

Dynamics

Dynamics indicate the loudness of the music, and can be combined with other instructions to give the performer a detailed understanding of how to perform the music, while also leaving room for interpretation.

Dynamics can indicate an immediate change in volume or a gradual change over a specified duration. By default, they are placed below the staff for instruments and above the staff for voices.

You can add qualifying and expressive text to dynamics that can give stylistic direction context alongside the volume level, for example, *f* *espressivo* indicates that a passage is played loudly but also with expressive feeling.

While almost all expression text is written in italics, dynamics such as *p* and *pp* use a bold italic font.

RELATED LINKS

[Input methods for dynamics](#) on page 208

[Positions of dynamics](#) on page 614

Types of dynamics

Dorico Pro categorizes dynamics into four groups.

Immediate dynamics

Immediate dynamics apply to the note to which they are attached until the next dynamic marking, and indicate an immediate change from any previous dynamic. Immediate dynamics include dynamic symbols, such as *pp* or *f*, and qualifying text, such as *subito* or *molto*.

Gradual dynamics and hairpins

Gradual dynamics are often shown as hairpins but can also be shown using text. In Dorico Pro, you can show gradual dynamic text in the following ways:

- *cresc.* or *dim.*: abbreviated text with no continuation line
- *cresc...* or *dim...*: abbreviated text with a dotted continuation line
- *cre-scen-do* or *di-mi-nuen-do*: the full word spread out across the duration of the gradual dynamic

Gradual dynamics can also have qualifying text, such as *poco*, *molto*, *poco a poco*, and *niente*.

In Dorico Pro, a hairpin can be shown as *mesa di voce*, which shows a pair of hairpins. In some cases, this is easier than having separate lines for each half of the pair.

Force/Intensity of attack

These dynamics, such as *fz* and *sffz*, indicate that a note has a stronger attack than is usually expected for the dynamic, similar to an accent articulation.

Combined dynamics

Combined dynamics, such as *fp* or *p-mf*, specify a sudden change of dynamic.

You can create custom combined dynamics in Dorico Pro, and control the intensity of each dynamic in the pair, in the **Combined Dynamics** section of the Dynamics panel. For example, you can make dynamics such as *pppf*, *fff-mp*, and *ffffpppp*.

RELATED LINKS

[Gradual dynamics](#) on page 624

Project-wide engraving options for dynamics

You can find options for the project-wide appearance and position of dynamics on the **Dynamics** page in **Engrave > Engraving Options**.

The options on the **Dynamics** page allow you to change the appearance of dynamics and gradual dynamics, and their default positions relative to noteheads, barlines, and the ends of systems.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Positions of dynamics

Dynamics are placed below the staff for instruments, where they can be read alongside the notes, and above the staff for voices. This way, they do not clash with lyrics placed below the staff, and are still close enough to the notes to be read simultaneously.

Immediate dynamics, such as *pp* or *f*, are centered on the notehead to which they apply. The beginnings of gradual dynamics are centered on the notehead from which they begin, or immediately after an immediate dynamic at the same position. The ends of gradual dynamics are centered on the notehead at which they end, or immediately before an immediate dynamic at the same position.

The placement of dynamics relative to the staff varies, depending on their function and the type of player. For example, dynamics are placed below instrumental staves and above vocal staves by default. This ensures dynamics are kept as close to the staff as possible for legibility but are not placed between noteheads and lyrics on vocal staves. For grand staff instruments, such as piano or harp, dynamics are usually placed between the two staves, but can be placed both above and below when each staff requires separate dynamics.

In general, dynamics are not placed within the staff, as hairpins in particular become very hard to read. They are also not usually placed within tuplet brackets. Dynamics are placed outside of notations such as slurs, which must be kept close to noteheads, but inside pedal lines, which can be placed further from noteheads and still be clearly understood.

You can move dynamics to different rhythmic positions in Write mode. They snap to noteheads and are positioned by default according to your settings in **Engraving Options**.

You can move dynamics graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

You can change the default positions of all dynamics project-wide, and their positions relative to beats, barlines, system ends, the staff, and other objects on the **Dynamics** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for dynamics](#) on page 614

[Moving dynamics rhythmically](#) on page 616

[Moving dynamics graphically](#) on page 617

Changing the placement of dynamics relative to the staff

By default, dynamics are placed below the staff for instruments and above the staff for voices. You can change the placement of individual dynamics relative to the staff, for example, to have different dynamics above and below the staff in multiple-voice contexts.

PROCEDURE

1. Select the dynamics whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Placement** in the **Dynamics** group.
3. Choose one of the following options:
 - **Above**
 - **Below**

RESULT

The placement of the selected dynamics is changed.

Changing the horizontal beat-relative position of dynamics

You can position individual dynamics before or after the beat.

PROCEDURE

1. Select the dynamics whose position relative to the beat you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Beat-relative position** in the **Dynamics** group.
3. Choose one of the following options:
 - **Before**
 - **After**

EXAMPLE



A dynamic positioned before the beat






A dynamic positioned after the beat

Changing the alignment of immediate dynamics relative to noteheads

Immediate dynamics, such as *ff* and *mp*, are usually horizontally aligned with the optical center of noteheads. However, you can change the horizontal alignment of immediate dynamics individually, independently of your project-wide setting.

PROCEDURE

1. Select the dynamics whose alignment relative to noteheads you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Text alignment** in the **Dynamics** group.
 3. Choose one of the following options:
 - **Align optical center with notehead**

 - **Left-align with notehead**

 - **Align optical center with left of notehead**

-

RESULT

The alignment of the selected immediate dynamics is changed.

TIP

You can change the default alignment of all immediate dynamics relative to noteheads project-wide in the **Horizontal Position** section of the **Dynamics** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for dynamics](#) on page 614

Moving dynamics rhythmically

You can move dynamics to new rhythmic positions after they have been input.

NOTE

- You can only move dynamics to existing noteheads.
 - If you want to move a single dynamic within a group, you must click and drag it with the mouse. If you use the key commands, the whole group is moved.
-

PROCEDURE

1. In Write mode, select the dynamics you want to move.

NOTE

When using the mouse, you can only move one dynamic rhythmically at a time.

2. Move the dynamics to the next/previous notehead on the staff in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.

- Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the dynamic to the right/left.
-

RESULT

The selected dynamics are moved to noteheads to the right/left along the staff.

Moving dynamics graphically

You can move dynamics graphically, without changing the rhythmic positions to which they apply. When you select hairpins in Engrave mode, three adjustment handles appear at each end. You can use these handles to lengthen/shorten gradual dynamics graphically.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

- Immediate dynamics or whole gradual dynamics
- Individual handles on gradual dynamics

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the dynamics or handles in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected dynamics or handles are moved graphically, without affecting the rhythmic positions to which they are attached.

TIP

The following properties in the **Dynamics** group of the Properties panel are activated automatically when you move dynamics in the corresponding directions:

- **Start offset** moves immediate dynamics and the start of gradual dynamics. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves the end of gradual dynamics. **X** moves them horizontally, **Y** moves them vertically.

For example, if you move a whole gradual dynamic upwards, both handles are moved so both properties are activated. You can also use these properties to move dynamics graphically by changing the values in the value fields.

Deactivating the properties resets the selected dynamics to their default positions.

RELATED LINKS

[Lengthening/Shortening gradual dynamics and groups of dynamics](#) on page 625

Aligning dynamics

You can graphically align individually selected dynamics in a row without grouping/ungrouping them, for example, if system breaks in part layouts are different to the full score layout and so require parts of different groups of dynamics to be aligned, but you do not want to change their grouping.

PROCEDURE

1. In Engrave mode, select the dynamics you want to align.
2. Choose **Edit > Dynamics > Align Dynamics**. You can also choose this option from the context menu.

RESULT

The selected dynamics are aligned in a row with the dynamic within the selection that was furthest from the staff. This does not affect their grouping or their alignment in other layouts.

General placement conventions for hairpins relative to barlines

In Dorico Pro, the ends of hairpins align with the left edge of the note to their right.

Hairpins that end on the first note of a bar extend across the preceding barline in certain cases.

- If there is not an immediate dynamic on the first note in the next bar.
- If there is a time signature or key signature change at the barline which increases the gap between the end of the current bar and the first note in the new bar.

Dorico Pro avoids hairpins overlapping barlines by a small amount, as this is less visually clear. However, this means that the same dynamic phrase on two different staves can appear differently if one of the staves does not have the barline extending below it.

You can change this default behavior and stop all hairpins project-wide from crossing barlines if the hairpin ends on the first note in the next bar. This ensures all applicable hairpins appear the same length. You can also change the minimum distance before hairpins are allowed to extend beyond barlines.



The ends of the two hairpins are not aligned despite their duration being identical, as the barline does not extend to the bottom staff of the system.

Changing the project-wide position of hairpins relative to barlines

You can change whether all hairpins cross barlines when they end on the first note in the next bar project-wide. You can also change the minimum distance before hairpins are allowed to extend beyond barlines.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Dynamics** in the page list.
 3. In the **Gradual Dynamics** section, click **Advanced Options**.
 4. Choose one of the following options for **Hairpins ending at beginning of note at start of bar**:
 - **Do not cross barline**
 - **Allow to cross barline**
 5. Optional: In the **Horizontal Position** section, change the value for **Minimum distance to right of barline to allow dynamic to cross barline**.
 6. Click **Apply**, then **Close**.
-

Showing dynamics in parentheses

You can show individual dynamics in parentheses, for example, to show editorial dynamics that were not in the original manuscript.

PROCEDURE

1. Select the dynamics you want to appear parenthesized. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Parenthesized** in the **Dynamics** group.
-

RESULT

Each of the selected dynamics is shown in parentheses individually.

Deactivating **Parenthesized** removes parentheses from the selected dynamics.

Erasing the background of dynamics

You can erase the background of individual dynamics, for example, to ensure the dynamic remains legible when crossing barlines. You can erase the backgrounds of all types of dynamics.

PROCEDURE

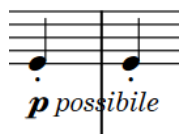
1. In Engrave mode, select the dynamics whose backgrounds you want to erase.
 2. In the Properties panel, activate **Erase background** in the **Dynamics** group.
-

RESULT

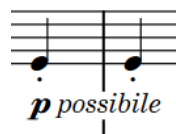
The backgrounds of the selected dynamics erase whatever is behind them.

Deactivating **Erase background** returns the selected dynamics to the default non-erased background.

EXAMPLE



Dynamic with non-erased background



Dynamic with erased background

AFTER COMPLETING THIS TASK

You can change the padding between dynamics and each edge of their erased areas.

Changing the erasure padding of dynamics

You can change the erasure padding of individual dynamics, including changing the padding between dynamics and each edge of their erased areas independently.

Erasure padding considers the prefix/suffix separately from immediate dynamics and also takes into account ascenders/descenders in the text. This can cause the erasure padding to appear larger below the dynamic than above, such as for “*espressivo*” due to the “*p*”. In such cases, you can change the padding on the affected edge to make the padding appear symmetrical.

PROCEDURE

1. In Engrave mode, select the dynamics whose erasure padding you want to change.
 2. In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Dynamics** group.
 - **L** changes the padding between dynamics and their left edge.
 - **R** changes the padding between dynamics and their right edge.
 - **T** changes the padding between dynamics and their top edge.
 - **B** changes the padding between dynamics and their bottom edge.
 3. Change the values in the value fields.
-

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding. This also affects the area considered for collision avoidance.

TIP

You can change the default erasure padding of all dynamics project-wide in the **Appearance** section of the **Dynamics** page in **Engrave > Engraving Options**. However, this does not allow you to change the padding of each edge independently.

Copying dynamics

You can copy dynamics to other rhythmic positions after they have been input. You can select dynamics on a single staff to copy to another single staff, or you can select dynamics across multiple staves to copy across the same number of staves.

PROCEDURE

1. In Write mode, select the dynamics you want to copy.

TIP

If you want to copy many dynamics or, for example, just gradual dynamics, you can use a filter.

2. Press **Ctrl/Cmd-C** to copy the dynamics.
 3. Select the notehead at the rhythmic position to which you want to copy the dynamics.
 4. Press **Ctrl/Cmd-V** to paste the dynamics.
-

RESULT

The selected dynamics are pasted to new rhythmic positions. If you copied dynamics to other staves at the same rhythmic position as the original dynamics, the dynamics on all staves are automatically linked.

If you selected multiple dynamics at different rhythmic positions, their new positions reflect their original rhythmic spacing.

TIP

- You can also copy dynamics without adding them to your clipboard by selecting them and **Alt**-clicking each notehead to which you want to copy the selected dynamics.
 - If you want to copy dynamic phrases immediately after where they were originally input, you can select them and press **R**. If you select a single immediate dynamic, it is copied to the same position.
-

RELATED LINKS

[Dynamics linked across multiple staves](#) on page 633

[Filters](#) on page 278

Deleting dynamics

You can delete dynamics from your project. If you delete some but not all dynamics from a group that is linked to dynamics on other staves, all equivalent linked dynamics are also deleted.

PROCEDURE

1. In Write mode, select the dynamics you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected dynamics are deleted. If you delete immediate dynamics immediately before/after hairpins, the length of hairpins can adjust automatically, depending on the context.

NOTE

Deleting dynamics that are linked to other staves can cause the selected dynamics to be deleted from all linked staves as well. If you do not select and delete all dynamics in the group, the selected dynamics are also deleted from all linked staves. However, if you select and delete the whole group of dynamics from a single staff, those dynamics are not deleted from other staves.

RELATED LINKS

[Groups of dynamics](#) on page 632

[Dynamics linked across multiple staves](#) on page 633

Voice-specific dynamics

You can input different dynamics into each voice independently in multiple-voice contexts.

Inputting voice-specific dynamics allows you to show different dynamics for multiple voices on a staff, or to highlight an inner melody voice in a piano texture. They change the dynamics of each voice in playback.

During step input, voice-specific dynamics are added to the voice indicated by the stem direction of the quarter note symbol beside the caret.

By default, dynamics apply to all voices on a staff if input without pressing **Alt**. If you want each voice to have their own dynamic in playback as well as in the score, press **Alt** when inputting dynamics for every voice on a staff.

RELATED LINKS

[Input methods for dynamics](#) on page 208

Niente hairpins

Niente markings at the start/end of gradual dynamics indicate that the dynamic either increases from, or decreases to, silence.

This effect works very well on strings and singers with vowels, but it cannot always be played literally. For example, singers with words beginning with consonants cannot begin from silence, nor can reed and brass instruments, as they have to achieve a certain air pressure before a note sounds.

Niente markings can be shown in two ways: as a circle at the end of a hairpin, and as text directly before or after a hairpin. You can input both types of *niente* markings in Dorico Pro using the dynamics popover and by clicking **niente** in the **Gradual Dynamics** section of the Dynamics panel.

TIP

You can turn existing hairpins into *niente* hairpins by selecting them and clicking **niente** in the **Gradual Dynamics** section of the Dynamics panel, or by activating **Niente** in the **Dynamics** group of the Properties panel.

EXAMPLE



A niente shown as **Circle on hairpin**



A niente shown as **Text**

RELATED LINKS

[Lengthening/Shortening gradual dynamics and groups of dynamics](#) on page 625

[Input methods for dynamics](#) on page 208

Changing the appearance of individual niente hairpins

You can show *niente* hairpins in two ways in Dorico Pro, and you can change how they appear individually, independently of your project-wide setting.

PROCEDURE

1. Select the hairpins whose *niente* style you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Niente style** in the **Dynamics** group.
3. Choose one of the following options:

- **Circle on hairpin**



- **Text**



RESULT

The *niente* style of the selected hairpins is changed.

TIP

You can change how all *niente* hairpins appear project-wide in the **Gradual Dynamics** section of the **Dynamics** page in **Engrave > Engraving Options**.

EXAMPLE



A niente shown as **Circle on hairpin**



A niente shown as **Text**

RELATED LINKS

[Project-wide engraving options for dynamics](#) on page 614

Expressive text

Expressive text adds further detail to a dynamic than simply its volume level, and can help guide how a player performs a note or phrase.

In Dorico Pro, expressive text, such as “*sim.*”, *poco*, *molto*, or *subito*, must accompany a dynamic level, such as *p* or *f*.

NOTE

You cannot input expressive text on its own. However, you can hide the immediate dynamic that follows/precedes it.

You can input expressive text by entering it into the dynamics popover alongside an immediate dynamic or by clicking available options in the **Immediate Dynamics** section of the Dynamics panel. You can also add it to existing dynamics by entering the expressive text you want into one of the following properties in the **Dynamics** group of the Properties panel:

- **Prefix** adds expressive text before existing dynamics.
- **Suffix** adds expressive text after existing dynamics.

RELATED LINKS

[Hiding immediate dynamics](#) on page 624

Adding expressive text to existing dynamics

You can add expressive text to dynamics after they have been input, for example, if you want to add “sim.” instead of repeating dynamics across multiple phrases.

PROCEDURE

1. Select the dynamics to which you want to add expressive text. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate the following properties, individually or together, in the **Dynamics** group:
 - **Prefix** adds expressive text before the existing dynamic.
 - **Suffix** adds expressive text after the existing dynamic.
3. Enter the expressive text you want to add into the corresponding value field.
4. Press **Return**.

RESULT

The text you entered is added to the selected dynamics as expressive text.

Deactivating the properties removes the corresponding expressive text from the selected dynamics.

NOTE

Deactivating properties permanently deletes any custom text entered.

RELATED LINKS

[Niente hairpins](#) on page 622

[Input methods for dynamics](#) on page 208

Hiding immediate dynamics

You can hide immediate dynamics such as *f* and *pp*, for example, if you only want to show an expressive text, such as “sim.”, without the immediate dynamic that accompanies it.

PROCEDURE

1. Select the immediate dynamics you want to hide. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Hide intensity marking** in the **Dynamics** group.

RESULT

The selected immediate dynamics are hidden. If no other dynamic exists at their rhythmic position, they are indicated by signposts so you can always find them again. However, signposts are not printed by default.

Deactivating **Hide intensity marking** shows the selected immediate dynamics again.

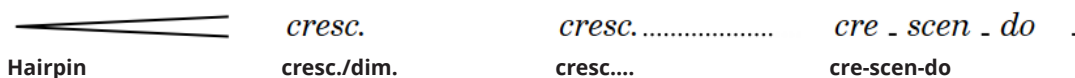
Gradual dynamics

Gradual dynamics indicate a change in volume that happens incrementally over the specified duration. By default, gradual dynamics appear either as hairpins or as text instructions, such as *cresc.* or *dim.*.

You can change the appearance and placement of gradual dynamics individually, independently of your project-wide settings, using properties in the **Dynamics** group of the Properties panel.

For example, you can change the type of gradual dynamics so that they are shown as a hairpin with a single direction or as a *messa di voce* pair of hairpins with two directions.

You can change the style of gradual dynamics to show them in any of the following ways:



TIP

You can also change the line style of hairpins using **Hairpin line style** in the **Dynamics** group of the Properties panel.

If you enter two or more consecutive hairpins of the same direction separated by immediate dynamics into the dynamics popover, you can show them as a single, continuous hairpin across the immediate dynamics by activating **Hairpin shown as continuation** and the corresponding checkbox in the **Dynamics** group of the Properties panel in Engrave mode.



Hairpin not shown as continuation



Hairpin shown as continuation

You can also change the diminuendo style of gradual dynamics using the **cresc./dim.** style so they show either “diminuendo” or “decrecendo”, and you can change the continuation line style of gradual dynamics using the **cresc....** style.

In Engrave mode, hairpins have three square handles at the start/end:

- The middle handles at the start/end change the offset position of the start/end of the hairpin.
- The pair of outer handles at the start/end adjusts the aperture of the start/end of the hairpin.



A hairpin with the start middle handle selected in Engrave mode

You can use these handles to change the angle of hairpins.

RELATED LINKS

- [Types of dynamics](#) on page 613
- [Changing the angle of hairpins](#) on page 627
- [Changing the aperture of hairpins](#) on page 628

Lengthening/Shortening gradual dynamics and groups of dynamics

You can change the length of gradual dynamics and groups of dynamics after they have been input.

NOTE

You can only lengthen/shorten one gradual dynamic or group of dynamics at a time.

PROCEDURE

1. In Write mode, select one of the following that you want to lengthen/shorten:
 - A single gradual dynamic
 - A single gradual dynamic in a group of dynamics
2. Lengthen/Shorten the gradual dynamic or groups of dynamics in any of the following ways:
 - To lengthen them by the current rhythmic grid value or to the next notehead, whichever is closer, press **Shift-Alt-Right Arrow**.
 - To shorten them by the current rhythmic grid value or to the previous notehead, whichever is closer, press **Shift-Alt-Left Arrow**.
 - To lengthen them to the next notehead, press **Ctrl/Cmd-Shift-Alt-Right Arrow**.
 - To shorten them to the previous notehead, press **Ctrl/Cmd-Shift-Alt-Left Arrow**.

NOTE

When using the keyboard, you can only move the end of dynamics. You can move the start of dynamics by moving the whole dynamic, or by clicking and dragging the start handle.

- Click and drag the circular handle at the start/end.

RESULT

Individual gradual dynamics are lengthened/shortened either according to the rhythmic grid or to next/previous noteheads.

Dynamic groups are lengthened/shortened proportionally by lengthening/shortening the gradual dynamics and moving any other type of dynamic in the group. This retains the relative durations of the gradual dynamics in the group.

In the example, the *p* at the end moves two quarter notes to the right, but the *f* in the middle only moves one quarter note to the right. This keeps the lengths of the gradual dynamics equal.

EXAMPLE



Original dynamic phrase



Lengthened dynamic phrase

RELATED LINKS

[Groups of dynamics](#) on page 632

[Positions of dynamics](#) on page 614

[Ungrouping dynamics and removing dynamics from groups](#) on page 633

Changing the angle of hairpins

By default, hairpins are horizontal and are automatically adjusted to avoid collisions with other objects, such as noteheads and slurs. You can change the angle of individual hairpins as required for your music.

NOTE

Changing only the start offset position with the keyboard or activating **Start offset** only changes the position of the hairpin relative to the staff, not its angle. You must change the end offset position or activate **End offset** as well to change the angle of hairpins.

Dragging handles with the mouse changes the angle straight away.

PROCEDURE

1. In Engrave mode, select the middle handles of the hairpins whose angle you want to change.

TIP

- The hairpins you select do not have to be the same direction, or on the same staff.
 - You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.
-

2. Move the handles in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.
-

RESULT

The angle of the selected hairpins is changed. Each end can be moved independently of the other.

TIP

The following properties in the **Dynamics** group of the Properties panel are activated automatically when you move the corresponding handles on hairpins vertically:

- **Start offset Y** moves the start handles of hairpins vertically.
- **End offset Y** moves the end handles of hairpins vertically.

For example, if you move a whole hairpin upwards, both handles are moved so both properties are activated. You can also use these properties to change the angles of hairpins by changing the values in the value fields.

Deactivating the properties resets the selected hairpins to their default positions.

Changing the aperture of hairpins

The change in volume indicated by individual hairpins is shown in the distance between the two lines that make up hairpins at their apertures. You can change the aperture of hairpins individually.

Hairpins typically have a closed end and an open end. If the hairpin crosses a system or frame break, the closed end can appear with a small gap so that the hairpin is not misread as two separate hairpins.

In Dorico Pro, you can use the pair of outer handles at the start/end of hairpins in Engrave mode to change the aperture. These handles are linked and mirror each other: moving one handle also moves the other handle by the same amount, but in the opposite direction. This ensures that hairpins remain symmetrical.



A hairpin with the outer handle selected in Engrave mode

PROCEDURE

1. In Engrave mode, select one of the outer handles of the hairpins whose aperture you want to change.

TIP

- The hairpins you select do not have to be the same direction, or on the same staff.
- You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Change the distance between the handles in any of the following ways:

- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The apertures of the selected hairpins are changed.

TIP

- You can also change the aperture of individual hairpins by activating **Hairpin open aperture** and/or **Hairpin closed aperture** in the **Dynamics** group of the Properties panel. Increasing the value makes the corresponding aperture wider. Decreasing the value makes the corresponding aperture narrower.
 - You can find options to set minimum and maximum values for the width of hairpin apertures project-wide, including for hairpins across system and page breaks, by clicking **Advanced Options** in the **Hairpins** subsection of the **Gradual Dynamics** section of the **Dynamics** page in **Engrave > Engraving Options**.
-

EXAMPLE



A diminuendo that goes across a system break: aperture at the start is open, aperture at the end is closed. It appears slightly open to indicate the diminuendo continues after the system break.



The diminuendo continues onto a new system: aperture at the start is open, aperture at the end is closed.

Hiding/Showing flared ends on hairpins

Flared ends are usually shown at the end of crescendo hairpins and indicate a sudden burst in volume at the end of the crescendo. You can hide/show flared ends on any hairpin.

NOTE

You can only show flared ends on hairpins with solid lines.

PROCEDURE

1. Select the hairpins on which you want to hide/show flared ends. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Flared end** in the **Dynamics** group.
-

RESULT

A flared end is shown on the selected dynamics when **Flared end** is activated, and hidden when it is deactivated.

EXAMPLE



Crescendo hairpin with flared end hidden



Crescendo hairpin with flared end shown

Changing the size of flared ends on hairpins

You can change the height and width of flared ends on individual hairpins.

PROCEDURE

1. In Engrave mode, select the flared hairpins whose flare size you want to change.
 2. In the Properties panel, activate **Flare size** in the **Dynamics** group.
 3. Change the value for **W** to change the width of the flared ends.
 4. Change the value for **H** to change the height of the flared ends.
-

RESULT

Increasing the **W** value makes the selected flared ends wider by starting their angle earlier in the hairpin, decreasing the value makes the selected flared ends narrower.

Increasing the **H** value makes the selected flared ends taller, decreasing the value makes them shorter.

Changing the values independently of each other changes the angle of the flared ends. For example, increasing the **W** value without changing the **H** value makes the angle shallower.

TIP

You can change the default design and size of all flared hairpins project-wide in the **Gradual Dynamics** section of the **Dynamics** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for dynamics](#) on page 614

[Changing the aperture of hairpins](#) on page 628

Adding poco a poco text to gradual dynamics

You can add *poco a poco* text to individual gradual dynamics after they have been input.

PROCEDURE

1. Select the gradual dynamics to which you want to add *poco a poco*. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Poco a poco (little by little)** in the **Dynamics** group.
-

RESULT

Poco a poco is shown immediately after gradual dynamic text, below hairpins placed below the staff, and above hairpins placed above the staff.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual dynamics.

EXAMPLE



Text gradual dynamic with poco a poco



Hairpin gradual dynamic with poco a poco

Gradual dynamic spacing

Dorico Pro ensures that hairpins can always be clearly distinguished by giving hairpins a minimum default length. However, this can affect note spacing.

The default minimum hairpin length is three spaces. When hairpins are shorter than this, they can sometimes be confused with the accent articulation mark. Therefore, if you add a hairpin to a note which would make the hairpin less than three spaces long, the spacing of the note is changed to ensure the hairpin meets the minimum length.

You can change the minimum length of hairpins by changing the value for **Minimum length for hairpins**, which you can find by clicking **Advanced Options** in the **Hairpins** subsection of the **Gradual Dynamics** section of the **Dynamics** page in **Engrave > Engraving Options**.

Gradual dynamics that start/end partway through notes

If the start/end of a gradual dynamic is not attached to a note, there are restrictions on how you can move the start/end position.

For example, if you enter two hairpins separated by a space into the dynamics popover, pair of hairpins that looks like a *messa di voce* is created but containing two separate hairpins, rather than the combined option. Neither of the open ends of the hairpins is attached to a specific notehead, and you cannot move the center of the pair of hairpins rhythmically. You can lengthen/shorten the two hairpins as a group but you cannot lengthen/shorten each hairpin individually.



However, if you enter two hairpins without a space between them into the dynamics popover, you can move the center of the pair of hairpins and each hairpin rhythmically, but only to noteheads. You can lengthen/shorten each hairpin separately according to the current rhythmic grid value.

You can move individual hairpins in Engrave mode to any graphical position. If you input hairpins separated by a space into the popover, you can move each hairpin independently, for example, if you want to adjust the graphical peak of the pair of hairpins. You cannot move the graphical peak of *messa di voce* hairpins, except by adjusting the note spacing. However, moving dynamics graphically does not affect dynamics in playback.

RELATED LINKS

[Lengthening/Shortening gradual dynamics and groups of dynamics](#) on page 625

[Moving dynamics graphically](#) on page 617

[Note spacing](#) on page 381

[Adjusting note spacing at individual rhythmic positions](#) on page 388

Gradual dynamics truncated by immediate dynamics

A hairpin is automatically truncated if an immediate dynamic is positioned within its range, either before or after the hairpin is input.

The hairpin remains tied to its originally designated rhythmic positions, even if graphically it appears shorter. This means that if the immediate dynamic that truncated it is ever deleted, the hairpin extends up to its end or the next immediate dynamic within its range.

The examples demonstrate a crescendo hairpin that is truncated by two dynamics, but the hairpin extends to its total length as they are deleted. The dotted attachment line shows the link between the hairpin and the rhythmic position to which its end is attached.



A long hairpin truncated by a **p**

After deleting the **p**, the hairpin is now truncated by the **f**

Deleting both immediate dynamics allows the hairpin to extend to its full length

RELATED LINKS

[Lengthening/Shortening gradual dynamics and groups of dynamics](#) on page 625

Groups of dynamics

When dynamics are grouped together, they are automatically aligned in a row and can be moved and edited as a group. For example, you can move the *f* in the middle of the example within the group, and the hairpins either side automatically adjust to compensate.

A single dynamic, either immediate or gradual, is considered a group on its own.

Two or more dynamics are automatically grouped together if they immediately follow each other horizontally on the staff, were input together or in sequence, and have gradual dynamics between the immediate dynamics.



A group of dynamics



The same group of dynamics adjusts to compensate when the *f* moves position.

All of the dynamics in a group are highlighted when any of the dynamics in the group are selected.



NOTE

- Groups of dynamics apply project-wide, meaning you cannot have dynamics grouped one way in some layouts but differently in other layouts. However, you can graphically align selected dynamics independently of their groups.
- As well as horizontal groups of dynamics, you can also link groups of dynamics across staves if you want the same dynamics to appear on multiple staves. This can be useful when multiple instruments play the same dynamics simultaneously and you want to make the same change in all staves, for example, moving the peak of a crescendo to a later beat, or changing a *f* to a *fff*.

RELATED LINKS

[Dynamics linked across multiple staves](#) on page 633

[Aligning dynamics](#) on page 618

Grouping dynamics together

You can manually group dynamics together that were not automatically grouped when they were input. Grouped dynamics are automatically aligned in a row and can be moved and edited as a group.

PROCEDURE

1. In Write mode, select the dynamics you want to group together.
2. Choose **Edit > Dynamics > Group Dynamics**. You can also choose this option from the context menu.

RESULT

The selected dynamics are grouped together. If the first dynamic in the group is linked to other staves, all dynamics in the group are added to those staves. This applies to all layouts in which the dynamics appear.

RELATED LINKS

[Groups of dynamics](#) on page 632

[Dynamics linked across multiple staves](#) on page 633

Ungrouping dynamics and removing dynamics from groups

You can ungroup dynamics so that all dynamics in the group become ungrouped, and you can remove only selected dynamics from groups while leaving dynamics that were not selected in the group.

PROCEDURE

1. In Write mode, select the dynamics you want to ungroup or remove from groups.
2. Do one of the following:
 - Choose **Edit > Dynamics > Ungroup Dynamics**.
 - Choose **Edit > Dynamics > Remove from Group**.

TIP

You can also choose these options from the context menu.

RESULT

If you ungroup dynamics, all dynamics in the group are ungrouped. This includes dynamics in the group that were not included in your selection.

If you remove dynamics from groups, only the selected dynamics are removed from their groups. Any unselected dynamics in the group remain grouped.

This applies to all layouts in which the dynamics appear.

Dynamics linked across multiple staves

Identical dynamics at the same rhythmic position on multiple staves can be linked together. This happens automatically when you copy and paste dynamics between staves.

If you select one dynamic in a linked group, all other dynamics in the linked group appear highlighted. If one linked dynamic is moved to a new rhythmic position, all linked dynamics move.



Two linked dynamics with only the top dynamic selected



Moving just the top dynamic of the linked group automatically moves the other to match its new position.

Similarly, if you change one linked dynamic, for example, from *p* to *mf*, all dynamics linked to the changed dynamic are also changed.

If you group other dynamics to one of the linked dynamics, such as a hairpin, the hairpin is added at the same position in all linked staves.

If one staff has another immediate dynamic before the end of a hairpin, the hairpin is truncated automatically. If you delete such a dynamic, the hairpin extends automatically up to the next immediate dynamic or to its full length, whichever comes first.

Three linked dynamics, where a hairpin added to the top staff and grouped with the dynamics on that staff has been automatically added to the staves below.

Deleting the *f* at the end of the first bar in the third staff causes the hairpin to extend to match the range of the top staff.

NOTE

- If you delete only some dynamics from a group that is linked to other staves, those dynamics are also deleted from the linked staves. If you delete a whole dynamic group from one staff, this does not affect linked dynamics on other staves.
- As well as vertically linked dynamics, you can also group dynamics horizontally. This automatically aligns the dynamics in a row and allows them to be moved and edited as a group.
- Linking or unlinking dynamics applies project-wide, meaning you cannot have dynamics linked one way in some layouts but differently in other layouts.

RELATED LINKS

[Groups of dynamics](#) on page 632

[Unlinking dynamics](#) on page 635

[Disabling automatic linking of dynamics and slurs when pasting](#) on page 279

Linking dynamics together

When you copy and paste identical dynamics to the same rhythmic position on other staves, those dynamics are linked together automatically. You can also manually link dynamics and groups of dynamics together that are not automatically linked to allow simultaneous editing.

However, the groups of dynamics must be the same in order to link them together. For example, you can link two *p* dynamics together if neither is part of a group, but you cannot link them together if one is grouped with a hairpin.

PROCEDURE

1. In Write mode, select the dynamics you want to link together.

2. Choose **Edit > Dynamics > Link**. You can also choose this option from the context menu.
-

RESULT

The selected dynamics are linked together. If you later change one of the linked dynamics, all linked dynamics are changed to match. This applies to all layouts in which the dynamics appear.

RELATED LINKS

[Dynamics linked across multiple staves](#) on page 633
[Copying dynamics](#) on page 620

Unlinking dynamics

You can unlink dynamics, including dynamics that were linked automatically.

PROCEDURE

1. In Write mode, select a dynamic in each linked group that you want to unlink.
 2. Choose **Edit > Dynamics > Unlink**. You can also choose this option from the context menu.
-

RESULT

All dynamics in the linked groups are unlinked. This applies to all layouts in which the dynamics appear.

RELATED LINKS

[Dynamics linked across multiple staves](#) on page 633

Dynamics font styles

You can change different aspects of the fonts used for dynamics in the **Edit Font Styles** dialog.

- You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave > Font Styles**.

The following fonts affect the appearance of dynamics:

- **Default Text Font:** The parent font for all font styles in the project, including dynamic modifiers.
- **Dynamic Music Text Font:** Used for dynamic glyphs, such as *pf* and *mp*.
- **Dynamic Text Font:** Used for dynamic modifiers, including expressive text.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

Editing the dynamic modifier font styles

You can edit the formatting of the two fonts that affect the appearance of dynamic modifiers. One font only affects dynamic modifiers and the other affects the entire project.

The **Default Text Font** is the parent font for the whole project, so any changes you make to this font affect all fonts that are linked to the font. This includes dynamic modifiers, but also many other fonts.

The **Dynamic Text Font** is used for dynamic modifiers. Any changes you make to this font affect all dynamic modifiers, including expressive text, but do not affect any other font style.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
 2. Select one of the following fonts from the **Font style** menu:
 - **Default Text Font**
 - **Dynamic Text Font**
 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Optional: If required, repeat steps 2 and 3 to change the other font.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The formatting of the default font used for dynamic modifiers or all fonts in your project is changed.

RELATED LINKS

[Dynamics font styles](#) on page 635

Editing the dynamic glyph font style

You can edit the formatting of the font used for dynamic glyphs, such as *mf* or *ff*. However, you must choose a SMuFL-compliant font.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
 2. Select **Dynamic Music Text Font** from the **Font style** menu.
 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Click **OK** to save your changes and close the dialog.
-

RESULT

The formatting of the font used for dynamic glyphs is changed project-wide.

RELATED LINKS

[Dynamics font styles](#) on page 635

Playback Options for dynamics

You can change settings for how dynamics are interpreted in playback by making adjustments to the scale of the graphical curve on the **Dynamics** page in **Playback Options**.

You can open **Playback Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-P** in any mode.
- Choose **Play > Playback Options** in Play mode.

You can then click **Dynamics** in the page list on the left of the dialog.

Dynamic Curve

The graph at the top of the **Dynamics** page in **Playback Options** maps a continuous curve. This curve determines how the volume of dynamics increases across the range *pppppp* to *fffff*.

A dynamic curve power of 1 creates a straight line, producing a steady dynamic increase. The difference between *pppp* and *pp* is the same as between *p* and *mf*.

A dynamic curve power higher than 2 creates a curved line, producing a faster dynamic increase in the middle of the range. The difference between *pppp* and *pp* is much smaller than the difference between *p* and *mf*.

The higher the dynamic curve power, the greater the contrast between dynamics in the middle of the range, and the smaller the contrast between dynamics at the ends of the range.

If your project uses a wide range of dynamics, including dynamics such as *pppp* and *fff*, you might want a lower curve power with larger differences between the extremes of the range.

If your project has a smaller range of dynamics, such as a minimum of *pp* to a maximum of *ff*, you might prefer a higher curve power, so the differences between the dynamics in the middle of the range are more discernible.

NOTE

Changing the dynamic curve affects the playback of all instruments in the project.

Note Dynamics

In the **Note Dynamics** section of the **Dynamics** page, you can set how much the volume of notes in playback is affected by stresses and articulation marks.

Humanize

Humanize allows dynamics to vary randomly by the degree you set to mimic the natural fluctuations in a live performance.

Sustaining and non-sustaining instruments

The volume settings for sustaining instruments and non-sustaining instruments vary in terms of their control of gradual dynamics.

You can control settings for each software instrument by choosing **Play > Expression Maps** and selecting software instruments from the list on the left.

Sustaining instruments

Sustaining instruments include string, wind, and brass instruments, because they can hold a note while being in control of its volume throughout.

Dorico Pro applies gradual dynamics to these instruments in playback. You can control settings for each software instrument by choosing **Play > Expression Maps** and selecting software instruments from the list on the left.

Non-sustaining instruments

Non-sustaining instruments, such as piano, harp, marimba, and most percussion instruments, have no further control of the dynamic of notes after they have been struck. For this reason, non-sustaining software instruments often use note velocity for dynamics, because this is set at the start of the note.

VST Expression Maps for volume types

If you are using a third-party sound library, you may need to change or edit the expression map to make instruments respond to gradual dynamics. Otherwise, the sound library uses velocity by default.

The setup of the expression map for dynamics depends on how the instrument is configured. Consult the documentation for the sound library for further information.

Dorico Pro provides the following default expression maps:

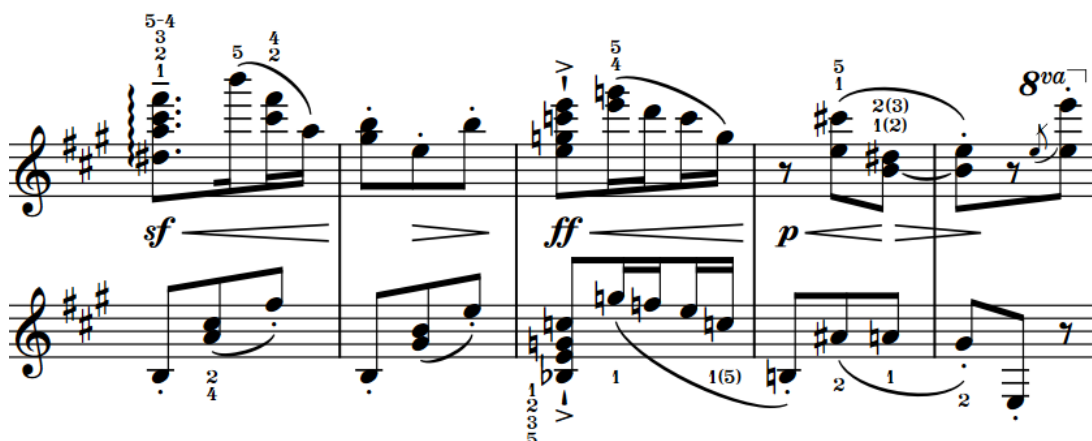
- **CC11 Dynamics** for dynamics produced by changing MIDI channel expression
- **Modulation Wheel Dynamics** for dynamics produced by changing MIDI controller 1

You can edit expression maps in the **Expression Maps** dialog, which you can open by choosing **Play > Expression Maps**.

Fingering

Fingerings can be added to music to recommend which fingers players should use for notes. This can be useful for music aimed at players learning the instrument and for difficult musical passages where certain fingering patterns make the notes much easier to play.

They are often used in keyboard music, as players can use all ten fingers to play notes, and in guitar music, where fingerings are often used alongside fret positions. However, fingerings can also be useful for other instruments, for example, to indicate that string players should change the finger used to stop the string while holding the note, or to instruct wind players to use uncommon fingerings for particular notes in order to create a special sonic effect.

A musical score for piano in G major, consisting of two staves. The top staff is in treble clef and the bottom staff is in bass clef. The music is marked with dynamics: sf, ff, and p. The score includes various fingering notations in bold roman numerals. For example, in the first measure of the top staff, the notes G4, A4, B4, and C5 are fingered 5-4, 3, 2, 1 respectively. In the second measure, the notes D5, E5, and F5 are fingered 5, 4, 2. In the third measure, the notes G5, A5, and B5 are fingered 5, 4. In the fourth measure, the notes C6, B5, and A5 are fingered 5, 1, 2(3) and 1(2). In the fifth measure, the notes G5, F5, and E5 are fingered 5, 1, 2. In the sixth measure, the notes D5, C5, and B4 are fingered 2(3), 1(2), and 2. In the seventh measure, the notes A4, G4, and F4 are fingered 1, 1(5), and 2. In the eighth measure, the notes E4, D4, and C4 are fingered 1, 2, and 2. In the ninth measure, the notes B3, A3, and G3 are fingered 1, 2, 3, 5. In the tenth measure, the notes F3, E3, and D3 are fingered 1, 2, 3, 5. The score also includes a fermata over the final note and a '8va.' marking.

Piano music containing multiple fingerings, including a substitution fingering and alternative fingerings

Dorico Pro also provides fingerings for brass instruments. For example, you can specify which valves players should depress for instruments such as trumpet and horn, and you can specify the horn branch you want players to use for double horns.

Fingerings in Dorico Pro use a bold roman font by default, following accepted conventions for the appearance of fingerings. You can change the font used for fingerings project-wide on the **Fingering** page in **Engrave > Engraving Options**.

RELATED LINKS

[Inputting fingerings](#) on page 184

[Fingerings popover](#) on page 184

[Changing the font used for fingerings project-wide](#) on page 646

General placement conventions for fingering

Fingerings are placed as close as possible to the notes to which they apply, so the performer can read them easily and clearly.

In music for grand staff instruments, such as the piano and harp, it is accepted to place fingerings for the right hand above the top staff, and fingerings for the left hand below the

bottom staff. However, in dense contrapuntal music for these instruments, fingerings can be placed between the staves to follow the direction of the voices to which they apply.

Project-wide engraving options for fingerings

You can find options for the project-wide appearance and position of fingerings on the **Fingering** page in **Engrave > Engraving Options**.

The options on the **Fingering** page allow you to change the font, size, appearance, placement, and precise position of fingerings on standard notes and grace notes, including fine adjustments for the different instrument groups, such as brass instruments, and the design of enclosures around fingerings and lines beneath fingerings. You can also change the position of fingerings relative to slurs, octave lines, and tuplets.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Changing fingerings to substitution fingerings

Substitution fingerings indicate where players should change the finger used for the note. You can change existing fingerings to substitution fingerings.

PROCEDURE

1. Select the fingerings you want to change to substitution fingerings. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Substitution** in the **Fingering and Positions** group.
3. Enter the fingering you want for the substitution into the value field.
4. Press **Return**.

RESULT

The selected fingerings are now shown as substitution fingerings. The deferred position of the substitution is the same as the original fingering by default, but you can change the rhythmic position of substitution fingerings.

Changing the rhythmic position of substitution fingerings

Substitution fingerings are shown as immediate by default, meaning that the substitution takes place on the same note, but you can change the rhythmic position at which individual substitutions take place.

PROCEDURE

1. Select the substitution fingering whose deferred rhythmic position you want to change. You can do this in Write mode and Engrave mode.
2. Change the rhythmic position of the substitution fingering in any of the following ways:
 - In Write mode, click and drag the circular handle to the right/left.
 - In Write mode and Engrave mode, activate **Substitution offset** in the **Fingering and Positions** group of the Properties panel.
Change the rhythmic position of substitutions as fractions of a quarter note (crotchet) by entering a value into the left value field, or by clicking the arrows

beside the value field. Increasing the value moves substitutions to later positions, decreasing the value moves them to earlier positions.

NOTE

The right value field is for the grace note position at which substitutions occur, if applicable.

RESULT

The rhythmic position of the substitution fingering is changed.

Dorico Pro automatically arranges deferred substitutions so they are ordered appropriately alongside any fingerings that coincide with the substitution.

NOTE

You can only change the position of single substitution fingerings when dragging their handles with the mouse. However, you can change the positions of multiple substitution fingerings with **Substitution offset** in the **Fingering and Positions** group of the Properties panel.

Deferred substitutions are always shown with horizontal lines, even if you have chosen to show immediate substitutions with slurs.

RELATED LINKS

[Fingerings popover](#) on page 184

[Project-wide engraving options for fingerings](#) on page 640

Changing existing fingerings

You can change fingerings after you have input them, for example, if you decide a different fingering would be better.

PROCEDURE

1. Select the fingerings you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, enter the new fingering you want into the **Finger or position** value field in the **Fingering and Positions** group.
 3. Press **Return**.
-

RESULT

The selected fingerings are changed.

TIP

You can also change existing fingerings in Write mode by opening the fingerings popover. Any existing fingerings on the selected note are shown in the popover.

RELATED LINKS

[Inputting fingerings](#) on page 184

[Fingerings popover](#) on page 184

Moving fingerings graphically

You can move fingerings graphically, independently of the noteheads to which they apply.

NOTE

You cannot move fingerings to different rhythmic positions as they are intrinsic parts of notes. If you want to move fingerings to other noteheads, you must delete the existing fingerings and re-input them on the noteheads to which you wanted to move them.

PROCEDURE

1. In Engrave mode, select the fingerings you want to move graphically.
2. Move the fingerings in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The fingerings are moved to new graphical positions.

TIP

Offset in the **Fingering and Positions** group of the Properties panel is activated automatically when you move fingerings.

- **Offset X** moves fingerings horizontally.
- **Offset Y** moves fingerings vertically.

You can also use this property to move fingerings by changing the values in the value fields.

Deactivating the property resets the selected fingerings to their default positions.

Resetting the positions of fingerings

You can reset the positions of individual fingerings whose graphical positions you have moved.

PROCEDURE

1. In Engrave mode, select the fingerings whose positions you want to reset.
 2. Reset their positions in any of the following ways:
 - Choose **Edit > Reset Position**.
 - In the Properties panel, deactivate **Offset** in the **Fingering and Positions** group.
-

Changing the placement of fingerings relative to the staff

Dorico Pro automatically follows conventions for fingering placement, but you can change the placement of fingerings relative to the staff individually, independently of your project-wide setting.

According to conventions, keyboard instrument fingering is positioned above the right-hand staff, and below the left-hand staff. String and brass instrument fingering is always positioned above the staff.

PROCEDURE

1. Select the fingerings whose position relative to the staff you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Staff-relative position** in the **Fingering and Positions** group.
3. Choose one of the following options:
 - **Above**
 - **Below**

RESULT

The selected fingerings appear above/below the staff.

TIP

You can change the placement of all fingerings relative to the staff project-wide to follow voice directions on the **Fingering** page in **Engrave > Engraving Options**.

This can be useful in complex contrapuntal music where fingering may not be clear if it is only placed above the top staff and below the bottom staff.

RELATED LINKS

[Project-wide engraving options for fingerings](#) on page 640

Changing the position of individual fingerings relative to slurs, octave lines, and tuplet brackets

By default, fingerings are positioned inside the arcs of slurs, but outside the start/end of slurs. You can change the position of fingerings relative to individual slurs, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the fingerings whose position relative to slurs you want to change.
2. In the Properties panel, activate **Slur-relative position** in the **Fingering and Positions** group.
3. Choose one of the following options:
 - **Inside**
 - **Outside**

RESULT

The position of the selected fingerings relative to slurs, octave lines, and tuplet brackets is changed.

NOTE

- If fingerings also coincide with the first note or last note of slurs, fingerings are positioned outside all of these notations.
 - You can change the position of all fingerings relative to slurs, octave lines, and tuplet brackets project-wide on the **Fingering** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Project-wide engraving options for fingerings](#) on page 640

Changing the size of fingerings

You can change the size of fingerings individually, without changing the size of the noteheads to which they apply.

PROCEDURE

1. In Engrave mode, select the fingerings whose size you want to change.
 2. In the Properties panel, activate **Scale** in the **Fingering and Positions** group.
 3. Change the value in the value field.
 4. Press **Return**.
-

RESULT

The scale size of the selected fingerings is changed. For example, changing the value to 50 scales the selected fingerings to half their normal size.

TIP

You can change the default size of all fingerings project-wide by changing the size of the **Fingering Font** in **Engrave > Font Styles**.

RELATED LINKS

[Editing the fingering font styles](#) on page 647

Showing enclosures/underlines on fingerings

You can show individual fingerings with either a circle enclosure or an underline.

PROCEDURE

1. In Engrave mode, select the fingerings on which you want to show an enclosure/underline.
 2. In the Properties panel, activate **Decoration** in the **Fingering and Positions** group.
 3. Choose one of the following options:
 - **Circle**
 - **Underline**
-

RESULT

The selected fingerings are shown with the chosen decoration.

TIP

You can find options that determine the default design of all fingering decorations project-wide, such as their line thickness, by clicking **Advanced Options** in the **Design** section of the **Fingering** page in **Engrave > Engraving Options**.

EXAMPLE



Fingering with circle



Fingering with underline

RELATED LINKS

[Project-wide engraving options for fingerings](#) on page 640

Hiding/Showing fingering

You can hide/show fingering in each layout in your project independently of other layouts. For example, you can show fingering in part layouts but hide fingering in full score layouts as conductors rarely require fingering information.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show fingering.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Players** in the page list.
 4. In the **Fingering** section, activate/deactivate **Show fingering**.
 5. Click **Apply**, then **Close**.
-

RESULT

All fingerings in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

RELATED LINKS

[Changing the appearance of cautionary fingerings](#) on page 648

Deleting fingerings

You can remove fingerings from notes after you have input them. However, because fingerings are considered an intrinsic part of notes rather than a separate item, you cannot select and delete them as you would for other items.

PROCEDURE

1. Select the notes from which you want to remove fingerings. If you are in Engrave mode, select the fingerings.

2. In the Properties panel, deactivate **Finger or position** in the **Fingering and Positions** group.
-

RESULT

All fingerings are removed from the selected notes.

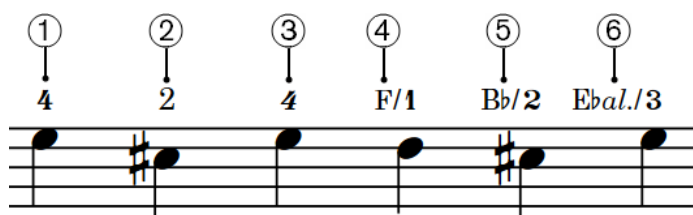
RELATED LINKS

[Large selections](#) on page 274

Fingering font styles

Bold and plain fingerings use different fonts. You can change different aspects of the font styles used for fingering in the **Edit Font Styles** dialog.

- You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave > Font Styles**.



The following fonts are used for fingering:

- 1 **Fingering Font:** Used for bold fingerings.
- 2 **Fingering Text Font:** Used for plain fingerings.
- 3 **Fingering Text Italic Font:** Used for italic fingerings.
- 4 **Fingering Horn Branch Text Font:** Used for note names in horn branch indicators.
- 5 **Fingering Horn Branch Accidental Font:** Used for accidentals in horn branch indicators.
- 6 **Fingering Horn Branch Alto Text Font:** Used for the alto abbreviation in triple horn branch indicators.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

[Project-wide engraving options for fingerings](#) on page 640

Changing the font used for fingerings project-wide

By default, fingerings are drawn in a bold, Arabic font that is similar in appearance to the digits in time signatures. You can change the font used for all fingerings project-wide, which affects the appearance of fingering numbers, parentheses, and brackets.

NOTE

The font used for thumb indicator, substitution lines and slurs, and brass valve separators is not changed.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Fingering** in the page list.
 3. In the **Design** section, choose one of the following options for **Fingering appearance**:
 - **Bold font**
 - **Plain font**
 4. Click **Apply**, then **Close**.
-

RESULT

The font style used for fingerings project-wide is changed.

TIP

You can edit different aspects of the font style used in the **Edit Font Styles** dialog. Bold fingerings use **Fingering Font**. Plain fingerings use **Fingering Text Font**.

RELATED LINKS

[Editing the fingering font styles](#) on page 647

Editing the fingering font styles

You can edit the formatting of the font styles used for all fingerings project-wide, for example, if you want them to appear larger by default.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
 2. Select the fingering font style you want to edit from the **Font style** menu.
 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Optional: Repeat steps 2 and 3 for any other font style you want to edit.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The formatting of the selected fingering font styles is changed project-wide.

RELATED LINKS

[Fingering font styles](#) on page 646

[Project-wide engraving options for fingerings](#) on page 640

[Changing the size of fingerings](#) on page 644

Showing individual fingerings in italics

Fingerings are normally shown in a bold, non-italic font, but you can show individual fingerings in italics.

PROCEDURE

1. In Engrave mode, select the fingerings you want to show in italics.
2. In the Properties panel, activate **Italic** in the **Fingering and Positions** group.

RESULT

The selected fingerings are shown in a bold italic font if your project-wide setting for fingerings is a bold font, and in a plain italic font if your project-wide setting for fingerings is a plain font.

NOTE

Bold italic fingerings look very similar to tuplet numbers, which can be confusing.

Cautionary fingerings

Cautionary fingerings remind players that fingerings specified at previous rhythmic positions continue to apply to notes that are still sounding. Dorico Pro automatically shows cautionary fingerings when you add other fingerings at rhythmic positions where notes with existing fingerings are still sounding.

By default, cautionary fingerings are shown enclosed in parentheses. You can choose to show cautionary fingerings without parentheses or not to show cautionary fingerings at all project-wide, and you can change the appearance of cautionary fingerings individually, for example, if you want to show cautionary fingerings manually on tied notes that cross system or frame breaks.



Cautionary fingering shown in parentheses (default)

Changing the appearance of cautionary fingerings

You can change the appearance of cautionary fingerings individually and independently of your project-wide setting, for example, if you want particular fingerings to appear without parentheses or to hide specific cautionary fingerings.

PROCEDURE

1. In Engrave mode, select the noteheads whose cautionary fingering appearance you want to change.

NOTE

You must select the specific noteheads to which the cautionary fingerings apply, not the fingerings themselves.

2. In the Properties panel, activate **Cautionary** in the **Fingering and Positions** group.
3. Select one of the following options from the menu:
 - **Default**

- **With parentheses**
 - **Without parentheses**
 - **Suppress**
-

RESULT

The appearance of cautionary fingerings on the selected notes is changed.

TIP

You can change the default appearance of all cautionary fingerings project-wide in the **Alternative, Editorial and Cautionary** section of the **Fingering** page in **Engrave > Engraving Options**.

RELATED LINKS

[Cautionary fingerings](#) on page 648

[Project-wide engraving options for fingerings](#) on page 640

Fingerings for valved brass instruments

For instruments like trumpet and horn, fingering is used to show which valves must be depressed to produce a specific note.

You can enter fingerings for valved brass instruments into the fingerings popover as numbers without any separation. For example, enter 12 for a C# on a trumpet to indicate that the first two valves must be depressed.

By default, Dorico Pro automatically stacks fingerings added to notes on brass instrument staves vertically. They are shown with no separator by default.

You can change the appearance of fingerings for valved brass instruments in the **Brass** section of the **Fingering** page in **Engrave > Engraving Options**. For example, you can show fingerings for valved brass instruments in a single row or stacked vertically. You can also change the appearance of the separator or show no separator.

You can also edit the formatting of the fonts used for the different parts of fingerings for valved brass instruments.

RELATED LINKS

[Fingering font styles](#) on page 646

[Fingerings popover](#) on page 184

[Inputting fingerings](#) on page 184

Showing horn branch indicators

You can indicate the branch on which notes are played for double horns and triple horns by adding branch indicators as prefixes to horn fingerings. Some publications simply indicate "T" for thumb, while others more explicitly indicate which branch is to be used by specifying its pitch.

NOTE

You can only add branch indicators to notes belonging to horns in F.

PROCEDURE

1. Select the horn fingerings to which you want to add branch indicators. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate **Horn branch** in the **Fingering and Positions** group.
 3. Select one of the following horn branches from the menu:
 - **F**
 - **B flat**
 - **F alto**
 - **E flat alto**
 - **Thumb trigger**
-

RESULT

Branch indicators are added to the selected fingerings.

TIP

You can change the appearance of branch indicators in the **Brass** section of the **Fingering** page in **Engrave > Engraving Options**.

RELATED LINKS

[Inputting fingerings](#) on page 184

[Project-wide engraving options for fingerings](#) on page 640

Changing the appearance of slide positions for brass instruments

You can use Arabic or Roman numerals to indicate slide positions for slide brass instruments, such as trombones. By default, Dorico Pro uses Arabic numerals for slide positions.

NOTE

You must enter slide positions using Arabic numerals into the fingerings popover, even if you have chosen to show slide positions with Roman numerals in your project.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Fingering** in the page list.
 3. In the **Brass** section, choose one of the following options for **Slide position appearance**:
 - **Arabic numerals**
 - **Roman numerals**
 4. Click **Apply**, then **Close**.
-

RESULT

The numeral style used for slide positions on slide brass instruments is changed project-wide.

RELATED LINKS

[Inputting fingerings](#) on page 184

Hiding/Showing string fingering shift indicators

An angled line can be used to indicate the direction of movement when string players must shift their finger position on the fingerboard to play a higher/lower note with the same finger as the previous note.

PROCEDURE

1. Select the notes or fingerings on string instrument staves from which you want to indicate a fingering shift. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Indicate shift to next note** in the **Fingering and Positions** group.

RESULT

Shift indicators are shown when the property is activated, even if neither of the notes at each end have explicit fingerings, and hidden when the property is deactivated. They are positioned between the selected notes and the notes that immediately follow them.

TIP

You can change the length, thickness, angle, and placement of shift indicators in the **String Fingering Shifts** section of the **Fingering** page in **Engrave > Engraving Options**.

EXAMPLE



RELATED LINKS

[Specifying on which string individual notes are played](#) on page 727

Changing the direction of string fingering shift indicators

You can change the direction of individual string fingering shift indicators if they do not point in the direction required.

PROCEDURE

1. Select the shift indicators whose direction you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Shift direction** in the **Fingering and Positions** group.
3. Choose one of the following options:
 - **Up**
 - **Down**

RESULT

The selected shift indicators are angled up/down.

NOTE

You can also affect the direction of string shift indicators by specifying the strings on which notes are played.

RELATED LINKS

[Specifying on which string individual notes are played](#) on page 727

Fingerings imported from MusicXML files

Dorico Pro imports fingerings that are specified using the fingering element in MusicXML files.

MusicXML files exported from Finale typically represent fingerings in the correct way. However, because Sibelius does not use the fingering element, Dorico Pro cannot import fingerings from MusicXML files exported by Sibelius.

Front matter

Front matter in Dorico Pro is a broad term that covers all information included before the first bar of music in scores.

Front matter includes musical information often added on pages before the first pages of scores, such as:

- Performance instructions
- Contents
- Instrumentation list

Front matter also includes information above the music on the first page of scores and parts, such as:

- Dedications
- Titles
- Subtitles
- Composers

All information in your project that is independent of the music must be added within frames, which you can input and edit in Engrave mode. You can do this on individual pages in layouts or on master pages, which allow you to apply the same formatting to multiple pages in all the layouts that use the same master page set, for example, if you want the music frame for the last page in all part layouts to be smaller because it only contains a few systems.

RELATED LINKS

[Master pages](#) on page 301

[Master page sets](#) on page 302

[Master page types](#) on page 304

[Paragraph Styles dialog](#) on page 366

[Frames](#) on page 322

Project information used in default master pages

An efficient way of ensuring all text information in the different layouts in your project is consistent is to use tokens that link to information for the current project entered in the **Project Info** dialog.

Tokens are codes that refer to text elsewhere, meaning they are updated automatically if the source text is changed.

The default master pages in Dorico Pro include tokens, so that any information you include for each flow in the **Project Info** dialog is automatically shown. For example, the **Default Full Score** master page set shows the following information for each flow:

- Composer
- Lyricist

- Title

NOTE

These tokens are linked to the project information for each flow by default. If you only enter information for **Project** in the **Project Info** dialog, no text is shown.

RELATED LINKS

- [Project Info dialog](#) on page 90
- [Flow names and flow titles](#) on page 119
- [Text tokens](#) on page 332

Adding dedications in master pages

You can show dedications in multiple layouts by adding them to master pages. Dedications are usually shown above titles in scores, use a smaller font size than titles, and are shown in italics.

PREREQUISITE

- You have entered a dedication in one of the **Dedication** fields in the **Project Info** dialog. You can enter different dedications for the whole project and for each flow individually.
 - If you want to use a new paragraph style for dedications, you have created a new paragraph style.
-

PROCEDURE

1. In Engrave mode, open a layout in the music area that uses the master page set containing the master page to which you want to add a dedication.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the **Master Pages** section of the Pages panel, double-click the master page master page pair to which you want to add a dedication.
The master page editor opens in the music area.
 3. Double-click the title text frame to open the text editor.
 4. Position the cursor at the start of the title token.
 5. Press **Return** to input a new line above the title token.
 6. Enter one of the following tokens in the new line above the title token:
 - `{@flowDedication@}` shows the dedication for the flow.
 - `{@projectDedication@}` shows the dedication for the whole project.
 7. Optional: Change the appearance of the dedication text using the text editor options.
 8. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.
-

RESULT

A dedication is shown above the title of all pages that use the selected master page format if a dedication is entered into the appropriate field in the **Project Info** dialog.

RELATED LINKS

- [Project Info dialog](#) on page 90
- [Creating paragraph styles](#) on page 368

[Text editor options in Engrave mode](#) on page 371

Adding player lists

You can add the player list text token to any layout or master page. It automatically displays the names of all players in the layout, and includes all instruments held by each player.

PREREQUISITE

- If you want to add a player list to a master page, you have opened the master page in the master page editor.
- If you want to add a player list into a new text frame, you have input the text frame where you want the player list to appear.

PROCEDURE

1. Double-click the text frame to which you want to add a player list to open the text editor.
2. Enter `{@playerlist@}`.
3. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.

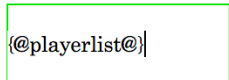
RESULT

The player list text token is added. It is populated with a list of all players in the layout. If you added it to a master page, the text frame and text token are automatically added to all pages in all layouts that use that master page.

NOTE

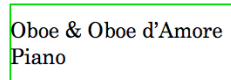
Pages with overrides are not updated when you change the master page.

EXAMPLE



`{@playerlist@}`

Player list token in a text frame



Oboe & Oboe d'Amore
Piano

Player list token populated with players in the layout

RELATED LINKS

[Inputting frames](#) on page 322

[Master page overrides](#) on page 308

[Master page editor](#) on page 306

Changing the text in running headers in master pages

The **Default Part** master page set shows the part name at the top left of the first pages in flows, and also shows the part name centered at the top of subsequent pages as a running header.

You can change the text shown in running headers, for example, if you want to include the flow title as well.

PROCEDURE

1. In Engrave mode, open a layout in the music area that uses the master page set containing the master page whose running header text you want to change.

NOTE

You can also select the master page set from the **Current set** menu in the **Master Pages** section of the Pages panel when any layout is open in the music area, but this changes the master page set applied to the layout.

2. In the **Master Pages** section of the Pages panel, double-click the master page master page pair whose running header text you want to change.
The master page editor opens in the music area.
3. Double-click the header text frame to open the text editor.
4. Change or delete the header text.
For example, to show both the part name and the flow title in the header text separated by a dash, enter - {@flowTitle@} after the part name token in the text frame.
5. Press **Esc** or **Ctrl/Cmd-Return** to close the text editor.

RESULT

The running header text is changed for all layouts that use the selected master page format.

EXAMPLE

{@layoutName@} - {@flowTitle@}

Token text added to a text frame

Violin I - Allegro con moto

Token text in a part layout

RELATED LINKS

[Master page editor](#) on page 306

[Changing the vertical alignment of text in text frames](#) on page 338

[Changing the horizontal alignment of text in text frames](#) on page 339

[Changing the paragraph style of text](#) on page 373

Grace notes

Grace notes are notes without a fixed duration, which are intended to be played quickly. They are scaled-down versions of normal notes, and are commonly shown with a slash through their stem.

Grace notes with slashed stems are known as acciaccaturas and are often played very fast. Grace notes without slashed stems are known as appoggiaturas and are often played slower than acciaccaturas.

In Baroque music, appoggiaturas are often understood to last for a specific duration, based on the prevailing meter and the rhythmic value of the notehead to which they are attached.

Grace notes do not take up space rhythmically, as they are intended to be fitted into the space before the notehead to which they are attached, which is the notehead immediately to their right.

There can be multiple grace notes before a notehead. If there are two or more grace notes attached to the same notehead, and they have a rhythmic value that shows a flag on the stem, such as eighth notes (quavers) and 16th notes (semiquavers), they are automatically beamed together.



Multiple grace notes before notes

In Dorico Pro, grace notes are scaled to 3/5 the size of a normal notehead by default and are affected by your note spacing settings. There is a separate option specifically for grace note spacing.

You can add notations, such as slurs and articulations, to grace notes in the same ways as to normal notes, and you can transpose grace notes after they have been input.

RELATED LINKS

[Inputting grace notes](#) on page 167

[Grace note slashes](#) on page 660

[Slur placement relative to grace notes](#) on page 870

[Note spacing](#) on page 381

[Changing the pitch of individual notes](#) on page 173

[Inputting articulations](#) on page 182

[Inputting slurs](#) on page 265

General placement conventions for grace notes

Grace notes function like normal notes in many ways, but there are some specific conventions about their stem direction, position relative to noteheads, and the placement of stem slashes.

Grace notes appear stem up by default, except when there are multiple voices with grace notes in a single staff, in which case grace notes in the lower voices appear stem down. This affects the placement of slurs relative to grace notes.

Grace notes are always positioned before a notehead, even if they are intended to be played on the beat rather than before the beat. They are normally placed after a barline, so they can be positioned directly before the notehead to which they are attached. However, groups of three or more grace notes can be placed before the barline so that the note of the first beat in the bar is not pushed too far from the barline.

Grace note stem slashes appear at the beginning of a grace note beam if multiple grace notes can be joined by a single beam at the same rhythmic position. If there is a single grace note, the slash appears across the stem, and its flag if applicable, and extends either side of the stem.



Adding accidentals causes their spacing to readjust so that the accidentals are clearly legible, similar to normal notes.

Articulations can be added to grace notes wherever they are most clearly legible, which is most likely outside the staff. Dorico Pro automatically places articulations on the stem-side of grace notes, and outside the staff if the stem or beam is within the staff.

Slurs relative to grace notes

By default, slurs starting on grace notes and ending on tie chains end on the first note of the tie chain. You can change the position of individual slurs relative to tie chains, including those starting from grace notes.

You can change the default position of all slurs relative to grace notes in the **Grace Notes** section of the **Slurs** page in **Engraving Options**. Included in this section are options for the position of slurs relative to grace notes in multiple voices.

In the **Tied notes** section of the page, you can change the default position of slurs relative to tie chains when slurs start on grace notes.

RELATED LINKS

[Changing the position of grace notes relative to barlines](#) on page 659

[Slur placement relative to grace notes](#) on page 870

[Slur position relative to tie chains](#) on page 869

[Changing the position of slurs relative to tie chains](#) on page 870

[Note spacing](#) on page 381

Grace note placement in multiple-voice contexts

According to accepted notation convention, grace notes appear stem up by default when there is only one voice on a staff, even if the notehead to which they are attached is stem down.

However, when there are multiple voices on the staff, all notes in the upper voices appear stem up and all notes in the lower voices appear stem down, including all grace notes. This adjustment happens automatically in Dorico Pro, but you can also override the stem direction of grace notes in multiple voices and change their directions individually if necessary.



RELATED LINKS

[Changing the stem direction of notes](#) on page 946

[Slur placement relative to grace notes](#) on page 870

Changing the position of grace notes relative to barlines

By default, grace notes are positioned after barlines and directly before the notehead to which they apply, including for the first note in a bar. You can position individual grace notes before barlines, for example, so the first normal note in the bar is not pushed too far from the barline, or to indicate that grace notes are played before the beat.

PROCEDURE

1. Select the grace notes whose position relative to barlines you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Grace note before barline** in the **Grace Notes** group.

RESULT

The selected grace notes are positioned before barlines when the property is activated, and after barlines when the property is deactivated.

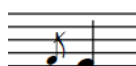
Project-wide changes to the position of grace notes

The **Grace Notes** section of the **Notes** page in **Engrave > Engraving Options** allows you to change the default distance between grace notes and the noteheads to which they apply.

Increasing the value for the minimum distance to the right of the rightmost grace note moves grace notes further from the notehead to which they apply. Decreasing the value moves them closer to the notehead to which they apply.



A grace note with the default minimum value of half a space between it and the notehead to its right



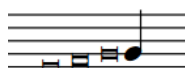
A grace note with an increased value of 1.5 spaces between it and the notehead to its right

You can also adjust the position of grace notes in each layout independently by changing the note spacing scale factor for grace notes on the **Note Spacing** page in **Setup > Layout Options**.

Decreasing the note spacing scale value for grace notes decreases the gap between multiple grace notes at the same rhythmic position.



Three grace notes with long durations, with the default note spacing scale of 70%



Three grace notes with long durations, with a decreased note spacing scale of 20%

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Note spacing](#) on page 381

Grace note size

Grace notes are smaller versions of normal notes, and are scaled down by a ratio that is set by default to 3/5 of a normal note.

You can find the ratio that controls the default size of all grace notes project-wide in the **Grace Notes** section of the **Notes** page in **Engrave > Engraving Options**.

You can also change the size of grace notes individually in the same way as for normal notes.

RELATED LINKS

[Changing the size of notes](#) on page 723

Grace note slashes

Slashes shown diagonally across grace note stems are often used to distinguish different types of grace notes. Grace notes with slashed stems are known as acciaccaturas and are often played very fast. Grace notes without slashed stems are known as appoggiaturas and are often played slower than acciaccaturas.

In Dorico Pro, grace notes appear with slashed stems by default. You can change whether grace notes are slashed or unslashed during note input as well as by changing the type of existing grace notes.

You can set the precise measurements of each part of grace note stem slashes in the **Grace Notes** section of the **Notes** page in **Engrave > Engraving Options**.



In this section, you can change the following:

- Thickness of grace note stem slashes
- Default length of grace note stem slashes
- Position of grace note stem slashes relative to the end of the stem

Changing the type of grace notes

You can change the type of individual grace notes after they have been input. Grace notes have slashed stems by default, but you can change them to have unslashed stems.

PROCEDURE

1. Select the grace notes whose type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, choose one of the following options for **Grace note type** in the **Grace Notes** group:
 - **Slashed stem**

 - **Unslashed stem**


RESULT

The selected grace notes are shown with slashed/unslashed stems.

TIP

You can also change the grace note type during step input.

RELATED LINKS

[Grace note slashes](#) on page 660

[Inputting grace notes](#) on page 167

Moving slashes on grace note stems

You can change the vertical position of individual grace note slashes, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the grace notes whose slash positions you want to change.
 2. In the Properties panel, activate the following properties, individually or together, in the **Grace Notes** group:
 - **Slash inset from stem tip**
 - **Slash offset to right**
 3. Move the selected grace note slashes by changing the values in the value fields.
-

RESULT

Increasing **Slash inset from stem tip** moves grace note slashes further from the tips of stems and closer to the noteheads. Decreasing the value moves them closer to the tips of stems and further from the noteheads.

Increasing **Slash offset to right** moves grace note slashes to the right, decreasing the value moves them to the left.

TIP

You can change the default position of all grace note slashes project-wide in the **Grace Notes** section of the **Notes** page in **Engrave > Engraving Options**.

Changing the length of grace note slashes

You can change the length of slashes on grace note stems individually, independently of your project-wide setting.

PROCEDURE

1. In Engrave mode, select the grace notes whose slash length you want to change.
2. In the Properties panel, activate the following properties, individually or together, in the **Grace Notes** group.
 - **Slash length**
 - **Slash protrusion from beam** (beamed grace notes only)

NOTE

Grace note slashes seem to disappear when you activate **Slash length** because activating the property resets the value to 0.

3. Change the length and/or protrusion of the selected slashes by changing the values in the corresponding value fields.
-

RESULT

Increasing **Slash length** lengthens grace note slashes on both single grace notes and grace note beams, decreasing the value shortens grace note slashes.

Increasing **Slash protrusion from beam** increases how far slashes extend beyond grace note beams, decreasing the value decreases how far slashes extend beyond grace note beams.

TIP

You can change the default appearance of all grace note slashes project-wide in the **Grace Notes** section of the **Notes** page in **Engrave > Engraving Options**.

RELATED LINKS

[Moving slashes on grace note stems](#) on page 661

Grace note stems

Grace notes are scaled-down notes, so the length of grace note stems is determined by your project-wide settings for the stem length of all notes.

You can change the default lengths of all stems project-wide in the **Stems** section of the **Notes** page in **Engrave > Engraving Options**.

Following accepted conventions, grace notes in Dorico Pro are stem up by default in any clef, regardless of the stem direction of the note to which they apply. The stem directions of grace notes are changed automatically when there are multiple voices on a staff, but you can change the stem direction of individual grace notes manually. You can also lengthen/shorten grace note stems in the same ways as for normal stems.

RELATED LINKS

[Stems](#) on page 942

[Grace note slashes](#) on page 660

[Changing the stem direction of notes](#) on page 946

[Lengthening/Shortening stems](#) on page 947

[Hiding stems](#) on page 948

Grace note beams

Dorico Pro automatically beams multiple adjacent grace notes together if they are an eighth note (quaver) or shorter in duration.

Like all beams, grace note beams ideally follow the accepted standards for beam placement relative to staff lines, in order to avoid wedges. However, because grace notes are smaller than normal notes, this can lead to extreme slants in grace note beams.

You can adjust the slants of individual grace note beams in the same ways as for normal beams. You can also change how all grace note beam slants are positioned project-wide in the **Vertical Position** section of the **Beams** page in **Engrave > Engraving Options**.

Beam slants in two-note groups of beamed grace notes

If two adjacent grace notes covering a wide pitch range are joined by a beam at the same rhythmic position, the angle of the beam can appear very steep.

You can choose whether the beam slant in such cases is left unchanged, or whether shallower slants are used, in the **Grace Notes** subsection of the **Slants** section of the **Beams** page in **Engraving Options**.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Beaming](#) on page 537

[Beam groups](#) on page 539

Holds and pauses

Different notations are used to show where the established rhythmic flow of the music is interrupted, either with a moment of repose or a short silence, before continuing. The most subtle effect is produced by a tenuto mark, with more significant effects denoted with holds and pauses.

The duration of the break in the music intended by the hold or pause does not need to be specified. This leaves significant room for interpretation, even though the different styles of holds and pauses normally indicate larger or smaller breaks.

NOTE

Holds and pauses do not currently have an effect in playback, but this is planned for future versions.

RELATED LINKS

[Input methods for holds and pauses](#) on page 225

Types of holds and pauses

There are three types of holds and pauses in Dorico Pro, and they can all be input, moved, and deleted in the same ways.

Fermatas

Fermatas indicate that a note is held for longer than its notated length, which applies to the whole ensemble.

They are also known as “pauses” and informally sometimes called “birds’ eyes”.

Breath marks

Breath marks show suitable places for players to breathe, or suggest how the music is phrased to create a similar effect.

Caesuras

Caesuras indicate that a note is sustained for its full value and is followed by a break in sound before continuing.

Types of fermatas

There are different types of fermatas available in Dorico Pro. Each fermata indicates a suggested pause duration whilst leaving room for interpretation.

Fermata

Very short fermata



Description

Indicates that a note is held only a fraction longer than the rhythm indicates.

Fermata

Short fermata



Short fermata (Henze)



Fermata



Long fermata



Long fermata (Henze)



Very long fermata



Curlew (Britten)



Description

Indicates that a note is held a little bit longer than the rhythm indicates.

Indicates that a note is held a little bit longer than the rhythm indicates, as used by Hans Werner Henze.

Indicates that a note is held for longer than the rhythm indicates.

Indicates that a note is held quite a lot longer than the rhythm indicates.

Indicates that a note is held quite a lot longer than the rhythm indicates, as used by Hans Werner Henze.

Indicates that a note is held for much longer than the rhythm indicates.

Indicates that a note or rest is held until the next synchronization point in asynchronous music, as used by Benjamin Britten.

Fermatas can be divided into two styles. Because their meanings overlap, it can be confusing for players if both styles are used in a single project.

Style	Very short fermata	Short fermata	Fermata	Long fermata	Very long fermata
Normal					
Henze	N/A				N/A

RELATED LINKS

[Holds and pauses popover](#) on page 225

[Changing existing items](#) on page 280

Types of breath marks

There are different types of breath marks available in Dorico Pro. Breath marks indicate a suitable place for a player to take a breath, or create a musical effect like a breath.

Comma-like



Tick-like



Upbow-like



Salzedo



Types of caesuras

There are different types of caesuras available in Dorico Pro. All caesuras indicate a break in sound, but different types are often needed for different styles of musical scores.

Caesura



Two diagonal slashes

Thick caesura



Two thick diagonal slashes

Short caesura



Two straight, vertical slashes

Curved caesura



Two curved diagonal slashes

If you intend to communicate a specific length of hold or gap with each type of caesura, we recommend that you consider adding a legend, as different players may interpret these symbols differently.

RELATED LINKS

[Changing existing items](#) on page 280

Project-wide engraving options for holds and pauses

You can find options for the project-wide positions of holds and pauses on the **Holds and Pauses** page in **Engrave > Engraving Options**.

The options on the **Holds and Pauses** page allow you to change the default positions and placement of holds and pauses, including the placement of fermatas in multiple-voice contexts.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Positions of holds and pauses](#) on page 666

Positions of holds and pauses

Holds and pauses are placed above the staff by default in single-voice contexts, and are shown on all staves at the closest rhythmic position available, for example, if a single staff has a fermata on the last beat in the bar, it is shown above the bar rests on the other empty staves. For staves with multiple voices, fermatas are also shown inverted below the staff.

You can move holds and pauses to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move holds and pauses graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

You can change the default positions of all holds and pauses project-wide, and values for the minimum gaps around holds and pauses, on the **Holds and Pauses** page in **Engrave > Engraving Options**.

Fermatas

Fermatas are positioned horizontally so that they are centered on noteheads, regardless of the stem direction of notes.



Fermatas affect the overall tempo of the piece, so all players must be able to see where they occur. Therefore, fermatas are shown on all staves at the same rhythmic position, or the rhythmic position of the note, chord, or rest that corresponds with the end of the fermata, including over a bar rest if a staff has no notes in that bar.

You can change the minimum distance between fermatas and the staff on the **Holds and Pauses** page in **Engrave > Engraving Options**.

Breath marks

Breath marks are placed above the top line of the staff, at the end of the note to which they apply; that is, they appear just before the following note.

Breath marks apply only to the staff to which they were added, as they do not affect the overall tempo, but instead only indicate to a single player or group of players a suitable place to break their line in order to breathe.

You can change the minimum distance between breath marks and the staff, and between breath marks and the next note or rest, on the **Holds and Pauses** page in **Engraving Options**.

Caesuras

Caesuras are positioned at the top of the staff, with the top staff line passing through the middle of the caesura and the bottom of the caesura resting on the second staff line. They are commonly placed at the end of a bar, before the barline.

Caesuras are automatically added to all staves at the same rhythmic position, immediately to the left of the notehead or barline to which they were input. They are not linked to noteheads, and adjust note spacing to create a clear gap.

You can change the size of the gap to the right of caesuras on the **Holds and Pauses** page in **Engraving Options**.

RELATED LINKS

[Project-wide engraving options for holds and pauses](#) on page 666

[Moving holds and pauses graphically](#) on page 669

Multiple holds and pauses at the same rhythmic position

Because fermatas apply to all staves, only one type of fermata can exist at the same rhythmic position. For example, you cannot have a short fermata on one staff and a long fermata at the same rhythmic position on another staff.

A Britten curlaw can be used at the same rhythmic position as another kind of fermata, but it cannot exist simultaneously with any breath mark. This is the only exception in Dorico Pro.

Caesuras can co-exist with any type of breath mark, but you cannot have a caesura and a fermata at the same rhythmic position.

Changes to fermatas on single staves

Changing the type of fermata or caesura on one staff automatically changes the type on all staves at that rhythmic position, as a pause at one particular rhythmic position can only be of one duration.

However, if you override a particular fermata on one staff, for example, by changing it to a Britten curliew or a breath mark, changing the existing fermata on another staff does not change the marking on the overridden staff. Deleting the marking on the overridden staff reverts that marking to match the fermata on the other staves.

For example, changing a fermata to a breath mark changes the marking for only that staff. That note is not affected when the type of fermata on the other staves at that rhythmic position is changed.



The bottom staff is overridden to show a breath mark instead of a fermata.



The fermata is changed to a very short fermata, but the bottom staff is exempt as it was overridden to show a breath mark.



Deleting the breath mark from the bottom staff returns it to showing the fermata currently chosen for that rhythmic position.

Moving holds and pauses rhythmically

You can move holds and pauses to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the holds and pauses you want to move.

NOTE

When using the mouse, you can only move one hold or pause rhythmically at a time.

2. Move the holds and pauses according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the hold or pause to the right/left.

RESULT

The selected holds and pauses are moved to new rhythmic positions on each staff where they appear, even if their position does not appear to move. For example, if one staff has a bar rest, the rhythmic position of the hold or pause moves, but the hold or pause still appears above the rest.

NOTE

Only one type of hold or pause can exist at each rhythmic position. If a hold or pause passes over another hold or pause as part of its move, the existing hold or pause is deleted.

You can undo this action, but any holds and pauses deleted in the process are only restored if you moved the hold or pause using the keyboard.

Moving holds and pauses graphically

You can move holds and pauses graphically without changing the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the holds and pauses you want to move.
2. Move the holds and pauses in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The holds and pauses are moved to new graphical positions.

TIP

Start offset in the **Holds and Pauses** group of the Properties panel is activated automatically when you move fermatas and breath marks. You can use this property to move fermatas and breath marks by changing the values in the value fields. However, you cannot move caesuras using this property.

- **Offset X** moves fermatas and breath marks horizontally.
- **Offset Y** moves fermatas and breath marks vertically.

Deactivating the property resets the selected fermatas and breath marks to their default positions.

Changing the placement of fermatas relative to the staff

Fermatas are normally placed above the staff, but you can change their staff-relative placement individually.

PROCEDURE

1. In Engrave mode, select the fermatas whose staff-relative placement you want to change.
 2. In the Properties panel, activate **Placement** in the **Holds and Pauses** group.
 3. Choose one of the following options:
 - **Above**
 - **Below**
-

RESULT

The selected fermatas appear above/below the staff.

Changing the number of fermatas per staff

You can change the maximum number of fermatas that appear in each staff at individual positions when there are multiple voices on a staff.

PROCEDURE

1. Select a fermata or multiple fermatas. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Max. fermatas per staff** in the **Holds and Pauses** group.
3. Select one of the following options from the menu:
 - **One per voice**
 - **One per each side of staff**
 - **One per staff**

RESULT

The number of fermatas shown at the selected positions is changed.

TIP

You can change the maximum number of fermatas that can appear on a single staff project-wide on the **Holds and Pauses** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for holds and pauses](#) on page 666

Positioning fermatas on barlines

You can position individual fermatas over a barline instead of over a note to indicate a gap before the start of the following bar.

NOTE

Fermatas cannot be positioned on barlines if **Max. fermatas per staff** is also activated.

PROCEDURE

1. Select the fermatas you want to position over barlines. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Attach to barline** in the **Holds and Pauses** group.

RESULT

The selected fermatas are positioned above the barline at the end of the bars they were in originally, appearing only above staves that are not joined by the barline. Depending on the instrumentation, this may mean they only appear at the top of the system.

Deactivating **Attach to barline** returns the selected fermatas to their default positions.

RELATED LINKS

[Changing the number of fermatas per staff](#) on page 670

Key signatures

Key signatures are the markings that show the current key of music by indicating which notes in the scale for that key are sharpened or flattened. They are shown at the start of each system on every applicable staff.

Using key signatures saves space, as by indicating which notes are generally going to be sharp or flat in the music in one group at the start of each system, these notes do not need an accidental beside them every time they occur.

By default, key signatures apply to the whole score. However, there are certain situations where some parts require their own key signature, independently of the rest of the ensemble. You can input key signatures that apply to all staves or only apply to single staves in Dorico Pro.

Traditionally, accidentals are organized following the pattern of the circle of fifths, which is different for sharp keys and flat keys.

In Dorico Pro, key signatures exist within the overarching tonality system for your project. The two tonality systems that come as standard in Dorico Pro are 12-EDO and 24-EDO.

Once you have selected or created a tonality system for your project, you can create custom key signatures and custom accidentals within that tonality system.

RELATED LINKS

[Tonality systems](#) on page 673

[Input methods for key signatures](#) on page 186



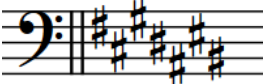
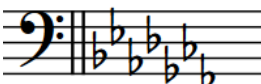
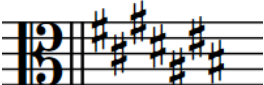
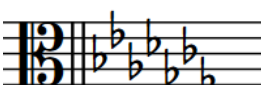
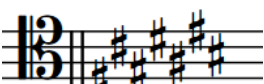
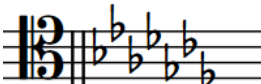
Key signature arrangements

Dorico Pro automatically follows conventions for the placement and appearance of key signatures, such as showing accidentals in the accepted circle of fifths order and positioning key signatures between clefs and time signatures.

The order in which accidentals are shown in key signatures is different for sharp keys and flat keys.

- For sharps: F#, C#, G#, D#, A#, E#, B#
- For flats: Bb, Eb, Ab, Db, Gb, Cb, Fb

Accidentals are arranged automatically in these orders in Dorico Pro for all standard Western key signatures. There is an accepted pattern for the placement of accidentals in a key signature, so that they fit inside the staff according to the current clef. The pattern of accidentals is the same in all clefs, apart from the tenor clef, which requires sharp key signatures to follow a different, ascending pattern to ensure the accidentals fit on the staff.

Clef	Arrangement of sharps	Arrangement of flats
Treble		
Bass		
Alto		
Tenor		

NOTE

For custom, non-standard key signatures, you can determine the order in which accidentals appear in the **Edit Custom Key Signature** dialog.

RELATED LINKS

[Custom key signatures](#) on page 681

[Changing the barline shown at key signature changes](#) on page 512

[Positions of key signatures](#) on page 684

Types of key signatures

There are four types of key signatures in Dorico Pro, which can all be input, moved, and deleted in the same ways.

The four types are:

- Major
- Minor
- Open key, or atonal
- No key signature (for specific instruments, such as horn or percussion)

Major/Minor key signatures

The key signature for a major key appears the same as the key signature for its relative minor, and vice versa. For example, B \flat major has two flats in its key signature. This is the same number of flats as for G minor, which is the relative minor key to B \flat major. The difference is that music in G minor usually has sharpened Fs, as the seventh degree of the scale is raised in minor keys. Therefore, if you input an F \sharp /G \flat after a G minor key signature, Dorico Pro prefers to spell it as F \sharp in most cases, in order to follow the convention of harmonic minor keys.



A B flat major scale following a B flat major key signature



A G minor scale following a G minor key signature

Open key signature

Although open, or atonal, key signatures appear the same as C major or A minor key signatures because none shows any accidentals, open key signatures behave differently.

In an open key signature, the spelling of accidentals is based on the current direction of the music. If the music is rising, sharps are preferred, whereas if the music is falling, flats are preferred. There is no hierarchy of pitches in an open key signature, so the same pitch might be spelled differently each time it appears depending on its context, even within a few bars.

In a C major or A minor key signature, accidentals are spelled based on the context of the major or minor tonality implied. For example, in C major, sharps in general are preferred, whether the music is going up or going down. Similarly, in A minor, G# in particular is preferred, whether the music is going up or going down, as G# is the leading note in A minor.

No key signature

Some instruments are accustomed to seeing no key signatures in their parts, no matter the overall key of the piece. These instruments include timpani, percussion, horn, trumpet, and sometimes the harp. If you have added the **No key sig** version of these instruments, then no key signature is shown in their parts, even if they are a transposing instrument, such as horn or trumpet.

Any pitch can be input into these instruments, and they show accidentals if needed.

RELATED LINKS

[Adding instruments to players](#) on page 104

Project-wide engraving options for key signatures

You can find options for the project-wide appearance of key signatures on the **Key Signatures** page in **Engrave > Engraving Options**.

The options on the **Key Signatures** page allow you to change the key signature cancellation style and the spacing gaps between accidentals in key signatures.

TIP

If you want to change the barline shown at key signature changes, you can find this option on the **Barlines** page in **Engraving Options**.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Changing the barline shown at key signature changes](#) on page 512

Tonality systems

The term “tonality system” is used in Dorico Pro to encompass three crucial elements that together make up the concept of tonality.

The three elements that make up tonality systems are:

- A number of equal divisions of the octave, or EDO. For example, standard Western scales with semitone steps have 12-EDO.
- A set of accidentals. This allows you to notate how much a note is raised or lowered. This can be a traditional or a custom set of accidentals, either selected from the wide variety available or of your own design.
- A key signature. This can be a traditional Western key signature, or a custom key signature of your own design.

RELATED LINKS

[Custom tonality systems](#) on page 675

[Changing the tonality system](#) on page 674

[Playback of custom tonality systems](#) on page 683

Equal Division of the Octave (EDO)

EDO stands for Equal Division of the Octave: the number of equal pieces, or intervals, into which an octave is divided. In Dorico Pro, you can create any number of divisions of an octave and design custom key signatures and custom accidentals for each tonality system.

Traditional Western harmony is based on equal temperament, another method used to describe tonality systems, or 12-EDO, as the traditional scale from C-C is made up of twelve steps spread across the seven notes in the scale.

When you edit the 12-EDO tonality system in the **Edit Tonality System** dialog, you can see how these steps are divided across each intervals in the scale. For example, between the notes A and B there are two steps, but between B and C there is one step. This is because in 12-EDO, each step represents a semitone, and there are two semitones between A and B according to standard equal temperament, but only one semitone between B and C.

To have the smallest step in the tonality system be a quarter tone rather than a semitone, the octave must be divided into twice as many equal divisions as 12-EDO. Therefore, to be able to use quarter tone accidentals in a project, you must choose the **Equal temperament (24-EDO)** tonality system for the project.

Although you can divide the octave into any number of divisions, to be able to show a standard Western key signature, the number of equal divisions in the octave must be divisible by 12.

EDO also allows you to map non-conventional Western pitches on to the seven note names A-G, and create a coherent notation to express that, because there is no limit to how you can divide the octave. For example, Turkish music is traditionally divided in 53-EDO, the division of which is usually spread across the notes A-A with the following number of divisions for each interval: 9-4-9-9-9-4-9.

RELATED LINKS

[Custom tonality systems](#) on page 675

[Edit Tonality System dialog](#) on page 675

Changing the tonality system

You can change the tonality system used in your project at key signature changes, including changing to a custom tonality system you have created.

PREREQUISITE

If you want to use a tonality system other than **Equal temperament (12-EDO)** or **Equal temperament (24-EDO)**, you have created a custom tonality system.

PROCEDURE

1. In Write mode, select an item at the position from which you want to change the tonality system.
 2. Without deselecting the item, select the tonality system you want from the menu in the **Tonality System** section of the Key Signatures, Tonality Systems, and Accidentals panel.
 3. Input a new key signature.
-

RESULT

The tonality system is changed from the key signature you input until the next key signature with a tonality system change or the end of the flow.

If you selected a tonality system that allows microtonal accidentals, such as **Equal temperament (24-EDO)**, microtonal accidentals become available in the **Accidentals** section of the Key Signatures, Tonality Systems, and Accidentals panel.

RELATED LINKS

[Input methods for key signatures](#) on page 186

[Inputting microtonal accidentals](#) on page 493

Custom tonality systems

Custom tonality systems allow you to specify a unique number of divisions of the octave for your project. This can be useful for music not based on traditional Western harmony. In Dorico Pro, you can design your own custom accidentals and combine them into custom key signatures within each custom tonality.

You can find existing tonality systems in your project in the **Tonality System** section of the Key Signatures, Tonality Systems, and Accidentals panel.

Dorico Pro provides two tonality systems in each project by default: **Equal temperament (12-EDO)** and **Equal temperament (24-EDO)**.

You can create custom tonality systems and edit existing tonality systems in the **Edit Tonality System** dialog

RELATED LINKS

[Custom divisions of the octave](#) on page 677

[Custom accidentals](#) on page 677

[Custom key signatures](#) on page 681

[Key Signatures, Tonality Systems, and Accidentals panel](#) on page 187

Edit Tonality System dialog

The **Edit Tonality System** dialog allows you to create custom tonality systems and edit existing tonality systems.

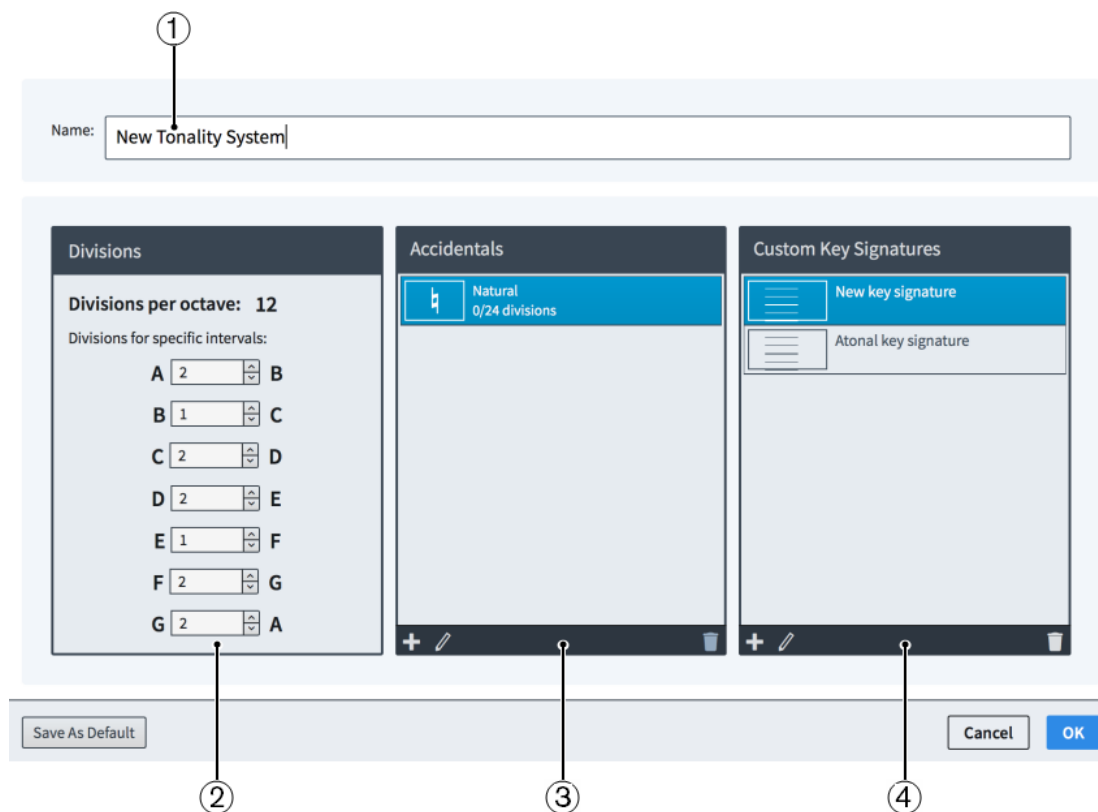
You can open the **Edit Tonality System** dialog in the following ways:

- To create a new tonality system, click **New Tonality System** in the **Tonality System** section of the Key Signatures, Tonality Systems, and Accidentals panel.



- To edit an existing tonality system, click **Edit Tonality System** in the **Tonality System** section of the Key Signatures, Tonality Systems, and Accidentals panel.





Edit Tonality System dialog

The **Edit Tonality System** dialog contains the following sections:

- 1 Name**
Allows you to enter a name for a new tonality system, or edit the name of an existing custom tonality system you created.
- 2 Divisions**
Allows you to specify how many divisions of the octave you want assigned to each interval.
- 3 Accidentals**
Displays the accidentals currently available for the selected tonality system. The two buttons at the bottom allow you to edit existing accidentals, and to create new accidentals.
- 4 Custom Key Signatures**
Displays the key signatures currently available for the selected tonality system. The two buttons at the bottom allow you to edit existing key signatures, and to create new key signatures.



New Accidental/New Key Signature button



Edit Accidental/Edit Key Signature button

Once you have decided on the number of divisions your octave has, and how many divisions are assigned to each interval, in the **Divisions** section of the dialog, you can assign existing and create custom accidentals for each raising/lowering pitch delta you want to notate in the **Edit Accidental** dialog.

You can arrange these accidentals into a custom key signature in the **Edit Custom Key Signature** dialog.

RELATED LINKS

[Custom tonality systems](#) on page 675

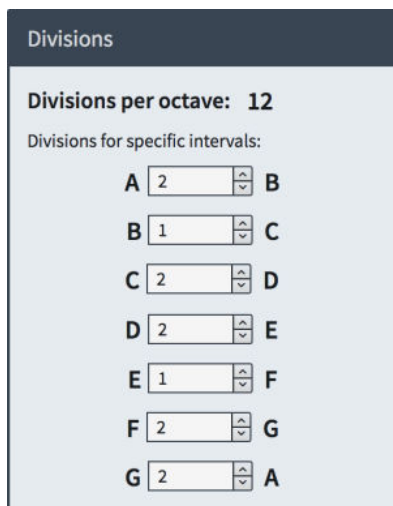
[Edit Accidental dialog](#) on page 678

[Edit Custom Key Signature dialog](#) on page 682

Custom divisions of the octave

You can change the number of divisions of the octave for an existing tonality system, or create a new tonality system with as many divisions of the octave as you like.

In the **Divisions** section of the **Edit Tonality System** dialog, you can change the number of divisions assigned to each interval. The total number of divisions of an octave, which is shown at the top of the section, is updated automatically as you change the number of divisions.



The screenshot shows a dialog box titled "Divisions". At the top, it says "Divisions per octave: 12". Below that, it says "Divisions for specific intervals:". There are seven rows, each representing an interval between two notes. Each row has a note label on the left, a text input field with a spinner, and another note label on the right. The intervals and their values are: A-B (2), B-C (1), C-D (2), D-E (2), E-F (1), F-G (2), and G-A (2).

The **Divisions** section of the **Edit Tonality System** dialog, as it appears when editing the existing 12-EDO tonality system.

In Equal temperament, or 12-EDO, the total number of divisions is 12. There are 2 divisions between A and B, 1 division between B and C, and so on. This follows the standard Western pattern which you can also see in the pattern of white and black keys on a keyboard.

Although you can divide the octave into any number of divisions, the number of equal divisions in the octave must be divisible by 12 to be able to show a standard Western key signature in Dorico Pro.

RELATED LINKS

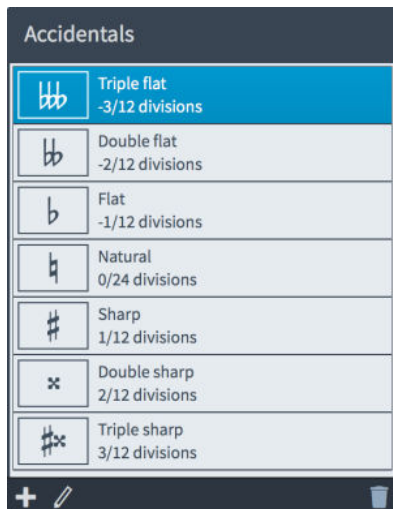
[Custom key signatures](#) on page 681

[Edit Tonality System dialog](#) on page 675

Custom accidentals

Custom accidentals can contain traditional accidental glyphs but also other musical symbols, text, and graphics. This allows you to design custom accidentals that express specific pitch deltas in your custom tonality systems.

You can find all accidentals available in the current tonality system in the **Accidentals** section of the **Edit Tonality System** dialog.



The **Accidentals** section of the **Edit Tonality System** dialog, as it appears when editing the existing 12-EDO tonality system.

You can create new and edit existing custom accidentals in the **Edit Accidental** dialog.

NOTE

You can edit any accidental that is included in either of the default tonality systems that come with Dorico Pro. New tonality systems start with a natural accidental, which you can edit or delete.

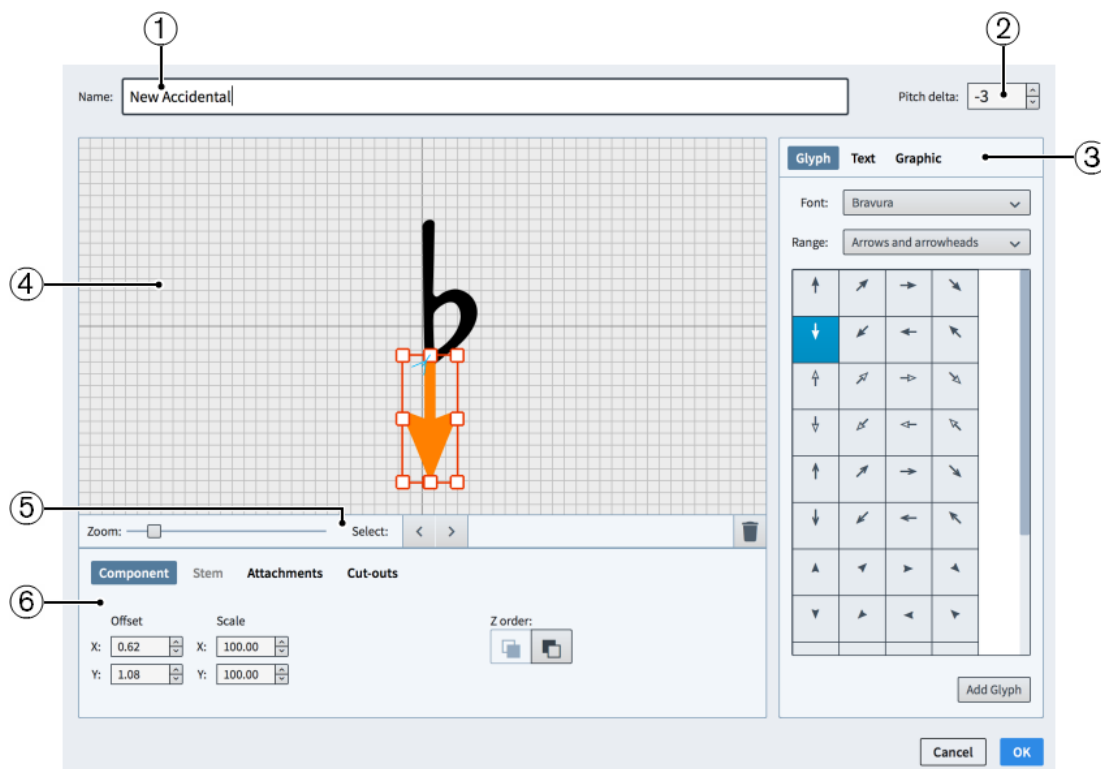
RELATED LINKS

[Edit Tonality System dialog](#) on page 675

Edit Accidental dialog

The **Edit Accidental** dialog allows you to create new and edit existing custom accidentals.

- You can open the **Edit Accidental** dialog by clicking either **New Accidental** or **Edit Accidental** in the action bar at the bottom of the **Accidentals** section of the **Edit Tonality System** dialog.



Edit Accidental dialog

The **Edit Accidental** dialog contains the following sections:

1 Name

Allows you to enter a name for your accidental.

2 Pitch delta

Allows you to set a value for what effect this accidental has on notes to which it is added. For example, a pitch delta of 2 raises notes by two equal divisions of the octave.

3 Accidental component selector

Allows you to choose components to add to your accidental. You can add different types of components by clicking the respective tab titles.

- **Glyph**, for example, ♯ or ♭. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the accidental.

NOTE

A full list of the different ranges of glyphs is available on the SMuFL website.

- **Text**, including numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the accidental.
- **Graphic**: Allows you to load a new graphics file, or select an existing graphic from the **Select existing** list, in SVG, PNG, or JPG format. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the accidental.

4 Editor

Allows you to arrange and edit the components that make up your accidental. You can use the controls at the bottom of the dialog to edit and arrange accidental components.

5 Editor action bar

Contains selection and view options for the editor.

- **Zoom**
Allows you to change the zoom level in the editor.
- **Select**
Allows you to select the next/previous component.
- **Delete**



Deletes the selected component.

6 Controls

Contains controls that allow you to edit individual components. Controls are divided into tabs according to the aspect of the selected component they affect. For accidentals, only the **Component**, **Attachments**, and **Cut-outs** tabs are available as the **Stem** tab does not apply to accidentals.

The **Component** tab contains the following options:

- **Offset:** Controls the position of the selected component. **X** moves it horizontally, **Y** moves it vertically.
- **Scale:** Controls the size of the selected component. For graphics, **X** controls its width, **Y** controls its height.

NOTE

Although some components scale their height and width independently, others retain their aspect ratio, meaning only one value affects their overall size.

- **Z order:** Allows you to **Bring Forward** or **Send Backward** the selected component in relation to other components when they overlap.

The **Attachments** tab is only available if the accidental comprises at least two separate components. It contains the following options:

- **Attachment from:** Sets the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.
- **Attachment to:** Sets the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

The **Cut-outs** tab allows you to mark individual corners within an accidental component that can overlap with other accidentals, for example, in order to position accidentals closer together in dense chords. It contains the following options for each of the four corners, which are labelled according to their compass direction:

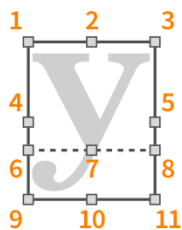
- **Width:** Sets the width of the cut-out area.
- **Height:** Sets the height of the cut-out area.
- **Add:** Adds a cut-out to the corresponding corner.



- **Delete:** Removes the cut-out from the corresponding corner.



There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.



The attachment points have the following names in the **Edit Accidental** dialog:

- 1 **Top Left**
- 2 **Top Center**
- 3 **Top Right**
- 4 **Middle Left**
- 5 **Middle Right**
- 6 **Baseline Left** (text only)
- 7 **Baseline Center** (text only)
- 8 **Baseline Right** (text only)
- 9 **Bottom Left**
- 10 **Bottom Center**
- 11 **Bottom Right**

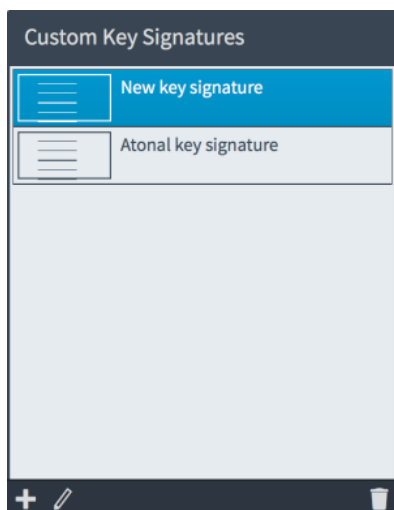
RELATED LINKS

[Edit Tonality System dialog](#) on page 675

Custom key signatures

Custom key signatures can comprise traditional accidentals in a different order, or custom accidentals you have designed in a specific order for your requirements.

You can find all key signatures available in the current tonality system in the **Custom Key Signatures** section of the **Edit Tonality System** dialog.



The **Custom Key Signatures** section of the **Edit Tonality System** dialog, as it appears when creating or editing custom tonality systems.

NOTE

If you edit one of the default tonality systems that come with Dorico Pro, no key signatures are available to edit in this section. However, you can create new key signatures within one of the default tonality systems.

You can create new and edit existing custom key signatures for both new and existing tonality systems in the **Edit Custom Key Signature** dialog.

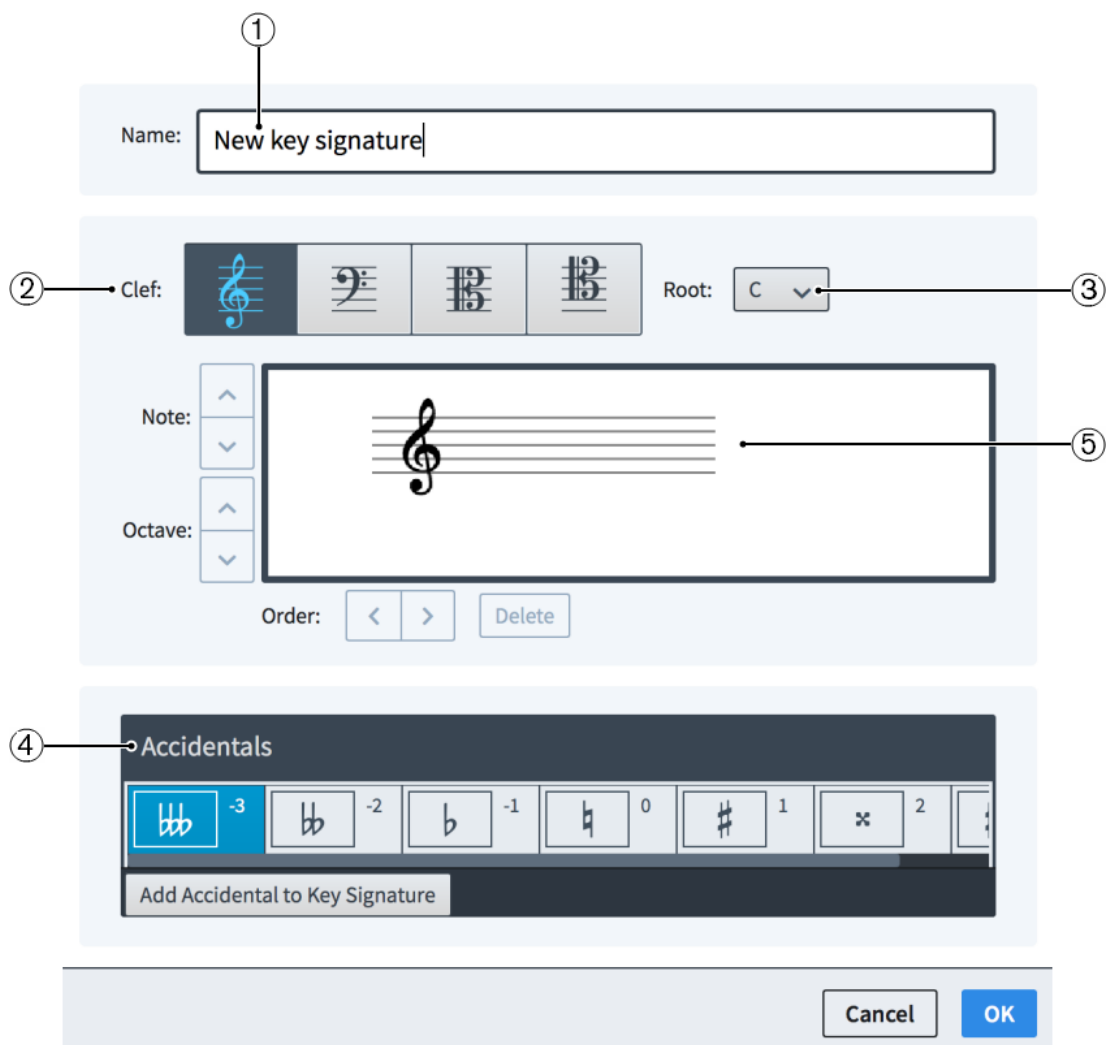
RELATED LINKS

[Edit Tonality System dialog](#) on page 675

Edit Custom Key Signature dialog

The **Edit Custom Key Signature** dialog allows you to create new and edit existing custom key signatures.

- You can open the **Edit Custom Key Signature** dialog by clicking either **New Key Signature** or **Edit Key Signature** in the action bar in the **Custom Key Signatures** section of the **Edit Tonality System** dialog.



Edit Custom Key Signature dialog

The **Edit Custom Key Signature** dialog contains the following sections:

1 **Name**

Allows you to enter a name for your key signature.

2 Clef

Shows how your key signature appears in treble clef, bass clef, alto clef, and tenor clef. You can edit your key signature in any of these clefs.

3 Root

Allows you to select the base note of your key signature from the menu.

4 Accidentals

Allows you to add accidentals from your tonality system to the key signature, including custom accidentals you have created in the **Edit Accidental** dialog. Click **Add Accidental to Key Signature** to add the selected accidental to the key signature.

5 Editor

Allows you to arrange accidentals in your preferred order using the **Order** arrow buttons, and change their position on the staff using the **Note** arrow buttons and **Octave** arrow buttons.

RELATED LINKS

[Edit Tonality System dialog](#) on page 675

[Edit Accidental dialog](#) on page 678

Playback of custom tonality systems

Dorico Pro can play back custom tonality systems with any number and distribution of octave divisions.

Dorico Pro achieves full microtonal playback by calculating the appropriate pitch delta for every note, whether or not it is written with an accidental. Depending on the virtual instruments used for playback, Dorico Pro produces microtonal playback in different ways.

- For HALion virtual instruments, Dorico Pro uses VST 3 Note Expression.
- For all other instruments, including NotePerformer, Dorico Pro uses the VST 2 detune parameter.

RELATED LINKS

[Custom tonality systems](#) on page 675

[Changing the playback tuning](#) on page 435

Deleting key signatures

You can delete key signatures without affecting the pitches of notes. Where appropriate, pitches are shown with accidentals after you have deleted a key signature.

NOTE

- You cannot hide key signatures as they provide crucial information about the pitch of notes. If you do not want to see a key signature, you can input an open key signature or delete all key signatures from the flow or project.
- Instruments that do not usually have key signatures, such as timpani or horn, have a **No key sig** version in Dorico Pro which ensures no key signature is shown for those instruments. You can select **No key sig** versions of instruments when adding/changing instruments in Setup mode.

PROCEDURE

1. In Write mode, select any of the following that you want to delete:
 - Key signatures

- Key signature signposts of key signatures with no accidentals in the current layout

2. Press **Backspace** or **Delete**.

RESULT

The selected key signatures are deleted from the score. The pitches of notes in the bars following the deleted key signatures are not changed, but the notes are shown with accidentals if the deleted key signature indicated an accidental for them, up until the next existing key signature or the end of the flow.

NOTE

If you delete the only key signature in the flow, your music appears without a key signature, with accidentals shown as necessary. This is treated as if there were an open key signature rather than a key signature of A minor or C major.

RELATED LINKS

[Input methods for key signatures](#) on page 186

[Adding instruments to players](#) on page 104

[Changing instruments](#) on page 106

Multiple simultaneous key signatures

You can have multiple key signatures simultaneously by inputting each one onto a single staff.

NOTE

You do not have to input multiple simultaneous key signatures if you have transposing instruments in your score. Dorico Pro handles instrument transpositions automatically.

You can check the transposition of transposing instruments by choosing **Edit > Transposed Pitch** to see the music in your layout at written pitch rather than concert pitch.

Alternatively, you can open the individual part layout of a transposing instrument and compare it to the full score.

RELATED LINKS

[Input methods for key signatures](#) on page 186

Positions of key signatures

Key signatures are positioned between clefs and time signatures by default, and are shown on every staff that requires a key signature. They are not shown on staves for unpitched instruments.

Key signatures are shown at the start of a piece and at the start of subsequent movements, even if the music carries straight on and in the same key. Unlike time signatures, key signatures appear at the start of every system in full score and part layouts, even if the key signature has not changed. They apply until the end of the flow or until the next key signature change, whichever comes first.



The correct position for key signatures is between clefs and time signatures.

If a key signature change occurs during a piece or movement, it should be placed immediately after a barline. It is customary to have a double barline where a key signature change takes place, which is the default setting in Dorico Pro. However, you can change the default barline shown at key signature changes.



Examples of key signatures positioned after double barlines

You can move key signatures to new rhythmic positions in Write mode. They are positioned according to your settings on the **Key Signatures** and **Spacing Gaps** pages in **Engrave > Engraving Options**.

If you find you need to move individual key signatures graphically, you can do this in Engrave mode, but this does not change their rhythmic positions.

If you want to adjust the default position of key signatures relative to notes or barlines, you must change the project-wide values for spacing gaps on the **Spacing Gaps** page in **Engraving Options**.

RELATED LINKS

[Key signature arrangements](#) on page 671

[Moving key signatures rhythmically](#) on page 686

[Moving key signatures graphically](#) on page 686

[Changing the barline shown at key signature changes](#) on page 512

Project-wide spacing gaps for key signatures

Options for spacing gaps allow you to change the minimum gaps between objects project-wide, including key signatures.

Among the available values on the **Spacing Gaps** page in **Engrave > Engraving Options**, the following minimum values directly relate to key signatures:

- **Gap after barline before clef, key or time signature**
- **Gap after cancellation naturals**
- **Gap after key signature**
- **Gap after end repeat barline**

NOTE

Other values may have an effect on the position of key signatures, but they also affect other objects.

On the **Key Signatures** page in **Engraving Options**, you can change the following gaps:

- **Gap between accidentals in key signatures**
- **Gap between cancellation naturals**

RELATED LINKS

[Engraving Options dialog](#) on page 299

Moving key signatures rhythmically

You can move key signatures to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the key signatures you want to move.

NOTE

When using the mouse, you can only move one key signature rhythmically at a time.

2. Move the selected key signatures according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the key signature to the right/left.
-

RESULT

The key signatures are moved to new rhythmic positions. They take effect from their new positions until the next key signature, or the end of the flow, whichever comes first.

NOTE

- Key signatures can only be moved along the staff. If you want to move a key signature across staves, you must delete the key signature and input a new key signature on the other staff.
- Only one key signature can exist at each rhythmic position, except for key signatures that only apply to single staves. If a key signature passes over another key signature as part of its move, the existing key signature is deleted and replaced by the key signature being moved.

You can undo this action, but any key signatures deleted in the process are only restored if you moved the key signature using the keyboard.

RELATED LINKS

[Input methods for key signatures](#) on page 186

Moving key signatures graphically

You can make individual changes to the graphical position of key signatures without affecting the positions of any other items.

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select the square handle above the key signature you want to move.



A smaller circular handle appears beside the key signature.

3. Press **Tab** to select the circular handle.



4. Move the handle in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.

NOTE

- If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.
 - You cannot move note spacing handles with the mouse, you can only move them using the keyboard.
-

RESULT

The key signature is moved graphically to the right/left.

TIP

When **Graphic Editing** is selected in the Engrave toolbox, you can also change **Spacing offset** in the **Key Signatures** group of the Properties panel to move key signatures horizontally. However, this also affects global note spacing at the rhythmic position of the key signature, including moving cancellation naturals.

You can also move cancellation naturals graphically, independently of the subsequent key signature and without affecting the spacing of any other item using the **Cancellation naturals X offset** property.

RELATED LINKS

[Note spacing](#) on page 381

Transposing key signatures alongside selections

You can transpose key signatures at the same time as transposing notes, which transposes both key signatures and notes by the same degree.

PROCEDURE

1. In Write mode, make a selection that includes both a key signature change and notes.
 2. Choose **Write > Transpose** to open the **Transpose** dialog.
 3. In the **Transpose** dialog, adjust the parameters required for your transposition, such as interval and quality.
 4. Activate **Transpose key signatures**.
It is activated automatically if your selection includes a key signature.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

All notes and key signatures within the selection are transposed by the degree you set in the dialog.

NOTE

If a key signature included in the transposed selection applies to all staves, then it is transposed on all staves in the layout, even if your selection did not include all staves.

Individual key signatures, that is, key signatures added only to single staves using the **Alt** key, are transposed if included in a selection, but this does not affect any other staff in the layout.

RELATED LINKS

[Selecting/Deselecting notes and items individually](#) on page 273

[Large selections](#) on page 274

[Transpose dialog](#) on page 175

Enharmonic equivalent key signatures

Enharmonic equivalent key signatures are keys with different names that include the same pitches, such as C# major and D \flat major. Dorico Pro follows the convention for transposing to keys with the same type of accidental as the previous key, except where the enharmonic equivalent key signature has fewer accidentals.

When transposing selections of notes, Dorico Pro prefers keys with the same type of accidental as the previous key signature. When choosing key signatures for transposing instruments, Dorico Pro prefers key signatures with the same type of accidental as the current concert pitch key.

However, there are some instances where you might prefer to transpose to a key with a different type of accidental as it has fewer accidentals than the enharmonic equivalent key. For example, C# major has seven sharps, whereas the enharmonic equivalent key of D \flat major only has five flats. This means the player has to remember the accidentals for fewer notes.

Transposing to an enharmonic equivalent key with fewer accidentals can have the added benefit of improving readability by avoiding double sharps or double flats. For example, transposing music from F# to G# requires the leading note to be spelled as an F $\sharp\sharp$, but transposing to A \flat instead means the leading note is G \flat .



G# major requires a double sharp leading note



A# major, the enharmonic equivalent to G# \flat , does not require a double sharp leading note

By default, Dorico Pro selects an enharmonic equivalent key signature if it has fewer accidentals. However, you can change this setting by deactivating **Prefer enharmonic equivalent key signatures with fewer accidentals** in the **Transposition** section of the **Accidentals** page in **Write > Notation Options**.

How key signatures affect transposing instruments

If there is a key signature in the full score, it is transposed for a transposing instrument by the same degree as the transposing interval for the instrument. For example, in a project in E major, a B \flat clarinet part has a key of F# major, as a B \flat clarinet sounds a whole tone below its notated pitch.

Instruments that do not show a key signature

Some instruments are accustomed to seeing no key signatures in their parts, no matter the overall key of the piece. These instruments include timpani, percussion, horn, trumpet, and sometimes the harp. If you have input the **No key sig** version of these instruments, then no key signature is shown in their parts, even if they are a transposing instrument, such as horn or trumpet.

You can still transpose music in the staves of these instruments, but they show accidentals as necessary, instead of showing a key signature.

RELATED LINKS

[Notation Options dialog](#) on page 139

[Transpose dialog](#) on page 175

[Transposing selections](#) on page 176

[Adding instruments to players](#) on page 104

Cautionary key signatures

When a key signature change occurs at a system break, either in the score or in a part, the new key signature is shown at the end of the first system as well as at the start of the new system.

This is sometimes considered a “cautionary key signature”, as players become used to seeing the key signature at the start of the system and therefore may miss a change of key signature if it is not conspicuously shown at the end of systems.

In Dorico Pro, as key signature changes occur immediately after barlines, the key signature at the end of a system is the key signature itself, rather than a cautionary key signature.

If the music is separate enough that you do not want to see a key signature at the end of a system and you cannot change where the system break occurs, you can separate the music by creating a new flow at the point of the system break.

RELATED LINKS

[Flows](#) on page 117

[Splitting flows](#) on page 289

[Formatting panel](#) on page 292

[Inserting system breaks](#) on page 359

Lyrics

In Dorico Pro, the term lyrics is used for all text that is sung by singers.

To differentiate sung text from any other forms of text that often appear in musical scores, other forms of text are referred to as performance instructions, tempos, dynamics, and so on.

In Dorico Pro, lyrics were designed so that it is simple to make changes to existing lyrics without having to re-input new lyrics each time. For example, you can change the syllable type of lyrics so that they are either followed or not followed by a hyphen.

Lyrics are organized into lines to ensure consistent horizontal alignment and to make showing verse numbers simple and accurate. There are different types of lyric lines for lyrics with different purposes, and the appearance of lyrics changes depending on their line type. For example, lyrics in a chorus line are shown in an italic font.

When inputting lyrics, you can use key commands to switch between lyric lines, to change on which side of the staff lyrics are input, and to switch the lyric style between normal lyrics, chorus lyrics, and translation lyrics. You can also change the type of lyrics after they have been input.

You can input multiple lines of lyrics, chorus lyrics, and translations, both above or below staves.

You can filter lyrics according to their type and lyric line by choosing **Edit > Filter > Lyrics** and choosing a lyric type or lyric line from the menu.

RELATED LINKS

[Types of lyrics](#) on page 692

[Lyric line numbers](#) on page 701

[Filters for lyrics](#) on page 691

[Inputting lyrics](#) on page 246

[Changing the syllable type of existing lyrics](#) on page 694

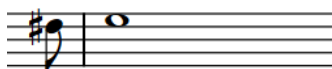
General placement conventions for lyrics

Lyrics are generally placed below the staff to which they apply, and are positioned so that they align horizontally with their corresponding notehead.

A plain font is generally used for normal lyrics, and an italic font is generally used for chorus lyrics and translation lyrics in order to differentiate them.

The horizontal spacing of lyrics must be wide enough so that words or syllables do not overlap with the words or syllables on either side. For this reason, note spacing must sometimes be adjusted to accommodate lyrics.

To reduce how severely the note spacing is changed to accommodate lyrics, which can distort the appearance of rhythms, Dorico Pro allows the alignment of some lyrics to be adjusted relative to their corresponding notes. For example, if a long, single-syllable word on a long note follows another long, single-syllable word on a short note, the second word is moved a little to the right to give both words enough space.



great strength_____

A short note followed by a long note, where the horizontal position of the lyrics is automatically adjusted for legibility

RELATED LINKS

[Positions of lyrics](#) on page 695

[Changing the font styles used for lyrics](#) on page 704

Project-wide engraving options for lyrics

You can find options for the project-wide appearance and placement of lyrics on the **Lyrics** page in **Engrave > Engraving Options**.

The options on the **Lyrics** page allow you to change the default appearance, spacing, and position of lyrics, and the appearance and position of lyric hyphens and lyric extender lines.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Filters for lyrics

In Dorico Pro, lyrics filters allow you to select all lyrics of a specified type across your project or across a specific selection.

The following filters are available in the menu when you choose **Edit > Filter > Lyrics**:

All Lyrics

Selects all types of lyrics in the current selection, with any lyric line number and placement above/below the staff.

Line 1

Selects only Line 1 lyrics and translation lyrics for Line 1 in the current selection, including Line 1 below the staff and Line 1 above the staff.

Line 2

Selects only Line 2 lyrics and translation lyrics for Line 2 in the current selection, including Line 2 below the staff and Line 2 above the staff.

Line 3

Selects only Line 3 lyrics and translation lyrics for Line 3 in the current selection, including Line 3 below the staff and Line 3 above the staff.

Line 4

Selects only Line 4 lyrics and translation lyrics for Line 4 in the current selection, including Line 4 below the staff and Line 4 above the staff.

Line 5

Selects only Line 5 lyrics and translation lyrics for Line 5 in the current selection, including Line 5 below the staff and Line 5 above the staff.

Above Staff

Selects all lyrics above the staff in the current selection. You can use this filter in addition to the other filters. For example, you can filter first by line number, and then filter again by staff-relative placement.

Below Staff

Selects all lyrics below the staff in the current selection. You can use this filter in addition to the other filters. For example, you can filter first by line number, and then filter again by staff-relative placement.

Chorus

Selects all chorus lyrics in the current selection.

Translations

Selects all translation lyrics in the current selection.

RELATED LINKS

[Large selections](#) on page 274

Selecting lyrics using filters

You can use lyric filters to select all lyrics of a specified type across your project or across a specific selection.

PREREQUISITE

Your filter setting is set to **Select Only**. You can check this by choosing **Edit > Filter > Select Only**.

PROCEDURE

1. In the music area, make a selection that includes all the lyrics you want to select.
For example, press **Ctrl/Cmd-A** to select the whole flow.
2. Choose **Edit > Filter > Lyrics > [Lyrics type]**.

RESULT

All lyrics of the selected type in your selection are selected. For example, if you choose **Edit > Filter > Lyrics > Chorus**, all chorus lyrics in your selection are selected.

RELATED LINKS

[Filters for lyrics](#) on page 691

[Large selections](#) on page 274

Types of lyrics

Lyrics are divided into different lyric types in Dorico Pro.

Lyric lines

Lyric lines contain normal lyrics and can be shown with verse numbers.

Chorus lines

Chorus lines contain lyrics in an italic font and are placed between lyric lines. For example, if there are two lyric lines, the chorus line appears between Line 1 and Line 2.

Chorus lines do not have verse numbers.

Lyric line translations

Lyric line translations show the text in lyric lines or chorus lines in different languages. They are placed directly below the lyric line or chorus line of which they are a translation. They are shown in an italic font.

Each lyric line can have its own lyric line translation, including chorus lines.

Lyric line translations do not have verse numbers, as they are part of the line of which they are a translation.

You can input all types of lyrics using the lyrics popover. The icon shown on the left-hand side of the popover indicates the type of lyric currently being input.

RELATED LINKS

[Lyric line numbers](#) on page 701

[Changing the line number and type of lyric lines](#) on page 702

[Lyrics popover](#) on page 247

Changing the type of individual lyrics

You can change the type of individual lyrics after they have been input. For example, you can change lyrics into chorus lyrics or translation lyrics.

PROCEDURE

1. Select the individual lyrics whose type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate the following properties, individually or together, in the **Lyrics** group:
 - **Chorus**
 - **Is translation**

RESULT

If you activate **Chorus**, the selected individual lyrics are changed to chorus lyrics.

If you activate **Is translation**, the selected lyrics are changed to translation lyrics of the same lyric line number. For example, selecting lyrics in Line 2 and activating **Is translation** turns them into translation lyrics for Line 2.

If you activate both properties, the selected lyrics are changed to translation lyrics of the chorus.

If you deactivate both properties, the selected lyrics are changed to normal lyrics. Their line number is indicated by the number in **Line number** in the **Lyrics** group of the Properties panel.

NOTE

If other chorus lines exist at the same position on the side of the staff where you want to change your current selection to chorus lines, the two lines collide. To avoid this, change the type of the whole lyric line, which automatically avoids collisions.

RELATED LINKS

[Lyric line numbers](#) on page 701

[Showing lyrics in italics](#) on page 705

[Changing the line number and type of lyric lines](#) on page 702

Types of syllables in lyrics

There are different types of syllables in lyrics, depending on their position in words. The key you press to advance the popover indicates the syllable type for each lyric.

Dorico Pro defines lyrics as different syllables depending on how you advance the popover when inputting lyrics.

Whole word

Lyrics are considered a whole word if the lyric comes after a gap and is followed by a gap or a period.

No hyphens are shown either side of whole word lyrics. Extender lines can be shown after lyrics.

Start

Lyrics are considered the start syllable in a multi-syllabic word if the lyric comes after a gap, but is followed by a hyphen.

Hyphens are shown after start lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.

Middle

Lyrics are considered the middle syllable in a multi-syllabic word if the lyric comes after a hyphen, and is followed by a hyphen.

Hyphens are shown after middle lyrics, which can be continuation hyphens depending on the distance before the next lyric in the same lyric line.

End

Lyrics are considered the end syllable in a multi-syllabic word if the lyric comes after a hyphen but is followed by a gap or a period.

Extender lines can be shown after end lyrics.

RELATED LINKS

[Inputting lyrics](#) on page 246

Changing the syllable type of existing lyrics

You can change the syllable type of lyrics after they have been input.

For example, if you advanced the lyrics popover to the next note by pressing **Space** but you later want it to be followed by a hyphen, you can change its syllable type.

NOTE

Changing the syllable type changes whether a hyphen is shown after the selected lyrics, not before them. Therefore, if you want to show a hyphen before lyrics, you must change the syllable type of the lyrics immediately preceding them.

PROCEDURE

1. Select the lyrics whose syllable type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, select one of the following options from the **Syllable type** menu in the **Lyrics** group:
 - **Whole word**
 - **Start**
 - **Middle**

- **End**
-

RESULT

Lyrics with a syllable type of **Whole word** or **End** are followed by a space.

Lyrics with a syllable type of **Start** or **Middle** are followed by a hyphen.

RELATED LINKS

[Inputting lyrics](#) on page 246

Changing the text of existing lyrics

You can change the text of lyrics after they have been input.

PROCEDURE

1. In Write mode, select the lyric you want to change.

NOTE

You can only change one lyric at a time.

2. Press **Return** or **Shift-L** to open the lyrics popover.
 3. Change the existing text in the lyrics popover.
 4. Optional: If you want to change other existing lyrics as well, advance the popover in one of the following ways:
 - To advance the popover to the next note if you entered a complete word, or the final syllable in a multi-syllabic word, press **Space**.
Existing lyrics are automatically selected in the popover when you press **Space**.
 - To advance the popover to the next note if you entered one syllable of a multi-syllabic word, press **-**.
 - To move the cursor one character to the right, press **Right Arrow**.
 - To move the cursor one character to the left, press **Left Arrow**.
The cursor automatically moves to the next/previous lyric/note if you keep pressing the arrow keys.
 5. Press **Return** or **Esc** to close the popover when you have finished changing lyrics.
The popover closes automatically when you reach the last note on the staff.
-

RELATED LINKS

[Lyric line numbers](#) on page 701

[Inputting lyrics](#) on page 246

Positions of lyrics

Dorico Pro automatically positions lyrics and makes adjustments to accommodate variations in the length of lyrics, including adjusting the horizontal alignment of lyrics in melismatic music. However, you can also move lyrics manually and also change their default positions project-wide.

You can move lyrics to different rhythmic positions in Write mode. They are positioned by default according to your chosen options on the **Lyrics** page in **Engrave > Engraving Options**.

You can move individual lyrics graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

NOTE

The horizontal position of lyrics is automatically adjusted in Dorico Pro to minimize changes to the note spacing. Syllables are moved by small amounts either left or right to accommodate longer syllables without distorting the appearance of note rhythms.

Moving lyrics graphically in Engrave mode overrides the automatic spacing for the selected lyrics. If you move a lyric whose position was automatically readjusted, the note spacing at that rhythmic position might change.

You can change the default positions of lyrics project-wide on the **Lyrics** page in **Engraving Options**.

The default settings for lyrics on the **Lyrics** page in **Engraving Options** are optimized for scores with comfortable spacing. If your project requires note spacing to be narrower, with less room for each note, change these settings to achieve a clearly legible result without the need for lots of editing in Engrave mode.

For scores that have less horizontal space, the following changes often improve the appearance of lyrics and rhythmic space:

- Make minimum gaps smaller, such as the minimum gap between lyrics and hyphens, in the **Hyphens** section of the **Lyrics** page in **Engraving Options**.
- Increase the amount that lyrics can be adjusted by in the **Spacing** section of the **Lyrics** page in **Engraving Options**.

Positions of syllables

The number of notes sung on syllables or words determines how the lyrics are positioned:

- Single syllables, which are whole words or parts of longer words that are sung on only one note, are centered on their corresponding note.
- Melismata, which are syllables or words that are sung on more than one note, are left-aligned with the left side of the first note to which they apply.

Placement of lyric lines

Lyrics are placed relative to other lyric lines according to their line number. For example, lyrics in Line 1 are placed at the top, including when there are multiple lyric lines above the staff.

If a line of lyrics is missing across the width of a whole system, no additional gap is left between the remaining lines of lyrics.

EXAMPLE

You have three lines of lyrics, but one system does not have a second line of lyrics. On this system, the third line of lyrics is moved upwards, closer to the first line of lyrics.

If a subsequent system does not have a first line, but does have the second and third lines, then the second and third lines of lyrics are moved upwards. The second line of lyrics takes the place of the first line.

RELATED LINKS

[Project-wide engraving options for lyrics](#) on page 691

[Moving lyrics graphically](#) on page 697

[Changing the placement of lyric lines relative to the staff](#) on page 703

Moving lyrics rhythmically

You can move lyrics to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the lyrics you want to move.
2. Move the lyrics according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

NOTE

You cannot move lyrics rhythmically with the mouse, you can only move them using the keyboard.

RESULT

The selected lyrics are moved to the right/left according to the current rhythmic grid value.

Moving lyrics graphically

You can move individual lyrics graphically without changing the rhythmic positions to which they apply.

NOTE

Moving lyrics graphically in Engrave mode overrides the automatic spacing of the selected lyrics. If you move a lyric whose position was automatically readjusted, the spacing at that rhythmic position might change.

PROCEDURE

1. In Engrave mode, select the lyrics you want to move.
2. Move the selected lyrics in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them to the right/left.
-

RESULT

The selected lyrics are moved to the right/left.

NOTE

- You cannot move lyrics upwards/downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave > Engraving Options**.
 - You can change the line number of whole lyric lines, and the placement of whole lyric lines relative to the staff. You can also change the position of lyrics relative to the staff, other lyric lines, and to other objects for all lyrics project-wide in the **Vertical Position** section of the **Lyrics** page in **Engraving Options**.
-

RELATED LINKS

[Changing the line number and type of lyric lines](#) on page 702

[Changing the placement of lyric lines relative to the staff](#) on page 703

Changing the alignment of lyrics relative to notes

By default, the center of lyrics is aligned horizontally with noteheads, but you can change the horizontal alignment of individual lyrics.

You cannot change the alignment of lyrics relative to notes project-wide, as the horizontal position of lyrics is automatically adjusted in Dorico Pro to minimize changes to the note spacing.

NOTE

Changing the alignment of lyrics manually overrides the automatic spacing for the selected lyrics. If you change the alignment of a lyric whose position was automatically readjusted, the note spacing at that rhythmic position might change.

PROCEDURE

1. Select the lyrics whose alignment you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Lyric text alignment** in the **Lyrics** group.
 3. Select one of the following alignment options from the menu:
 - **Left**
 - **Center**
 - **Right**
-

RESULT

The alignment of the selected lyrics is changed.

Lyric hyphens and lyric extender lines

Lyric hyphens indicate that individual lyrics are syllables within multi-syllabic words, for example, “Hal-le-lu-jah”. Lyric extender lines indicate that individual lyrics extend across multiple notes.

Dorico Pro automatically inputs and positions lyric hyphens when you advance the lyrics popover by pressing - between syllables, and lyric extender lines when you advance the lyrics popover by pressing **Space** multiple times after an entry.

In Engrave mode, lyric hyphens and lyric extender lines have two square handles, one at the start and one at the end. You can move whole lyric hyphens and lyric extenders lines, and you can also move their handles independently of each other. This allows you to lengthen/shorten lyric hyphens and extender lines, which for lyric hyphens means increasing/decreasing the length of the space in which lyric hyphens are shown.

The image shows the word "way" in blue. A horizontal orange line extends to the right from the end of the word. At the start of this line (under the 'y') and at its end, there are small orange square handles.

Lyric extender line with handles shown

The image shows the word "a - way" in blue. A hyphen is placed between the 'a' and 'way'. Small orange square handles are positioned at the start of the 'a' and the end of the 'way'.

Lyric hyphen with handles shown

NOTE

You can change the default lyric hyphen in the **Hyphens** section of the **Lyrics** page in **Engrave > Engraving Options**.

RELATED LINKS

[Lengthening/Shortening lyric extender lines and hyphens](#) on page 700

Moving lyric extender lines and hyphens

You can move lyric extender lines and hyphens horizontally.

NOTE

You cannot move lyric extender lines or hyphens upwards/downwards, as their vertical position is determined by their lyric line number and your project-wide settings in **Engrave > Engraving Options**.

PROCEDURE

1. In Engrave mode, select the lyric extender lines or hyphens that you want to move.
2. Move the lyric extender lines or hyphens in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them to the right/left.
-

RESULT

The selected lyric extender lines or hyphens are moved to the right/left.

NOTE

- The start handles of lyric extender lines are attached to the lyrics from which they extend, and the start handles and end handles of lyric hyphens are attached to the lyrics on each side. If you move either of those lyrics, the corresponding lyric extender line or hyphen handles also move.
 - You can change the position of lyric extender lines and hyphens relative to lyrics, to the ends of systems, and to other extender lines and hyphens for all lyric extender lines and hyphens project-wide in the **Extender Lines** and **Hyphens** sections of the **Lyrics** page in **Engraving Options**.
-

RELATED LINKS

[Lyric hyphens and lyric extender lines](#) on page 698

[Lengthening/Shortening lyric extender lines and hyphens](#) on page 700

Lengthening/Shortening lyric extender lines and hyphens

You can lengthen/shorten individual lyric extender lines and lyric hyphens. Lengthening/Shortening lyric hyphens increases/decreases the space in which lyric hyphens are shown.

NOTE

The start handles of lyric extender lines and hyphens are attached to the lyrics from which they extend. If you move those lyrics, the start handles also move.

PROCEDURE

1. In Engrave mode, select the square handles at one of the following positions on the lyric extender lines or hyphens you want to lengthen/shorten:
 - The start of lyric extender lines or hyphens
 - The end of lyric extender lines or hyphens

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them to the right/left.
3. Optional: Repeat steps 1 and 2 for the other handle of the lyric extender lines or hyphens.
-

RESULT

The length of the selected lyric extender lines is changed. For example, moving the start handle of a lyric extender line to the right without moving the end handle makes the line shorter.

Lengthening/Shortening lyric hyphens does not change the size or shape of the hyphens themselves. Instead, you increase/decrease the distance between the handles in which hyphens can appear.

NOTE

- Depending on your settings for the size of gaps relating to hyphens in the **Hyphens** section of the **Lyrics** page in **Engrave > Engraving Options**, more/fewer hyphens can appear in the space when you lengthen/shorten lyric hyphens.
- The following properties in the **Lyrics** group of the Properties panel are activated if you move the corresponding handle on lyric extender lines and hyphens:
 - **Line start X** moves the start handles of lyric extender lines and hyphens horizontally.
 - **Line end X** moves the end handles of lyric extender lines and hyphens horizontally.

For example, if you move a whole lyric extender line to the right, both handles are moved so both properties are activated. You can also use these properties to move lyric extender lines and hyphens graphically by changing the values in the value fields.

Deactivating the properties resets the selected lyric extender lines and hyphens to their default positions.

RELATED LINKS

[Lyric hyphens and lyric extender lines](#) on page 698

Deleting lyric lines

You can delete whole lines of lyrics.

PROCEDURE

1. In Write mode, select the staves from which you want to delete a whole lyric line.
 2. Select just the lyric line you want to delete by choosing **Edit > Filter > Lyrics > [Lyrics type]**.
 3. Press **Backspace** or **Delete**.
-

RESULT

All lyrics in the selected lyric line are deleted.

RELATED LINKS

[Filters for lyrics](#) on page 691

[Selecting lyrics using filters](#) on page 692

[Large selections](#) on page 274

Deleting lyrics individually

You can delete individually selected lyrics without deleting other lyrics in the same lyric line.

PROCEDURE

1. In Write mode, select the lyrics you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected lyrics are deleted.

Lyric line numbers

Lyric line numbers are used to organize lyrics when a single musical passage can have different lyrics sung to it, such as music that contains multiple verses. In Dorico Pro, you can specify the line number of lyrics as you input them and by changing the line number of existing lyrics.

For example, if you input lyrics in Line 3 but later want to change those lyrics to Line 4 because you want to input different lyrics as Line 3, you can change your current Line 3 into Line 4, and then input a new line of lyrics as Line 3. The spacing is automatically adjusted to show lyric lines in the correct order.

In Dorico Pro, you can have multiple lines of lyrics both above and below the same staff. Turning lyric lines into chorus lyric lines or lyric line translations changes both their placement and appearance as chorus lyrics generally use an italic font.

RELATED LINKS

[Verse numbers](#) on page 705

[Filters for lyrics](#) on page 691

[Showing lyrics in italics](#) on page 705

Changing the line number and type of lyric lines

You can change the lyric line number of whole lyric lines after they have been input. You can also change whole lyric lines to chorus lines and lyric line translations.

For example, you can change the existing Line 1 into a lyric translation of Line 4, or change Line 2 into a chorus line.

TIP

To identify which line you are working on, select a syllable in the line of lyrics and check the number in the **Line number** value field in the **Lyrics** group of the Properties panel. Alternatively, you can activate verse numbers on the **Lyrics** page in **Engrave > Engraving Options**.

PROCEDURE

1. In Write mode, select a lyric in the line whose lyric line type you want to change. The lyric line can be above or below the staff.

TIP

You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers.

2. Change the line type of the selected lyric line in one of the following ways:

- Choose **Edit > Lyrics > Line > [Line number]**.
- Choose **Edit > Lyrics > Line > Chorus**.
- Choose **Edit > Lyrics > Translations > [Line number Translation]**.
- Choose **Edit > Lyrics > Translations > Chorus Translation**.

TIP

You can also choose these options from the context menu.

RESULT

The line number or type of the whole lyric line of the selected lyric is changed.

NOTE

The position of the selected lyric line relative to other lyric lines at the same position might be changed. For example, if there were two lyric lines and you changed Line 1 to Line 3, it now appears below Line 2.

If a lyric line with the same number already exists at the same position on the same side of the staff, the two lines switch. For example, if there is already a Line 1 at the rhythmic position where you want to change Line 2 to Line 1, then the existing Line 1 becomes Line 2 to accommodate your most recent preference. The same applies to chorus lines and lyric line translations.

RELATED LINKS

[Lyric line numbers](#) on page 701

[Types of lyrics](#) on page 692

[Filters for lyrics](#) on page 691

[Selecting lyrics using filters](#) on page 692

Changing the line number of individual lyrics

You can change the lyric line number of individually selected lyrics after they have been input.

PROCEDURE

1. Select the individual lyrics whose line number you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, change the value for **Lyric number** in the **Lyrics** group.

RESULT

The line number of the selected lyrics is changed to match the value in the value field.

NOTE

The position of the selected lyrics relative to other lyric lines might be changed. For example, if there were two lyric lines and you changed lyrics in Line 1 to Line 3, they now appear below Line 2.

RELATED LINKS

[Lyric line numbers](#) on page 701

Changing the placement of lyric lines relative to the staff

You can change the staff-relative placement of whole lyric lines after they have been input.

PROCEDURE

1. In Write mode, select a lyric in each line whose staff-relative placement you want to change.

NOTE

You can also make a selection and use the lyric filters to select different lyric lines according to their line numbers, and to select lyric lines according to their position relative to the staff.

2. Select the staff-relative placement you want in one of the following ways:
 - Choose **Edit > Lyrics > Placement > Above**.
 - Choose **Edit > Lyrics > Placement > Below**.

TIP

You can also choose these options from the context menu.

RESULT

The staff-relative placement of the whole lyric lines in which you selected lyrics is changed.

NOTE

If other lyric lines with the same lyric line number exist at the same position on the side of the staff to which you want to change your current selection, the two lines switch sides. For example, if there is already a Line 2 above the staff at the position where you want to change the placement of Line 2 below the staff, then the existing Line 2 above the staff is placed below the staff to accommodate your most recent preference.

RELATED LINKS

[Lyric line numbers](#) on page 701

[Filters for lyrics](#) on page 691

[Selecting lyrics using filters](#) on page 692

[Changing the line number and type of lyric lines](#) on page 702

Changing the placement of individual lyrics relative to the staff

You can change the placement of individual lyrics relative to the staff after they have been input.

PROCEDURE

1. Select the lyrics whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, choose one of the following options for **Line placement** in the **Lyrics** group:
 - **Above**
 - **Below**

RESULT

The staff-relative placement of the selected individual lyrics is changed.

NOTE

If other lyric lines with the same lyric line number already exist at the same position on the same side of the staff, the two lines collide. To avoid this, change the lyric line number of one of the lyric lines, or change their staff-relative placement by choosing **Edit > Lyrics > Placement** and selecting an option from the menu, which avoids collisions.

RELATED LINKS

[Lyric line numbers](#) on page 701

[Changing the placement of lyric lines relative to the staff](#) on page 703

[Changing the line number and type of lyric lines](#) on page 702

Changing the font styles used for lyrics

You can change aspects of the fonts used for the available types of lyrics project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
2. Select the font you want to change from the **Font style** menu:
 - **Lyrics Font**
 - **Lyrics Translation Font**
 - **Lyrics Verse Numbers Font**
 - **Chorus lyrics Font**
 - **Chorus lyrics translation Font**
3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**

- **Underlined**

4. Optional: Repeat steps 2 and 3 for each font whose style you want to change.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The font style for the selected lyrics type is changed project-wide.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

Showing lyrics in italics

You can show individual lyrics in an italic font without changing their font style, lyric type, or staff-relative placement.

PROCEDURE

1. Select the lyrics you want to show in an italic font. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Italic** in the **Lyrics** group.
-

RESULT

The selected lyrics are shown in an italic font.

TIP

If you want to show lyrics in an italic font because they are intended to be either chorus lyrics or translation lyrics, you can change their lyric type instead.

If you want all normal lyric lines to appear in an italic font project-wide, you can change the font style of the **Lyrics Font**.

RELATED LINKS

[Changing the line number and type of lyric lines](#) on page 702

[Changing the type of individual lyrics](#) on page 693

[Changing the font styles used for lyrics](#) on page 704

Verse numbers

Verse numbers indicate the order in which lyrics are sung when multiple lines of lyrics share the same musical passage. They are commonly used in hymns and song sheets.

Depending on the type of music you are writing, verse numbers might not be appropriate. Therefore, hiding/showing verse numbers in Dorico Pro is optional. By default, verse numbers are not shown. You can hide/show verse numbers on all lines of lyrics project-wide and on individually selected lyrics.

When verse numbers are shown on all lyric lines project-wide, they only appear before the first lyric in the line by default, they are not repeated on subsequent systems automatically. Therefore, if you want to show verse numbers at the start of subsequent systems, you must show verse numbers on those individual lyrics.

NOTE

Lyric line translations are part of the lyric line of which they are a translation so do not have their own verse number.

Hiding/Showing verse numbers project-wide

You can hide/show verse numbers project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Lyrics** in the page list.
 3. In the **Verse Numbers** section, choose one of the following options for **Verse numbers for each line of lyrics**:
 - **Show verse numbers**
 - **Do not show verse numbers**
 4. Click **Apply**, then **Close**.
-

RESULT

Verse numbers are either shown or hidden project-wide.

Changing the punctuation of verse numbers

You can change how verse numbers are punctuated project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Lyrics** in the page list.
 3. In the **Verse Numbers** section, choose one of the following options for **Punctuation for verse numbers**:
 - **Append period (full stop)**
 - **Do not append period (full stop)**
 4. Click **Apply**, then **Close**.
-

RESULT

Verse numbers are shown with/without a period project-wide.

Hiding/Showing verse numbers on individual lyrics

You can hide/show verse numbers on individual lyrics, independently of your project-wide setting, for example, if you want to show the verse number at the start of every system.

PROCEDURE

1. Select the lyrics before which you want to hide/show verse numbers. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Show verse number** in the **Lyrics** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

Verse numbers are shown before the selected lyrics when the property and the corresponding checkbox are both activated. Verse numbers are not shown when the property is activated but the checkbox is deactivated.

When the property is deactivated, lyrics follow your project-wide setting for hiding/showing verse numbers.

RELATED LINKS

[Hiding/Showing verse numbers project-wide](#) on page 706

East Asian elision slurs

East Asian elision slurs are used to show that two or more characters in East Asian languages are part of the same lyric.



A phrase containing an East Asian elision slur

In Dorico Pro, you can hide/show East Asian elision slurs on all applicable lyrics project-wide and on individually selected lyrics.

Hiding/Showing East Asian elision slurs

You can hide/show East Asian elision slurs for individual lyrics, independently of your project-wide setting.

PROCEDURE

1. Select the lyrics on which you want to show East Asian elision slurs. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Show East Asian elision slur** in the **Lyrics** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

East Asian elision slurs are shown on the selected lyrics when **Show East Asian elision slur** and the corresponding checkbox are both activated, and hidden when the property is activated but the checkbox is deactivated.

When the property is deactivated, lyrics follow your project-wide setting.

TIP

You can choose to hide/show East Asian elision slurs on all applicable lyrics project-wide on the **Lyrics** page in **Engrave > Engraving Options**.

Notes

Notes are shapes that are positioned on staves to indicate musical pitches. Notes are most commonly shown with oval-shaped, round noteheads that are either filled or void depending on their duration, but there are many different designs of noteheads that you can use.

Depending on their duration, notes can have stems that help indicate their duration.

RELATED LINKS

[Inputting notes](#) on page 149

[Note spacing](#) on page 381

[Stems](#) on page 942

[Changing the notehead design of individual noteheads](#) on page 722

[Add intervals popover](#) on page 172

[Adding notes above/below existing notes](#) on page 171

Project-wide engraving options for notes

There are a number of options for the appearance of notes and noteheads project-wide that you can choose from on the **Notes** page in **Engrave > Engraving Options**.

The options on this page allow you to change the design, appearance, and position of noteheads, ledger lines, stem flags, and rhythm dots. You can also change the appearance of double whole notes (breves) and the size of grace notes relative to normal notes.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Changing the notehead design project-wide

You can change the notehead design of all noteheads project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Notes** in the page list.
 3. In the **Noteheads** section, select one of the following options for **Notehead design**:
 - **Default size noteheads** (smaller than **Larger noteheads**)
 - **Larger noteheads** (Default)
 - **Note names**
 - **Figurenotes© colors**
-

RESULT

The notehead design of all notes project-wide is changed.

NOTE

This does not change the notehead design of noteheads whose design you have changed individually, for example, if you changed selected notes to have diamond noteheads.

RELATED LINKS

[Changing the notehead design of individual noteheads](#) on page 722

Showing differently shaped noteheads for each scale degree project-wide

You can show each degree of the scale with a different notehead design project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Notes** in the page list.
 3. In the **Noteheads** section, select one of the following options for **Shaped noteheads based on scale degree**:
 - **Walker 4-shape**
 - **Walker 7-shape**
 - **Funk 7-shape**
 - **Aikin 7-shape**
-

RESULT

The notehead design of all noteheads project-wide is changed to show a different notehead design for each degree of the scale, depending on your selection.

NOTE

This does not override the notehead design of noteheads whose design you have changed individually.

RELATED LINKS

[Pitch-dependent notehead set designs](#) on page 714

[Changing the notehead design of individual noteheads](#) on page 722

Showing note names in noteheads project-wide

You can show the note name as a letter in all noteheads project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Notes** in the page list.
3. In the **Noteheads** section, choose **Note names** for **Notehead design**.

NOTE

This does not change the notehead design of noteheads whose design you have changed individually.

RESULT

The notehead design of all noteheads not overridden individually is changed to show the note name inside noteheads.

NOTE

To ensure legibility, you can increase the staff size of layouts in your project.

RELATED LINKS

[Changing the notehead design of individual noteheads](#) on page 722

[Staff size](#) on page 907

[Changing the staff size in layouts](#) on page 908

Notehead sets

A notehead set is a collection of related noteheads that together allow you to represent all the different noteheads required for the different durations used in music notation.

A typical notehead set contains at least four noteheads:

- A black notehead for quarter notes (crotchets) and shorter
- A white notehead for half notes (minims)
- A wider white notehead for whole notes (semibreves)
- A wider white notehead with one or two vertical strokes on either side, or a square white notehead, for double whole notes (breves)

Pitch-dependent notehead sets contain noteheads that vary according to the pitch of notes rather than their duration.

- In *pitched* notehead sets, there are different noteheads for different pitches. For example, the Pitch Names notehead set shows the letter name and any applicable accidental of each note within its notehead.
- In *scale degree* notehead sets, there is a different notehead for each scale degree, relative to the current key signature. For example, the Aikin 7-shape notehead set uses a different notehead shape for each pitch.

NOTE

- A single notehead can appear in multiple notehead sets. If you edit a notehead within one notehead set, your changes affect the appearance of that notehead in all notehead sets that contain it.
 - Notehead sets can only contain noteheads of the same type. For example, you cannot use a normal notehead in a pitched notehead set.
 - You cannot change the type of an existing notehead set or an existing notehead.
-

RELATED LINKS

[Pitch-dependent notehead set designs](#) on page 714

[Custom notehead sets](#) on page 715

Notehead set designs

There are a number of different notehead set designs that you can use for individual noteheads in Dorico Pro.

- You can find the available notehead designs by choosing **Edit > Notehead > [Notehead type] > [Notehead design]**.

NOTE

Dorico Pro does not offer stemless noteheads. Instead, you can hide the stems of notes with any notehead design.

Notehead set design



Notehead set name

Larger Noteheads



Default Noteheads



Large Circled Noteheads



Circled Noteheads



Slashed Noteheads (Bottom Left to Top Right)



Slashed Noteheads (Top Left to Bottom Right)

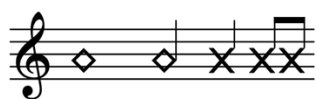
Cross noteheads

Notehead set design



Notehead set name

Circle X Noteheads



Large X and Diamond Noteheads

Notehead set design



Notehead set name

Ornate X Noteheads



Plus Noteheads



With X Noteheads



X Noteheads



X and Circle X Noteheads



X and Diamond Noteheads

Triangular noteheads

Notehead set design



Notehead set name

Large Arrow Down Noteheads



Large Arrow Up Noteheads



Triangle Down Noteheads



Triangle Left Noteheads

Notehead set design



Notehead set name

Triangle Right Noteheads



Triangle Up Noteheads

Diamond noteheads

Notehead set design



Notehead set name

Diamond Noteheads



Old-Style Diamond Noteheads



White Diamond Noteheads



Wide Diamond Noteheads

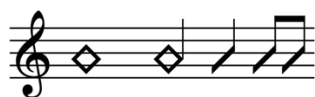
Slash noteheads

Notehead set design



Notehead set name

Muted Slash Noteheads

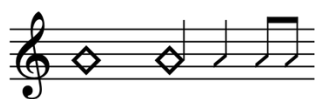


Oversized Slash Noteheads



Slash Noteheads

Notehead set design



Notehead set name

Small Slash Noteheads

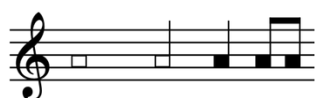
Round and square noteheads

Notehead set design



Notehead set name

Moon Noteheads



Rectangular Noteheads



Round White with Dot Noteheads

RELATED LINKS

[Notehead sets](#) on page 710

[Changing the notehead design of individual noteheads](#) on page 722

[Hiding stems](#) on page 948

Pitch-dependent notehead set designs

Pitch-dependent notehead sets use different notehead designs or different notehead colors depending on the pitch of notes. There are a number of different pitch-dependent notehead sets available in Dorico Pro.

- You can find the available notehead designs by choosing **Edit > Notehead > [Notehead type] > [Notehead design]**.

TIP

You can choose to use a pitch-dependent notehead design for all noteheads project-wide on the **Notes** page in **Engrave > Engraving Options**.

Scale degree noteheads

Notehead set design



Notehead set name

Aikin 7-shape Noteheads

Notehead set design



Notehead set name

Funk 7-shape Noteheads



Walker 4-shape Noteheads



Walker 7-shape Noteheads

Pitched noteheads

Notehead set design



Notehead set name

Figurenotes© Noteheads



Pitch Name Noteheads

RELATED LINKS

[Notehead sets](#) on page 710

[Changing the notehead design of individual noteheads](#) on page 722

[Showing differently shaped noteheads for each scale degree project-wide](#) on page 709

[Showing note names in noteheads project-wide](#) on page 709

Custom notehead sets

You can create and edit custom noteheads and notehead sets, for example, to create noteheads with specific shapes that represent extended techniques.

In Dorico Pro, noteheads are grouped into sets, which allow you to customize the noteheads used for different durations. For example, the standard notehead set uses different noteheads for quarter notes compared to half notes.

You can create new custom notehead sets, and edit existing notehead sets, in the **Edit Notehead Sets** dialog.

You can create new and edit individual noteheads within each notehead set in the **Edit Notehead** dialog.

RELATED LINKS

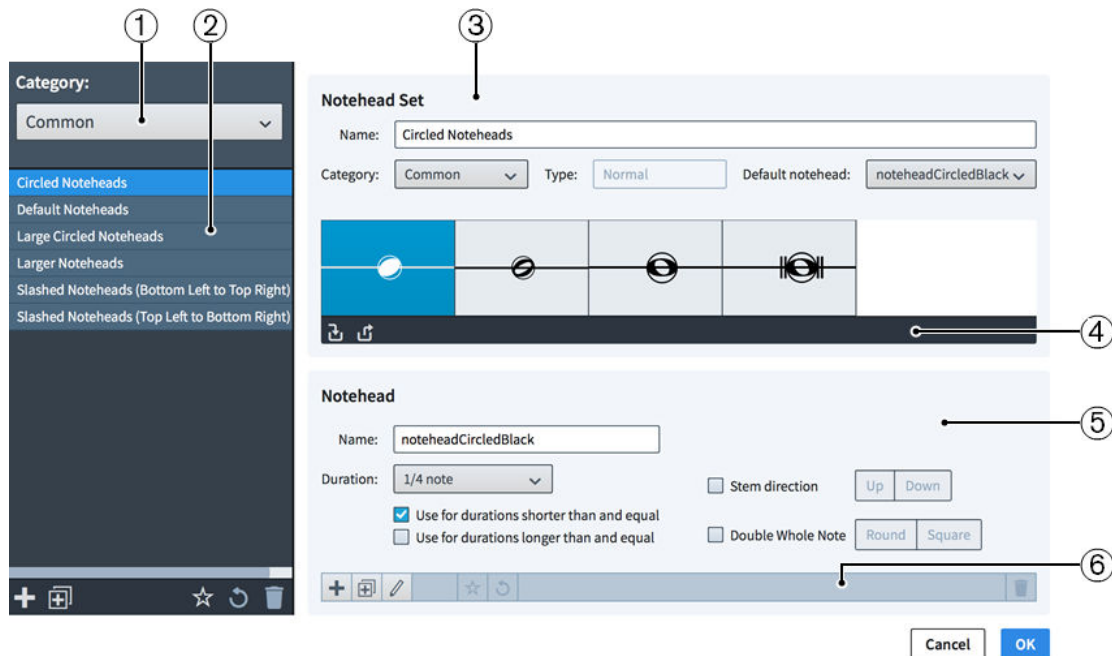
[Notehead sets](#) on page 710

[Edit Notehead dialog](#) on page 719

Edit Notehead Sets dialog

The **Edit Notehead Sets** dialog allows you to add, edit, and delete custom notehead sets. It also allows you to change various settings relating to the appearance and function of noteheads within each notehead set.

- You can open the **Edit Notehead Sets** dialog in Engrave mode by choosing **Engrave > Notehead Sets**.



Edit Notehead Sets dialog

The **Edit Notehead Sets** dialog contains the following sections and options:

1 Category menu

Allows you to filter the list of notehead sets by selecting a category from the menu, such as **Crosses** or **Diamonds**. This corresponds to where notehead sets are located in the menu, for example, **Edit > Notehead > Crosses > X Noteheads**.

2 List of notehead sets

Contains all the notehead sets in the project within the currently selected category.

The action bar at the bottom of the list contains the following options:

- New**



Adds a new notehead set. By default, new notehead sets are **Normal** and in the **Common** category.

- New from Selection**



Adds a new notehead set that is a duplicate of the notehead set currently selected.

NOTE

A single notehead can appear in multiple notehead sets. If you edit a notehead within one notehead set, your changes affect the appearance of that notehead in all notehead sets that contain it.

- Save as Default**



Saves the currently selected notehead set as a default in your user library, allowing you to use it in multiple projects.

- **Revert to Factory**



Removes all edits you have made to the selected predefined notehead set, returning it to its original settings and appearance.

- **Delete**



Deletes the selected notehead set.

NOTE

You cannot delete predefined notehead sets.

3 Notehead Set section

Displays the noteheads in the notehead set currently selected in the notehead set list, and contains the following options that apply to the notehead set:

- **Name**

Allows you to enter a new name or edit the existing name for the selected notehead set.

- **Category**

Allows you to select a category for the notehead set, such as **Crosses**. This corresponds to where notehead sets are located in the menu, for example, **Edit > Notehead > Crosses > X Noteheads**.

- **Type**

Displays whether the notehead set is **Normal**, **Pitched**, or **Scale Degree**.

NOTE

You cannot change the **Type** of notehead sets. If you want a new notehead set of a particular **Type**, you must select an existing notehead set of that type in the notehead set list and click **New from Selection**.

- **Default notehead**

Allows you to select which notehead within the set Dorico Pro uses if there is no notehead in the set that exactly matches the requirements of a note, for example, if you input a note longer than a whole note, but there is no notehead defined for this duration in the set.

4 Notehead Set action bar

Contains the following options for changing which noteheads are included in the notehead set:

- **Add Notehead to Set**



Adds a new notehead to the notehead set. You can select any notehead from the menu.

NOTE

A single notehead can appear in multiple notehead sets. If you edit a notehead within one notehead set, your changes affect the appearance of that notehead in all notehead sets that contain it.

- **Remove Notehead from Set**



Deletes the selected notehead from the notehead set.

5 Notehead section

Contains the following options that apply to the notehead currently selected in the **Notehead Set** section:

- **Name**

Allows you to enter a new name or edit the existing name for the selected notehead. This is the identifying name used in the **Add Notehead to Set** menu.

- **Duration**

Allows you to select the primary rhythmic duration for which the selected notehead is intended. You can then specify whether the selected notehead can also be used for shorter/longer notes.

- **Use for durations shorter than and equal**

Allows you to specify that the selected notehead can be used for notes of the selected **Duration** and shorter notes.

- **Use for durations longer than and equal**

Allows you to specify that the selected notehead can be used for notes of the selected **Duration** and longer notes.

- **Stem direction**

Allows you to specify that the selected notehead should be used for up-stem or down-stem notes only. This is particularly important for noteheads with shapes, for example, the triangles in triangular noteheads point in different directions according to their stem direction.

- **Double whole note**

Allows you to specify whether the selected notehead is **Round** or **Square**. This determines which notehead is used for double whole notes (breves) according to your project-wide setting for **Appearance of double whole note (breve) notehead** on the **Notes** page in **Engrave > Engraving Options**.

- **Pitch**

Specifies the note name and accidental for which the selected notehead is used (**Pitched** type noteheads only).

- **Degree**

Specifies the scale degree for which the selected notehead is used, using integer numbers from 1 to 7 (**Scale Degree** type noteheads only).

6 Notehead action bar

Contains the following options that allow you to edit new and existing noteheads:

- **New Notehead**



Creates a new **Normal** notehead, based on the default black notehead.

- **New from Selection**



Creates a new notehead that is a duplicate of the notehead currently selected in the **Notehead Set** section.

- **Edit Notehead**



Opens the **Edit Notehead** dialog, where you can change the appearance of the notehead itself.

- **Save as Default**



Saves the currently selected notehead as a default in your user library, allowing you to use it in multiple projects.

- **Revert to Factory**



Removes all edits you have made to the selected predefined notehead, returning it to its original settings and appearance.

- **Delete**



Deletes the selected notehead.

NOTE

You cannot delete predefined noteheads or any notehead that is currently used in your project.

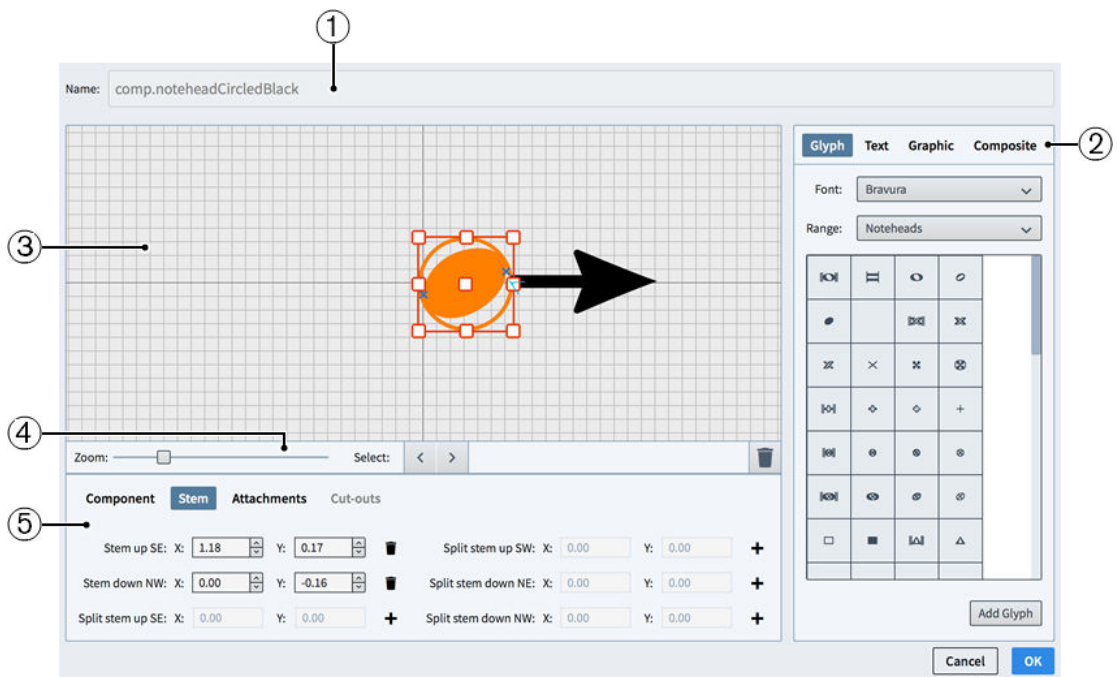
RELATED LINKS

[Notehead sets](#) on page 710

Edit Notehead dialog

The **Edit Notehead** dialog allows you to design custom noteheads and edit the appearance and arrangement of noteheads.

- You can open the **Edit Notehead** dialog from within the **Edit Notehead Sets** dialog, by selecting the notehead whose design you want to edit from the **Notehead Set** list and either double-clicking it or clicking **Edit Notehead** in the action bar in the **Notehead** section.



Edit Notehead dialog

The **Edit Notehead** dialog contains the following sections and options:

1 Name

Contains the saved name for predefined noteheads, or an automatically generated name for new noteheads. You cannot change this name.

2 Component selector

Allows you to choose components to add to the notehead. You can add different types of components by clicking the respective tab titles.

- **Glyph**, for example, ♯ or ♮. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the notehead.

NOTE

A full list of the different ranges of glyphs is available on the SMuFL website.

- **Text**, including numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the notehead.
- **Graphic**: Allows you to load a new graphics file, or select an existing graphic from the **Select existing** list, in SVG, PNG, or JPG format. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the notehead.
- **Composite**: Allows you to select a composite from the list. Click **Add Composite** to add the selected composite to the notehead.

3 Editor

Allows you to arrange and edit the components that make up the notehead. You can arrange and edit components by clicking and dragging them in the editor and by using the controls at the bottom of the dialog. You can also use the handles on each component to change their size.

We recommend that you position the notehead in the center of the editor so that its left edge is aligned with the thicker vertical grid line and its middle is aligned with the thicker horizontal grid line.

4 Editor action bar

Contains selection and view options for the editor.

- **Zoom**
Allows you to change the zoom level in the editor.
- **Select**
Allows you to select the next/previous component.

- **Show Attachments**



Shows all the attachments on all components in the editor.

- **Delete**



Deletes the selected component.

5 Controls

Contains controls that allow you to edit individual components. Controls are divided into tabs according to the aspect of the selected component they affect. For noteheads, the **Component**, **Stem**, and **Attachments** tabs are available. The **Cut-outs** tab does not apply to noteheads.

The **Component** tab contains the following options:

- **Offset:** Controls the position of the selected component. **X** moves it horizontally, **Y** moves it vertically.
- **Scale:** Controls the size of the selected component. For graphics, **X** controls its width, **Y** controls its height.

NOTE

Although some components scale their height and width independently, others retain their aspect ratio, meaning only one value affects their overall size.

- **Z order:** Allows you to **Bring Forward** or **Send Backward** the selected component in relation to other components when they overlap.

The **Stem** tab contains options controlling the position of where stems attach to the notehead. Each notehead can have multiple stem attachment points, as stems often attach to noteheads in different places when the note is stem up, stem down, and split for altered unisons. Stem attachment points include an indication of the stem direction for which the attachment is used and the part of the stem that attaches to this position, given as a compass direction. For example, **Stem up SE** is where the bottom right corner of an up stem attaches to the notehead.

Each stem attachment point in the **Stem** tab has the following options:

- **X:** Moves the attachment point horizontally.
- **Y:** Moves the attachment point vertically.
- **Add:** Adds the attachment point to the notehead.



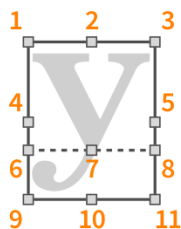
- **Delete:** Removes the attachment point from the notehead.



The **Attachments** tab is only available if the notehead comprises at least two separate components. It contains the following options:

- **Attachment from:** Sets the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.
- **Attachment to:** Sets the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.



The attachment points have the following names in the **Edit Notehead** dialog:

- 1 **Top Left**
- 2 **Top Center**
- 3 **Top Right**
- 4 **Middle Left**
- 5 **Middle Right**
- 6 **Baseline Left** (text only)
- 7 **Baseline Center** (text only)
- 8 **Baseline Right** (text only)
- 9 **Bottom Left**
- 10 **Bottom Center**
- 11 **Bottom Right**

RELATED LINKS

[Altered unisons](#) on page 491

Changing the notehead design of individual noteheads

You can change the notehead design of individual noteheads, including trill auxiliary notes. For example, cross noteheads might be used to indicate where players should produce pitchless sounds, such as air sounds on wind instruments.

NOTE

These steps do not apply to notes in slash voices.

PROCEDURE

1. Select the noteheads whose design you want to change. You can do this in Write mode and Engrave mode.
2. Choose **Edit > Notehead > [Notehead type] > [Notehead design]**. You can also choose these options from the context menu.

For example, to change the notehead design of the selected notes to X noteheads, choose **Edit > Notehead > Crosses > X Noteheads**.

RESULT

The notehead design of the selected notes is changed.

TIP

You can also change the notehead design for all noteheads project-wide.

RELATED LINKS

[Changing the notehead design project-wide](#) on page 708

[Project-wide engraving options for rhythm slashes](#) on page 850

[Rhythm slashes](#) on page 849

[Slash voices](#) on page 1044

[Hiding stems](#) on page 948

Changing the size of notes

You can change the size of notes individually using the default scale sizes for notes in cues or grace notes, or you can use a custom scale size.

TIP

- You can change the size of all notes project-wide by changing the notehead design on the **Notes** page in **Engrave > Engraving Options**. However, these options offer less flexibility than changing the size of notes individually.
 - If you want to change the size of notes because you want them to be grace notes or cues, you can input them as either grace notes or cues instead.
-

PROCEDURE

1. Select the notes whose size you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate any of the following properties in the **Common** group:
 - If you want to use a default scale size, activate **Scale**.
 - If you want to use a custom scale size, activate **Custom Scale**.
 - If you want to use a custom scale size based on a default scale size, activate both **Scale** and **Custom Scale**.
 3. Optional: If you activated **Scale**, select one of the following options from the menu:
 - **Normal**
 - **Grace**
 - **Cue**
 - **Cue grace**
 4. Optional: If you want activated **Custom Scale**, change the value in the value field.
-

RESULT

- If you activated **Scale**, the selected notes are changed to the selected default scale size.
- If you activated **Custom Scale**, the selected notes are changed to the custom percentage scale size you set.

- If you activated both **Scale** and **Custom Scale**, the selected notes are changed to the custom percentage scale size of the selected default scale size. For example, if you selected **Grace** for **Scale** then set **Custom Scale** to 50, the size of the selected notes is half the size of grace notes.

RELATED LINKS

[Inputting grace notes](#) on page 167

[Inputting cues](#) on page 268

[Notehead set designs](#) on page 711

Moving notes rhythmically

You can move notes, including grace notes, to different rhythmic positions along staves after they have been input.

PROCEDURE

1. In Write mode, select the notes you want to move.
2. Move the selected notes according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

RESULT

The selected notes are moved to new rhythmic positions according to the current rhythmic grid value. If you selected multiple notes, they are moved together as a block.

Notes are automatically positioned according to their rhythmic duration and position relative to other notes.

NOTE

If **Chords** is not activated and any of your selected notes collide with other notes in the same staff and at the same rhythmic position that are in the same voice as your selected notes, the existing notes are deleted and replaced with your selected notes.

RELATED LINKS

[Rhythmic grid](#) on page 144

[Inputting chords](#) on page 167

[Notes toolbox](#) on page 132

[Note spacing](#) on page 381

[Creating cross-staff beams](#) on page 544

[Moving notes to other staves](#) on page 286

Changing the width of ledger lines

You can change the width of ledger lines on individual notes, for example, to allow notes with short durations to be spaced more tightly and still be legible.

PROCEDURE

1. In Engrave mode, select the noteheads whose ledger line width you want to change.
 2. In the Properties panel, activate **Ledger line** in the **Notes and Rests** group.
 3. Change the values for **L** and **R**.
-

RESULT

Increasing **Ledger line L** makes the left side of ledger lines longer, decreasing the value makes the left side of ledger lines shorter.

Increasing **Ledger line R** makes the right side of ledger lines longer, decreasing the value makes the right side of ledger lines shorter.

TIP

You can change the width of all ledger lines project-wide on the **Notes** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for notes](#) on page 708

Hiding/Showing ledger lines

You can hide/show ledger lines on individual notes, for example, if you want to indicate approximate pitches using the relative vertical positions of notes.

PROCEDURE

1. In Engrave mode, select the noteheads whose ledger lines you want to hide/show.

NOTE

If you want to hide ledger lines, you must also select all other noteheads in the same voice and voice column index.

2. In the Properties panel, activate/deactivate **Hide ledger lines** in the **Notes and Rests** group of the Properties panel.
-

RESULT

Ledger lines are hidden/shown for the selected notes.

If you deactivated **Hide ledger lines** for only some notes in a chord, ledger lines are also shown on all notes between the selected notes and the staff in the same voice and voice column index.

RELATED LINKS

[Voice column index](#) on page 1042

Rhythm dot consolidation

Rhythm dot consolidation controls how many rhythm dots appear at the same rhythmic position in multiple-voice contexts. Depending on the number of notes and voices present, and their positions on the staff, different numbers of rhythm dots can be required to appear, and in different positions.

In the **Rhythm Dots** section of the **Notes** page in **Engrave > Engraving Options**, you can choose how rhythm dots in multiple voices are consolidated project-wide. There are separate options for the consolidation of rhythm dots generally and on unison notes in particular.

Rhythm dot consolidation



Notes of any duration have rhythm dots consolidated

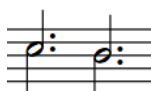


Only notes of the same duration have rhythm dots consolidated

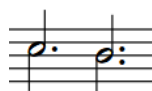


No rhythm dot consolidation

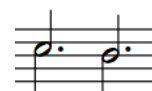
Rhythm dot consolidation on unison notes



One rhythm dot shown per notehead in unisons



Rhythm dots shown for each notehead for unisons on lines, but only one shown per unison in spaces



Only one rhythm dot shown per unison

TIP

You can also change how rhythm dots in multiple voices are consolidated individually.

RELATED LINKS

[Project-wide engraving options for notes](#) on page 708

[Changing the consolidation of rhythm dots](#) on page 726

Changing the consolidation of rhythm dots

You can change how rhythm dots in multiple voices are consolidated at individual rhythmic positions, independently of your project-wide setting. For example, if you want to show fewer rhythm dots for a very dense chord.

PROCEDURE

1. In Engrave mode, select the notes whose rhythm dot consolidation you want to change.
 2. In the Properties panel, activate **Rhythm dot consolidation** in the **Notes and Rests** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

Rhythm dots for notes of any duration are consolidated when the checkbox is activated, and no rhythm dots are consolidated when the checkbox is deactivated.

When the property is deactivated, rhythm dots follow your project-wide setting for consolidation according to note durations.

TIP

You can change how all rhythm dots in multiple voices are consolidated project-wide on the **Notes** page in **Engrave > Engraving Options**.

RELATED LINKS

[Rhythm dot consolidation](#) on page 725

[Project-wide engraving options for notes](#) on page 708

Moving rhythm dots

You can move rhythm dots horizontally. However, you cannot move an individual rhythm dot independently of other rhythm dots at the same rhythmic position.

PROCEDURE

1. In Engrave mode, select a notehead at each rhythmic position where you want to move rhythm dots.
2. In the Properties panel, activate **Rhythm dot X** in the **Notes and Rests** group.
3. Change the value in the value field.

RESULT

Increasing the **Rhythm dot X** value moves all rhythm dots at the selected rhythmic positions to the right, decreasing the value moves them to the left.

Specifying on which string individual notes are played

You can specify on which string individually selected notes are played when notes are in the staves of string instruments, such as violins or cellos. Many notes can be played on multiple strings, depending on where along its length the string is stopped.

Specifying the string can be useful for notes that also have glissando lines or fingering shifts, as the string and finger position required to play the note affects the direction of these changes. However, the string number is not shown in the music. You can instead input fingerings, which can help string players understand the string on which they should play.

NOTE

You can only specify strings on notes belonging to string instruments.

PROCEDURE

1. Select the notes whose assigned string you want to change. You can do this in Write mode and Engrave mode.

NOTE

If selecting multiple notes at once, select notes only in staves of the same instrument type. For example, select multiple Cs in Violin 1 and Violin 2 staves.

2. In the Properties panel, activate **String** in the **Notes and Rests** group.
3. Select your preferred string from the menu.

The string number for the instrument is shown, followed by the fundamental pitch and the octave number of that string in parentheses. For example, the lowest cello string is expressed as **4 (C2)**.

NOTE

The options available in the menu depend on the selected pitches and the instrument type.

RESULT

The string on which the selected notes are played is changed.

NOTE

If you subsequently change the pitches of notes, **String** is automatically deactivated for all notes that can no longer be played on their specified string.

RELATED LINKS

[Glissando lines](#) on page 753

[Changing the direction of string fingering shift indicators](#) on page 651

Ornaments

Ornaments are markings that indicate multiple notes are played in addition to the notated pitch. They are used to decorate music, such as in Baroque music, which is highly decorated with trills and other ornaments.

Over time, specific ways of notating how performers should play notes have developed and different ornament symbols indicate different patterns of decorative notes. Nonetheless, ornaments give some freedom to performers to embellish music in their own way.

Dorico Pro offers a range of ornament symbols to allow you to notate different styles of ornaments.

The term “ornaments” covers a wide range of decorative notes, including:

- Mordents
- Trills
- Turns
- Grace notes
- Acciaccaturas
- Appoggiaturas

In Dorico Pro, the term “ornaments” refers to ornament symbols and trill marks that are input above notes.



A phrase containing a turn, short trills, and a trill with extension line

RELATED LINKS

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

[Grace notes](#) on page 657

[Positions of ornaments](#) on page 731

Project-wide engraving options for ornaments

You can find options for the project-wide appearance and position of ornaments and trills on the **Ornaments** page in **Engrave > Engraving Options**.

The options on the **Ornaments** page allow you to change the position of trills relative to accidentals, noteheads, trill extension lines. You can also change the default appearance of trill marks on subsequent systems, the appearance and restatement of trill intervals, and set the minimum distance between ornaments and the staff and noteheads.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Changing ornament intervals

You can change the intervals of ornaments, both above and below the notated pitch, to indicate which pitches are played in the ornament. The intervals of ornaments are indicated by accidentals.

For some ornaments, you can only change the interval in one direction. For example, you can only change the interval above short trills and below mordents.

NOTE

These steps do not apply to trills.

PROCEDURE

1. Select the ornaments whose interval you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate the appropriate properties for the selected ornaments in the **Ornaments** group:
 - **Interval above**
 - **Interval below**For trills, activate **Interval** in the **Trills** group of the Properties panel.
3. Change the value in the value field to the interval you want.
 - 0 or 4 and above shows no accidental.
 - 1 shows a flat.
 - 2 shows a natural.
 - 3 shows a sharp.

RESULT

The interval of the selected ornaments is changed.

NOTE

Some ornaments do not show accidentals either above or below, depending on their type.

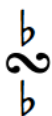
- Some ornaments do not show accidentals either above or below, depending on their type.
 - You can change the position of ornament accidentals relative to all trills project-wide on the **Ornaments** page in **Engrave > Engraving Options**.
-

EXAMPLE

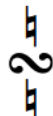
No accidentals



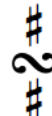
Flats above and below



Naturals above and below



Sharps above and below



RELATED LINKS

[Changing the intervals of existing trills](#) on page 739

[Project-wide engraving options for ornaments](#) on page 729

Positions of ornaments

Ornaments, including trills, are placed above the notes to which they apply. They are only placed below the staff when there are multiple voices on the staff.

Ornaments and trills are positioned outside of slurs by default. Similarly, they are positioned further from noteheads than articulations.

The center of ornaments aligns with the center of the notehead to which they apply. Trills are aligned differently, as the left side of trill marks aligns with the left edge of the notehead to which the trill applies.

Dorico Pro automatically positions ornaments correctly according to their type, and attaches them to their notehead.

You can move ornaments to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move ornaments graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the default positions of all ornaments and trills project-wide on the **Ornaments** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for ornaments](#) on page 729

[Moving ornaments graphically](#) on page 732

[Changing the position of ornaments relative to slurs](#) on page 733

Moving ornaments rhythmically

You can move ornaments to new rhythmic positions.

PROCEDURE

1. In Write mode, select the ornaments you want to move.

NOTE

When using the mouse, you can only move one ornament at a time.

2. Move the ornaments in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

- Click and drag the ornament to the right/left to snap it to different rhythmic positions.
-

RESULT

A single ornament is moved to the next or previous notehead on that staff.

Multiple ornaments are moved according to the current rhythmic grid value.

Moving ornaments graphically

You can move ornaments graphically without changing the rhythmic positions to which they apply. You can also move the start/end handles of trills independently of each other, meaning you can lengthen/shorten trills graphically.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

- Ornaments or trills
- Individual handles on trills

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the ornaments or handles in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected items are moved graphically, without affecting the rhythmic positions to which they are attached.

TIP

Offset in the **Common** group of the Properties panel is activated automatically when you move ornaments.

- **Offset X** moves ornaments horizontally.
- **Offset Y** moves ornaments vertically.

The following properties in the **Trills** group of the Properties panel are activated automatically when you move trills:

- **Start offset** moves whole trills. **X** moves them horizontally, **Y** moves them vertically.
- **End offset X** moves the end of trill extension lines horizontally.

For example, if you move a whole trill to the right, both handles are moved so both properties are activated. You can also use these properties to move ornaments/trills and lengthen/shorten trills graphically by changing the values in the value fields.

Deactivating the properties resets the selected ornaments and trills to their default positions.

Changing the placement of ornaments relative to the staff

Ornaments are usually placed above the staff, but they are placed below the staff for down-stem voices when there are multiple voices on the staff. You can change the staff-relative placement of ornaments individually.

PROCEDURE

1. Select the ornaments whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Placement** in the corresponding group for the selected ornaments:
 - **Ornaments**
 - **Trills**
 3. Choose one of the following options:
 - **Above**
 - **Below**
-

RESULT

The placement of the selected ornaments is changed.

Changing the position of ornaments relative to slurs

Ornaments are positioned outside of slurs by default. You can change the position of ornaments relative to slurs individually.

PROCEDURE

1. In Engrave mode, select the ornaments whose slur-relative position you want to change.
 2. In the Properties panel, activate **Slur-relative position** in the corresponding group for the selected ornaments:
 - **Ornaments**
 - **Trills**
 3. Choose one of the following options:
 - **Inside**
 - **Outside**
-

RESULT

The selected ornaments are positioned either inside or outside of slurs.

Changing the start position of trills

You can change whether the start position of individual trills is aligned with the notehead or with its accidental, independently of your project-wide setting.

PROCEDURE

1. Select the trills whose start position you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Start position** in the **Trills** group.

3. Choose one of the following options:

- **Notehead**
 - **Accidental**
-

RESULT

The start position of the selected trills is changed.

TIP

You can change the start position of all trills project-wide on the **Ornaments** page in **Engrave** > **Engraving Options**.

RELATED LINKS

[Project-wide engraving options for ornaments](#) on page 729

Trills

Trills are fast alternations between two notes, similar to a tremolo, that were a common decoration in Baroque, Classical, and Romantic music. Trill marks are usually added to a single note, to indicate the performed notes are the notated pitch and the note either a half-step or whole step above, and can have extension lines to show the duration of the trill.



A phrase containing multiple trills with extension lines

Because of their legacy as an ornament, many performers interpret trills differently to tremolos: some players add more emphasis to the notated pitch in a trill and less on the trilled-to note but play both notes equally in tremolos.

The most common trills are to notes a major or minor second above, but it is also possible to specify other trill intervals.

In Dorico Pro, you can specify any trill interval, change their appearance, and hear them in playback.

RELATED LINKS

- [Trill intervals](#) on page 737
- [Trill interval appearance](#) on page 740
- [Trills in playback](#) on page 742

Hiding/Showing trill marks

You can hide/show trill marks at the start of individual trills. This also hides/shows trill marks on all systems on which the trills extend.

PROCEDURE

1. Select the trills whose trill marks you want to hide/show. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Show trill mark** in the **Trills** group.

3. Activate/Deactivate the corresponding checkbox.
-

RESULT

Trill marks are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

When the property is deactivated, trill marks follow your project-wide setting.

Changing the speed of trills

You can indicate different speeds for trills, including indicating a change of speed within a single trill, by changing the height and frequency of wiggles in their extension lines.

PROCEDURE

1. Select the trills whose speed you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate the following properties, individually or together, in the **Trills** group:
 - **Start speed**
 - **End speed**
 3. Select one of the following options from each property menu:
 - **Slow**
 - **Normal**
 - **Fast**
-

RESULT

The speed of the selected trills is changed. This affects both the frequency of wiggles in their extension lines and their playback speed.

If only **Start speed** is activated, the speed of the whole trill extension line is changed. If only **End speed** is activated, the speed of the end half of the trill extension line is changed.

EXAMPLE



A trill extension line starting slow and ending fast

AFTER COMPLETING THIS TASK

You can customize the playback speed of trills individually.

RELATED LINKS

[Changing the playback speeds of trills](#) on page 744

Hiding/Showing speed changes in trill extension lines

You can hide/show speed changes in the extension lines for individual trills, for example, if you want to hear different speeds in playback but show extension lines with consistent wiggles.

PROCEDURE

1. Select the trills whose speed changes you want to hide/show. You can do this in Write mode and Engrave mode.

2. In the Properties panel, activate/deactivate **Suppress drawing speed changes** in the **Trills** group.
-

RESULT

Speed changes are hidden when the property is activated, and shown when it is deactivated.

EXAMPLE



Trill speed changes shown



Trill speed changes hidden

Hiding/Showing trill extension lines

You can hide/show the extension lines of individual trills.

PROCEDURE

1. Select the trills whose extension lines you want to hide/show. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Has trill line** in the **Trills** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

Trill extension lines are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

When the property is deactivated, trills follow your project-wide setting.

TIP

You can hide/show trill extension lines on all trills project-wide on the **Ornaments** page in **Engrave > Engraving Options**.

RELATED LINKS

[Changing the speed of trills](#) on page 735

[Changing the playback speeds of trills](#) on page 744

Lengthening/Shortening trills rhythmically

You can lengthen/shorten trills after they have been input. Multiple ornaments can exist at the same rhythmic position, so you can also lengthen/shorten trills to noteheads that already have ornaments.

PROCEDURE

1. In Write mode, select the trills you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one trill at a time.

2. Lengthen/Shorten the trills in any of the following ways:
 - To lengthen them by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.

- To shorten them by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.
- To lengthen a single trill to the next notehead, press **Ctrl/Cmd-Shift-Alt-Right Arrow**.
- To shorten a single trill to the previous notehead, press **Ctrl/Cmd-Shift-Alt-Left Arrow**.

NOTE

- You can only lengthen/shorten trills by the current rhythmic grid value when multiple trills are selected.
 - Key commands lengthen/shorten items by moving their end only.
-
- Click and drag the circular handle at the start/end of the trill to noteheads to the right/left.

RESULT

Single trills are lengthened/shortened according to the current rhythmic grid value or to the next/previous notehead, whichever is closer.

Multiple trills are lengthened/shortened according to the current rhythmic grid value.

RELATED LINKS

[Positions of ornaments](#) on page 731

[Moving ornaments rhythmically](#) on page 731

[Moving ornaments graphically](#) on page 732

Trill intervals

Trill intervals tell performers which notes to play and also affect the pitches used in playback in Dorico Pro. For example, a trill with a sharp accidental on an E indicates that the performer trills between E and F \sharp , rather than between E and F.



The different accidentals on these trills indicate changes in the trilled-to note.

If you do not specify an interval when inputting a trill, Dorico Pro calculates an appropriate interval based on the top note in the voice to which the trill belongs, the current key signature, and any accidentals earlier in the bar. For example, inputting a trill on an E \natural in C major produces a half-step/minor second trill interval to F \flat . If there were a sharp accidental on the F earlier in the bar, the trill interval produced is a whole step/major second between the E \natural and F \sharp .

In open/atonal key signatures, Dorico Pro produces whole step/major second trill intervals by default.

You can specify trill intervals when inputting them with the popover, including at different noteheads in the same trill, and you can change their intervals after they have been input.

Trills and accidentals

If required, Dorico Pro shows accidentals to clarify trill intervals. Dorico Pro also automatically shows accidentals on other notes in the bar if they have different accidentals to any upper notes of trills.

By default, trill marks themselves show intervals, unless the upper note is modified by an accidental in the key signature. If the upper note has been modified by an accidental earlier in the bar, trills always show the interval. If trills modify pitches modified by an accidental in the key signature, any subsequent notes of that pitch show the appropriate accidental automatically. Any cautionary accidentals required in the current and following bars are also shown automatically.

Microtonal trill intervals

When using other tonality systems than 12-EDO, you can specify trill intervals based on diatonic steps and the total number of divisions from the written note. In 24-EDO, you can describe trill intervals based on their quality, such as major or minor. In tonality systems with a greater number of divisions or an unequal number of divisions between each diatonic step, you must specify trill intervals based on their octave divisions, as specifying only the interval quality is insufficient in such cases.

RELATED LINKS

[Trill interval appearance](#) on page 740

Hiding/Showing trill interval accidentals

You can hide/show trill interval accidentals for individual trills.

NOTE

These steps only hide the accidentals shown in trill intervals, they do not hide auxiliary notes or Hollywood-style markings.

PROCEDURE

1. Select the trills whose accidentals you want to hide/show. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Accidental** in the **Trills** group.
 3. Choose one of the following options:
 - **Hide**
 - **Show**
-

RESULT

Accidentals in the selected trill intervals are hidden when you choose **Hide**, and shown when you choose **Show**.

NOTE

Trill accidentals are restated at each new pitch over which the trill extends. You can choose to repeat or hide all Hollywood-style trill intervals on successive notes in the **Trill Intervals** section of the **Ornaments** page in **Engrave > Engraving Options**.

RELATED LINKS

[Changing the appearance of trill intervals](#) on page 741

Changing the intervals of existing trills

The default trill interval is a second, either major or minor depending on the context. In addition to specifying the interval when inputting trills with the ornaments popover, you can change the intervals of trills individually after they have been input.

PROCEDURE

1. Select the trills whose interval you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Interval** in the **Trills** group. The existing interval of the trill is shown as a number and quality.
3. Change the interval by changing the value in the value field.
4. Select one of the following interval qualities from the menu:
 - **Diminished**
 - **Minor**
 - **Major**
 - **Augmented**

RESULT

The interval of the selected trills is changed. By default, trill intervals appear as accidentals when the interval is a second and as auxiliary notes for all other intervals.

RELATED LINKS

[Ornaments popover](#) on page 229

Changing intervals partway through trills

You can change the interval of trills multiple times within their duration, including before you have input notes, for example, if you want a trill to change seamlessly from a minor second in one bar to a major second in the next.

PROCEDURE

1. In Write mode, select one of the following:
 - The note whose trill interval you want to change.
 - An item or rest on the staff where you want to input notes and specify trill intervals.
2. Press **Shift-N** or **Return** to start note input.
3. Press **Right Arrow/Left Arrow** to move the caret according to the current rhythmic grid value to the notehead where you want to change the trill interval.

NOTE

You can only change trill intervals at noteheads.

-
4. Press **Shift-O** to open the ornaments popover.
 5. Enter the trill interval you want into the popover. For example, enter **m3** for a minor third.
 6. Press **Return** to close the popover.
 7. Optional: Repeat steps 3 to 6 to change the trill interval at other noteheads in the trill.
 8. Press **Esc** or **Return** to stop note input.
-

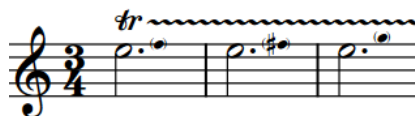
RESULT

The trill interval is changed at the corresponding noteheads. By default, all trill intervals in the trill appear as accidentals when the intervals are all seconds and as auxiliary notes when the trill contains at least one trill interval with a different interval.

EXAMPLE



Trill with interval changes shown as accidentals



Trill with interval changes shown as auxiliary notes

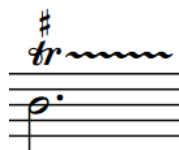
Trill interval appearance

There are different accepted ways to present trill intervals, including accidental symbols and the Hollywood convention of showing "H.T." for a half-step (semitone) and "W.T." for a whole step (tone).

In Dorico Pro, trill intervals can appear in the following ways:

Accidental

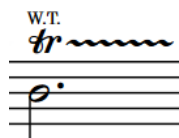
Indicates the trill interval using accidentals positioned above, below, or beside the **tr** mark. This is the default trill interval appearance in Dorico Pro for major or minor second trills.



Hollywood-style

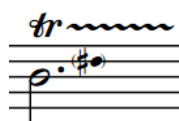
Indicates the trill interval using text.

- **H.T.** for half-step/minor second trills
- **W.T.** for whole step/major second trills



Auxiliary note

Indicates the trill interval using a small, parenthesized, stemless notehead shown in the staff immediately to the right of the first note to which the trill applies, and at the correct staff position for the trilled-to pitch. Auxiliary notes are used for all trill intervals that are not a major or minor second, but are automatically hidden for unison trills if the notehead design of the auxiliary note has not been overridden.



TIP

You can find options for the default appearance, position, and restatement of trill intervals on the **Ornaments** page in **Engrave > Engraving Options**.

Changing the appearance of trill intervals

You can change the appearance of trills with a second interval individually, independently of your project-wide setting, for example, if you want to show auxiliary notes on some trills to clarify a change in the trilled-to pitch.

NOTE

You can only change the trill interval appearance of trills with a major/minor second interval.

PROCEDURE

1. Select the trills whose trill interval appearance you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Appearance** in the **Trills** group.
 3. Select one of the following options from the menu:
 - **Accidental**
 - **Hollywood style**
 - **Auxiliary note**
-

RESULT

The appearance of the selected trill intervals is changed.

TIP

You can change the default appearance of all trills with a second interval project-wide in the **Trill Intervals** section of the **Ornaments** page in **Engrave > Engraving Options**.

AFTER COMPLETING THIS TASK

You can change the notehead design of individual auxiliary notes, for example, to show that the trilled-to note is a harmonic.

RELATED LINKS

[Project-wide engraving options for ornaments](#) on page 729

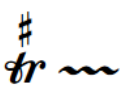
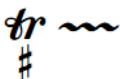
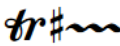
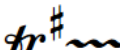
[Changing the notehead design of individual noteheads](#) on page 722

Changing the position of trill interval indicators

You can change where trill interval indicators, such as an accidental or W.T. marking, are positioned relative to individual trills, independently of your project-wide setting.

PROCEDURE

1. Select the trills whose interval indicator position you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Interval position** in the **Trills** group.
3. Select one of the following options from the menu:
 - **Above**

- 
- Below

- On the right

- Superscript


RESULT

The position of interval indicators relative to the selected trills is changed.

TIP

You can change the default position of interval indicators relative to all trills project-wide in the **Trill Intervals** section of the **Ornaments** page in **Engrave > Engraving Options**.

Trills in playback

Dorico Pro plays back trills by using a combination of sampled trills, when available, and triggering multiple notes.

- You can find options for trill playback on the **Trills** page in **Play > Playback Options**.

Dorico Pro can play back sampled half-step (semitone) and whole step (tone) trills automatically if these playing techniques are defined in the VST expression map, which is the case for a number of instruments in HALion Symphonic Orchestra. For sample libraries that do not provide sampled trills, or for intervals beyond a whole step, Dorico Pro generates trills. If your project contains some trill intervals that can only be generated, you can disable sampled trills and use generated trills throughout to produce a more consistent result.

When playing generated trills, Dorico Pro incorporates grace notes immediately before and after trills. A single unslashed grace note on the initial trill note produces an appoggiatura, while multiple grace notes on the initial trill note are included in the trill pattern. Grace notes on the note immediately following a trill are also included in the trill pattern.



A trill with grace notes at both the start and end

Variable speeds within trills are included in playback. You can determine the default playback speeds of slow, normal, and fast trills on the **Trills** page in **Playback Options**, and you can

change the playback speed of individual trills. Additionally, you can hide trill speed changes in trill extension lines whilst retaining the speed changes in playback.

In contemporary performance practice, trills are usually performed starting on the written note, while in the historical performance practice of the Baroque and Classical eras, trills are usually performed starting on the upper (trilled-to) note. You can change the default starting pitch for trills individually and by changing the default setting.

Another common performance practice, in particular for Romantic piano music, is to perform all trills with an acceleration, starting slowly and getting faster during the trill. You can choose this setting on the **Trills** page in **Playback Options**. It applies to all trills whose speed has not been changed.

RELATED LINKS

[Changing the speed of trills](#) on page 735

[Hiding/Showing speed changes in trill extension lines](#) on page 735

[Changing the starting pitch of trills](#) on page 744

Sampled vs. generated trills

Sampled trills are recorded, looped samples, whereas generated trills are produced by manually triggering separate notes.

Because they use fixed sounds, sampled trills typically offer no parameters that allow any kind of variation in the trill interpretation, such as different trill speeds or incorporating grace notes and termination notes into the pattern of trilled notes. By contrast, generated trills can provide greater flexibility but produce a less natural and realistic sound.

If your project contains some trill intervals that can only be generated, you can disable sampled trills and use generated trills throughout to produce a more consistent result.

Enabling/Disabling trill samples in playback

You can enable/disable the use of sampled trills in your project. This can be useful if your project contains some trill intervals that can only be generated and you want to use only generated trills throughout, or if you want to incorporate grace notes immediately before/after trills.

NOTE

If you are using NotePerformer for playback, we recommend that you disable sampled trills to allow Dorico Pro to send the correct notes and controllers for NotePerformer to produce its most realistic trill playback.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
 2. Click **Trills** in the page list.
 3. Choose one of the following options for **Playback approach for trills**:
 - **Generated trills only**
 - **Use samples if possible**
 4. Click **Apply**, then **Close**.
-

RESULT

Sampled trills are enabled when you choose **Use samples if possible**, and disabled when you choose **Generated trills only**.

Changing the playback speeds of trills

In addition to changing the speed of trills, which changes both the frequency of wiggles in their extension lines and their playback speed, you can also change the playback speed of each speed variant in individual trills, for example, if you want to make the fastest part of an individual trill faster than your default setting.

PROCEDURE

1. Select the trills whose playback speeds you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate any of the following properties, as appropriate for your selected trills:
 - **Slow trill speed**
 - **Normal trill speed**
 - **Fast trill speed**
3. Change the values in the value fields.

RESULT

The playback speed of the selected trills is changed. The values in the value fields correspond to the number of notes sounding per second.

TIP

You can change the default speeds for each level on the **Trills** page in **Play > Playback Options**.

RELATED LINKS

[Changing the speed of trills](#) on page 735

[Hiding/Showing speed changes in trill extension lines](#) on page 735

Changing the starting pitch of trills

By default in Dorico Pro, trills start on the lower note, which is usually the written note. However, the accepted practice in Baroque and Classical music is to start trills on the upper note. You can change the starting pitch of trills individually.

PROCEDURE

1. Select the trills whose starting note you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Start on upper note** in the **Trills** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

The selected trills start on the upper note when the checkbox is activated, and on the lower note when the checkbox is deactivated.

When the property is deactivated, trills follow your project-wide setting for the starting pitch of trills.

TIP

You can change the default starting pitch of all trills project-wide on the **Trills** page in **Play > Playback Options**.

Arpeggio signs

Arpeggio signs are vertical lines that indicate chords are to be played arpeggiated, or “spread”, so that the notes in the chord are played very quickly one after another. Arpeggio signs are normally shown with wavy lines similar to trill extension lines.



Arpeggiated chords can be played in two directions:

- Upwards, starting from the bottom note in the chord.
- Downwards, starting from the top note in the chord.

Dorico Pro offers the following types of arpeggio signs:

Up arpeggio

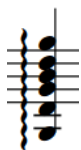
A vertical wavy line that indicates chords are to be arpeggiated from the bottom note upwards.

Down arpeggio

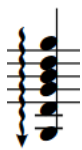
A vertical wavy line that indicates chords are to be arpeggiated from the top note downwards.

Non arpeggio

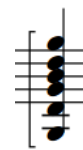
A bracket with straight lines that indicates all notes in the chord are to be played together, not arpeggiated.



Default up arpeggio



Default down arpeggio

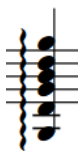


Default non arpeggio

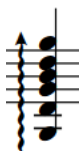
It is most common for up arpeggios to be shown with nothing at the top end, because chords are usually arpeggiated upwards, and for down arpeggios to be shown with an arrow at the bottom, so this is the default in Dorico Pro. However, it is also accepted practice to show up arpeggios with an arrow at the top if down arpeggios are also used in the same piece of music.

You can show both up arpeggios and down arpeggios with one of three ends in Dorico Pro:

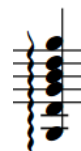
- Nothing
- Arrow
- Swash



Up arpeggio with nothing at the end



Up arpeggio with an arrow at the end



Up arpeggio with a swash at the end

RELATED LINKS

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Changing the type of arpeggio signs

You can change the type of arpeggio signs after they have been input.

PROCEDURE

1. Select the arpeggio signs whose type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, select one of the following options from the **Arpeggio type** menu in the **Arpeggios** group:
 - **Non arpeggio**
 - **Up arpeggio**
 - **Down arpeggio**

RESULT

The type of the selected arpeggio signs is changed.

TIP

You can also change the arpeggio type by opening the ornaments popover and changing the entry.

RELATED LINKS

[Ornaments popover](#) on page 229

[Changing existing items](#) on page 280

Changing the end appearance of arpeggio signs

Down arpeggio signs have an arrowhead at the bottom of the line by default, but up arpeggio signs have no arrowhead by default. You can change the appearance of the ends of arpeggio signs individually, independently of your project-wide settings.

PROCEDURE

1. Select the arpeggio signs of any direction whose ends you want to change. You can do this in Write mode and Engrave mode.

NOTE

You cannot change the ends of non arpeggio signs.

2. In the Properties panel, activate **Sign end** in the **Arpeggios** group.
3. Select the end you want from the menu:

- **Nothing**
 - **Arrow**
 - **Swash**
-

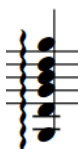
RESULT

The appearance of the ends of the selected arpeggio signs is changed.

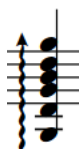
TIP

You can change the default appearance of the ends of all arpeggio signs project-wide on the **Arpeggio Signs** page in **Engrave > Engraving Options**.

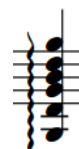
EXAMPLE



Up arpeggio sign with nothing at the end



Up arpeggio sign with an arrow at the end



Up arpeggio sign with a swash at the end

Length of arpeggio signs

Dorico Pro automatically adjusts the length of arpeggio signs when the pitches of the notes in the voices to which the sign applies change, or when you add notes to the chords or delete notes from the chords.

You can change how far arpeggio signs extend beyond the outer notes in all chords project-wide on the **Arpeggio Signs** page in **Engrave > Engraving Options**. You can set different values for when notes are on staff lines and in staff spaces.

You can also lengthen/shorten individual arpeggio signs.

RELATED LINKS

[Project-wide engraving options for arpeggio signs](#) on page 750

Lengthening/Shortening arpeggio signs

You can lengthen/shorten individual arpeggio signs manually. For example, you might lengthen an arpeggio sign on a chord with a small pitch range so the arpeggio sign is more clearly visible.

PROCEDURE

1. In Engrave mode, select the square handles at one end of the arpeggio signs you want to lengthen/shorten.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The selected arpeggio signs are lengthened/shortened graphically.

TIP

- The following properties in the **Arpeggios** group of the Properties panel are activated automatically when you move the corresponding end of arpeggio signs:

- **Top Y offset** moves the handles at the top of arpeggio signs.
- **Bottom Y offset** moves the handles at the bottom of arpeggio signs.

For example, if you move a whole arpeggio sign, both handles are moved so both properties are activated. You can also use these properties to lengthen/shorten arpeggio signs graphically by changing the values in the value fields.

Deactivating the properties resets the selected arpeggio signs to their default positions.

- You can change how far arpeggio signs extend beyond the outer notes in all chords project-wide on the **Arpeggio Signs** page in **Engrave > Engraving Options**.

RELATED LINKS

[Moving arpeggio signs graphically](#) on page 749

[Project-wide engraving options for arpeggio signs](#) on page 750

General placement conventions for arpeggio signs

Arpeggio signs are positioned to the left of the notes, including any applicable accidentals, to which they apply, but are positioned between grace notes and normal notes. They should appear within the same bar as the notes to which they apply, and not on the other side of the barline.

Dorico Pro makes automatic adjustments to note spacing and staff spacing to accommodate arpeggio signs and ensure they are positioned correctly.

Arpeggio signs should cover the whole vertical range of all notes in the chord to which they apply, and protrude slightly at each end. However, they do not need to cover the stems of notes. Dorico Pro automatically creates the lengths of arpeggio signs to cover the notes in chords, and adjusts their lengths if the notes in chords change or are deleted.

If an arpeggiated chord spans two staves, such as in a piano part, its arpeggio sign can extend across both staves.

You can move arpeggio signs to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move arpeggio signs graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

You can change the default position of all arpeggio signs project-wide on the **Arpeggio Signs** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for arpeggio signs](#) on page 750

[Length of arpeggio signs](#) on page 747

Moving arpeggio signs rhythmically

You can move arpeggio signs to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the arpeggio signs you want to move.
2. Move the arpeggio signs in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

NOTE

You cannot move arpeggio signs rhythmically with the mouse.

RESULT

Arpeggio signs are moved to the right/left, according to the current rhythmic grid value.

If no notes exist at the next rhythmic position according to the rhythmic grid, the arpeggio sign is not shown. If you continue moving it to the right/left, it is shown again beside the next note at a rhythmic position that can be reached according to the current rhythmic grid value.

You can change the rhythmic grid if you want to move arpeggio signs to notes at other rhythmic positions.

NOTE

Only one arpeggio sign can exist at each rhythmic position. If an arpeggio sign in your selection passes over another arpeggio sign as part of its move, the existing arpeggio sign is deleted.

Moving arpeggio signs graphically

You can move arpeggio signs graphically without changing the rhythmic positions to which they apply.

PROCEDURE

1. In Engrave mode, select the arpeggio signs you want to move.
2. Move the arpeggio signs in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected arpeggio signs are moved graphically, without affecting the rhythmic positions to which they apply.

TIP

The following properties in the **Arpeggios** group of the Properties panel are activated automatically when you move the corresponding part of arpeggio signs:

- **Top Y offset** moves the top of arpeggio signs vertically.
- **Bottom Y offset** moves the bottom of arpeggio signs vertically.
- **X offset** moves whole arpeggio signs horizontally.

For example, if you move a whole arpeggio sign upwards, both handles are moved, so **Top Y offset** and **Bottom Y offset** are both activated. You can also use all three properties to move arpeggio signs graphically by changing the values in the value fields.

Deactivating the properties resets the selected arpeggio signs to their default position.

RELATED LINKS

[Lengthening/Shortening arpeggio signs](#) on page 747

Showing arpeggio signs before/after grace notes

You can show arpeggio signs before/after grace notes individually. By default, arpeggio signs are positioned immediately to the left of the notes to which they apply, and so are positioned between normal notes and grace notes.

PROCEDURE

1. Select the arpeggio signs you want to show before grace notes. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Arpeggio before grace notes** in the **Arpeggios** group.
-

RESULT

The selected arpeggio signs are shown before grace notes when the property is activated, and after grace notes when the property is deactivated.

Project-wide engraving options for arpeggio signs

You can find options for the project-wide appearance and position of arpeggio signs on the **Arpeggio Signs** page in **Engrave > Engraving Options**.

The options on this page allow you to change the design, appearance, and precise position of arpeggio signs, including whether they can be shown on notes in slash voices.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Arpeggios in playback

You can find options to control the playback of all arpeggios project-wide in the **Arpeggio Signs** section of the **Timing** page in **Play > Playback Options**.

For example, you can control whether arpeggiation starts on the beat or ends on the beat, and the speed of arpeggiation.

You can set a default arpeggio length, expressed as a fraction of a quarter note (crotchet) at 120 bpm. It can be helpful to set arpeggio lengths using this measurement instead of defining arpeggios as a fraction of their notated rhythm, as otherwise arpeggios in very slow music would play back much slower than most people intend.

As well as setting a default length for arpeggios, you can also set minimum and maximum values for the length of arpeggios, expressed as a fraction of the notated value of the arpeggio. This is to ensure all notes with arpeggio signs can be heard within their notated duration.

TIP

You can also use properties in the **Arpeggios Playback** group of the Properties panel to override the default playback options for individual arpeggio signs.

Changing arpeggio playback relative to the beat individually

You can change whether individual arpeggios are played before their notated position or after their notated position, independently of your project-wide settings.

PROCEDURE

1. Select the arpeggio signs whose playback relative to the beat you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Playback position** in the **Arpeggios Playback** group.
 3. Choose one of the following options:
 - **Start on beat**
 - **End on beat**
-

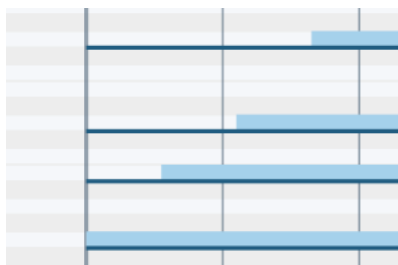
RESULT

The beat-relative position of the selected arpeggios in playback is changed.

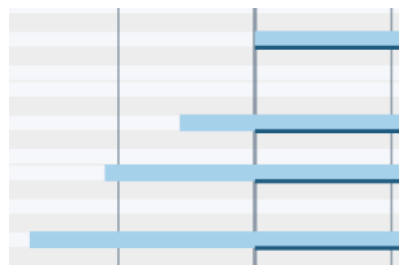
TIP

You can change the playback of all arpeggios relative to the beat project-wide on the **Timing** page in **Play > Playback Options**.

EXAMPLE



Arpeggio starting on the beat



Arpeggio ending on the beat

RELATED LINKS

- [Arpeggios in playback](#) on page 750
- [Playback Options dialog](#) on page 405

Changing the playback duration of arpeggios individually

You can change the duration of individual arpeggios in playback, independently of your project-wide settings.

The duration of arpeggios is expressed as a fraction of the notated rhythm of chords. For example, an arpeggio on a quarter note (crotchet) chord with a note offset value of $1/2$ lasts an eighth note (quaver), whereas with a note offset value of $1/8$ it lasts a 32nd note.

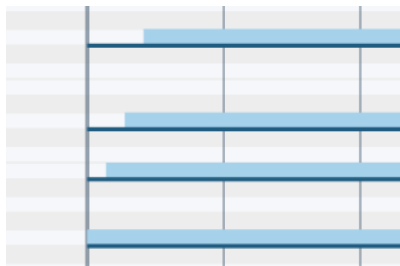
PROCEDURE

1. Select the arpeggio signs whose playback offset you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Note offset** in the **Arpeggios Playback** group.
3. Change the playback offset of the selected arpeggio signs by changing the value in the value field.
4. Press **Return**.

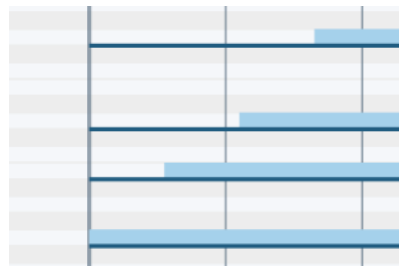
RESULT

The playback duration of the selected arpeggios is changed. This overrides your project-wide settings for the duration of arpeggios for the selected arpeggios.

EXAMPLE



Arpeggiated chord with a note offset value of $1/8$



Arpeggiated chord with a note offset value of $1/2$

RELATED LINKS

[Arpeggios in playback](#) on page 750

Glissando lines

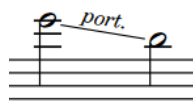
Glissando lines indicate a continuous transition between two notes, which can be smooth or in chromatic steps. They can have straight lines or wiggly lines, and can be shown with a text indication or as a line without text.

There are different conventions regarding the playing techniques for glissando and portamento. Some people understand glissando lines to indicate a chromatic scale between the two notes, either rising or falling in a series of semitones, and portamento lines to indicate a smooth, continuous glide between the two notes. However, the terms glissando and portamento can be used interchangeably in other cases.

You can input both glissando lines and portamento lines in Dorico Pro, and you can easily change their style after they have been input.



An example glissando line with text shown and a wiggly line



An example portamento line with text shown and a straight line

RELATED LINKS

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

General placement conventions for glissando lines

Glissando lines are positioned between noteheads and the steepness of their angle should reflect the interval between the notes: the steeper the angle, the greater the interval. The endpoints of glissando lines must be directly beside noteheads but not directly touching them.

Glissando lines must not collide with accidentals, and instead must stop short so the accidental can be clearly read. Dorico Pro automatically positions glissando lines so they do not collide with accidentals.

Usually, glissando lines join two adjacent noteheads because they indicate a gradual but constant change in pitch between those two notes, but they can also cross multiple notes.

Glissando lines can cross system breaks and page breaks. If text is shown for glissando lines that span across a system break or page break, then that text is shown on every part of the glissando line. By default, the start position and end position of each segment matches the original start point and end point of the whole glissando line.

In Dorico Pro, you can make detailed adjustments to the default positions of glissando lines on the **Glissando Lines** page in **Engrave > Engraving Options**. You can also adjust the start/end positions of individual glissando lines in Engrave mode.

RELATED LINKS

[Project-wide engraving options for glissando lines](#) on page 754

[Changing the default angles of glissando lines project-wide](#) on page 757
[Changing the angles of glissando lines individually](#) on page 758

Project-wide engraving options for glissando lines

You can find options for the project-wide appearance and position of glissando lines on the **Glissando Lines** page in **Engrave > Engraving Options**.

The options on the **Glissando Lines** page allow you to change the style, appearance, and thickness of glissando lines. You can also set precise positions for the endpoints of glissando lines relative to noteheads.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

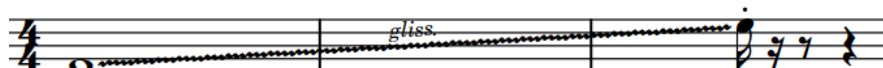
Glissando lines across empty bars

In Dorico Pro, you can input glissando lines between any two notes, even if there are rests or other notes between them, and including between notes in different voices and notes on different staves.

For very long glissando lines that extend across multiple bars, you might not want to show pitches at the start of each bar, for example, to indicate that performers do not emphasize pitches during the course of the glissando, or that performers can play the glissando at their own speed. By default, Dorico Pro shows notes or rests in every bar.

Once you have input a glissando line between the selected notes, you can delete any rests between them.

EXAMPLE



A glissando line across multiple bars with no rests shown between the two notes

RELATED LINKS

[Inputting glissando lines with the popover](#) on page 235

[Inputting glissando lines with the panel](#) on page 236

[Hiding/Showing bar rests in empty bars](#) on page 864

[Deleting rests](#) on page 863

[Turning explicit rests into implicit rests](#) on page 862

Changing the style of glissando lines

Glissando lines can be shown as straight lines or wiggly lines. You can change the glissando line style of glissando lines individually, independently of your project-wide setting.

PROCEDURE

1. Select the glissando lines whose style you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Glissando style** in the **Glissando Lines** group.
3. Choose one of the following options:

- **Straight line**



- **Wiggly line**



RESULT

The glissando line style is changed for the selected glissando lines.

TIP

- Deactivating **Glissando style** returns the selected glissando lines to the default style.
 - You can also change the glissando style by opening the ornaments popover and changing the entry.
 - You can change the default style for all glissando lines project-wide on the **Glissando Lines** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Project-wide engraving options for glissando lines](#) on page 754

[Ornaments popover](#) on page 229

[Changing existing items](#) on page 280

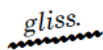
Changing glissando line text

Glissando lines can be shown with text or without text. You can change the text of glissando lines individually, independently of your project-wide setting.

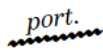
PROCEDURE

1. Select the glissando lines whose text you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Glissando text** in the **Glissando Lines** group.
3. Select one of the following options from the menu:

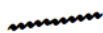
- **Gliss.**



- **Port.**



- **No text**



RESULT

The text shown on the selected glissando lines is changed.

TIP

You can change the text shown on all glissando lines project-wide on the **Glissando Lines** page in **Engrave > Engraving Options**.

Changing when glissando line text is shown

By default, glissando text is not shown when glissando lines are too short to accommodate the text. You can choose to show text on individual glissando lines always, or only if there is sufficient space.

PROCEDURE

1. Select the glissando lines whose setting for when text is shown you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Glissando text shown** in the **Glissando Lines** group.
3. Choose one of the following options:
 - **Show if sufficient space**
 - **Always show**

RESULT

If **Show if sufficient space** is chosen, glissando line text is not shown if the glissando line is too short.

If **Always show** is chosen, glissando line text is always shown, even if the glissando line is short. However, this can cause the glissando line text to collide with other items, such as noteheads and stems.

TIP

You can increase the default gaps between noteheads by changing the default note spacing, and between individual noteheads by adjusting note spacing at individual rhythmic positions in Engrave mode.

RELATED LINKS

[Note spacing](#) on page 381

[Changing the default note spacing](#) on page 383

Moving glissando lines graphically

You can move individual glissando lines graphically without changing the rhythmic positions to which they are attached. You can move each end of glissando lines independently, meaning you can also adjust the angle and graphical length of individual glissando lines.

If glissando lines cross system and frame breaks, you can move each glissando line segment independently.

NOTE

You cannot move glissando lines rhythmically. If you want to change the rhythmic positions of glissando lines, you must delete them from their original positions and input new glissando lines at the new positions.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:
 - Whole glissando lines, or glissando line segments
 - Individual handles on glissando lines

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the glissando lines or handles in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected glissando lines or handles are moved graphically, without affecting the rhythmic positions to which they are attached.

TIP

The following properties in the **Glissando Lines** group of the Properties panel are activated automatically when you move the corresponding glissando line handle:

- **Start offset** moves start glissando line handles. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves end glissando line handles. **X** moves them horizontally, **Y** moves them vertically.

For example, if you move a whole glissando line, both handles are moved so both properties are activated. You can also use these properties to move and lengthen/shorten glissando lines graphically by changing the values in the value fields.

Deactivating the properties resets the selected glissando lines to their default positions.

RELATED LINKS

[Changing the angles of glissando lines individually](#) on page 758

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Changing the default angles of glissando lines project-wide

In Dorico Pro, the endpoints of glissando lines are automatically positioned beside noteheads. When glissando lines cover a small pitch range, the angle of the line can be quite shallow. You can change the values for the minimum spans of glissando lines covering a small pitch range in different contexts project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Glissando Lines** in the page list.
3. In the **Vertical Position** section, change the values for the positions of glissando lines in the contexts relevant to your project.

For example, you can increase the minimum span of glissando lines between notes in the same staff space.

4. Click **Apply**, then **Close**.
-

RESULT

The default positions and angles of glissando lines are changed.

TIP

You can make graphical adjustments to the positions of individual glissando lines in Engrave mode.

RELATED LINKS

[Moving glissando lines graphically](#) on page 756

Changing the angles of glissando lines individually

You can adjust the angles of individual glissando lines in Engrave mode by moving the handles at each end of glissando lines in any direction.

PROCEDURE

1. In Engrave mode, select the square handles at the start/end of the glissando lines whose angles you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
3. Optional: Repeat steps 1 and 2 for the other glissando line handles.
-

RESULT

The angles of the selected glissando lines are changed.

NOTE

You can also use the **Start offset** and **End offset** properties in the **Glissando Lines** group of the Properties panel in Engrave mode to adjust the angles and graphical lengths of glissando lines.

Deactivating the properties resets the selected glissando lines to their default positions.

Jazz articulations

Jazz articulations in Dorico Pro cover a range of note ornamentations that are idiomatic to jazz music, and brass instruments in particular.

Although they are often known as jazz “articulations”, these techniques function more like ornaments than articulations because they change the pitch rather than the duration or attack of notes. For this reason, they are considered ornaments in Dorico Pro. They are found in the Ornaments panel, and you can also input them using the ornaments popover.

Jazz articulations can be shown as a curved line similar to a slur, which is called a “bend” in Dorico Pro, and as a straight line, which can be solid, dashed, or wiggly, which is called “smooth” in Dorico Pro.

Each note can have a single jazz articulation on each side of it, one before the note and one after. Jazz articulations after notes can have different lengths.

The following jazz articulations can be shown before notes:

Plop

An approach into the note from above.



Plop (bend)



Plop (smooth)

Scoop/Lift

An approach into the note from below. A bend approach is a scoop, a smooth approach is a lift.



Scoop



Lift (straight)

The following jazz articulations can be shown after notes:

Doit

A rise in pitch after the note.



Doit (bend)



Doit (smooth)

Fall

A lowering of pitch after the note.



Fall (bend)



Fall (smooth)

Additionally, there are other jazz ornaments commonly used by brass instruments that you can add to notes in the same ways as inputting jazz articulations.

NOTE

Jazz articulations are not currently reflected in playback.

RELATED LINKS

[Ornaments popover](#) on page 229

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Jazz ornaments

Jazz ornaments are notations that are commonly used in jazz music and by brass instruments, such as flips and smears, that are positioned outside of the staff rather than beside noteheads like jazz articulations.

Jazz ornaments behave more like other ornaments than jazz articulations, in that they are items separate from notes, and so can be selected independently of notes in Write mode and added to notes in addition to jazz articulations. Because they are so commonly used alongside jazz articulations, in Dorico Pro they are also included in the **Jazz** section in the Ornaments panel.

You can input jazz ornaments in the same ways as inputting other ornaments rather than jazz articulations.

The following ornaments are considered jazz ornaments in Dorico Pro:

- Flip
- Smear
- Jazz turn/Shake
- Bend

NOTE

Jazz articulations are not currently reflected in playback.

RELATED LINKS

[Ornaments](#) on page 729

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

[Ornaments popover](#) on page 229

Project-wide engraving options for jazz articulations

You can find options for the project-wide appearance and position of ornaments on the **Jazz Articulations** page in **Engrave > Engraving Options**.

The options on the **Jazz Articulations** page allow you to change the default length of bends and the default line style, design, and angle of smooth jazz articulations. You can also change the default positions of jazz articulations relative to noteheads, staff lines, rhythm dots, and jazz articulations belonging to other notes at the same rhythmic position.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Moving jazz articulations graphically

You can move individual jazz articulations graphically without changing the notes to which they apply. You can move each end of smooth jazz articulations independently, meaning you can also adjust the angle and graphical length of individual smooth jazz articulations.



Handles on a smooth doit in Engrave mode

NOTE

You cannot move jazz articulations rhythmically. If you want to change the notes to which jazz articulations apply, you must delete them from their original notes and input new jazz articulations on the new notes.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:
 - Whole jazz articulations
 - Individual handles on smooth jazz articulations

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the jazz articulations or handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected jazz articulations or handles are moved graphically, without affecting the notes to which they apply.

TIP

The following properties in the **Jazz Articulations** group of the Properties panel are activated automatically when you move the corresponding smooth jazz articulation handle:

- **In far offset** moves the start handle of jazz articulations shown before notes, that is, the handle further from the note. **X** moves them horizontally, **Y** moves them vertically.
- **In offset** moves the end handle of jazz articulations shown before notes, that is, the handle closer to the note. **X** moves them horizontally, **Y** moves them vertically.
- **Out offset** moves the start handle of jazz articulations shown after notes, that is, the handle closer to the note. **X** moves them horizontally, **Y** moves them vertically.
- **Out far offset** moves the end handle of jazz articulations shown after notes, that is, the handle further from the note. **X** moves them horizontally, **Y** moves them vertically.

For example, if you move a whole smooth fall, both handles are moved so both **Out offset** and **Out far offset** are activated. You can also use these properties to move and lengthen/shorten smooth jazz articulations graphically by changing the values in the value fields.

Deactivating the properties resets the selected smooth jazz articulations to their default positions.

RELATED LINKS

[Jazz articulations](#) on page 759

[Deleting jazz articulations](#) on page 764

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Positions of jazz articulations

In Dorico Pro, jazz articulations are automatically positioned relative to the noteheads to which they apply, with any other notations on those notes, such as rhythm dots, accidentals, and back notes, automatically considered.

When multiple notes in a chord have a jazz articulation, Dorico Pro considers the best way to align them based on how close to the noteheads they can be positioned and how many jazz articulations to show in total. Dorico Pro allows a maximum of one jazz articulation per space, meaning fewer jazz articulations than noteheads are sometimes shown on cluster chords.

They are positioned by default according to your settings in **Engraving Options**.

You can change the default positions of all jazz articulations project-wide relative to other jazz articulations and to noteheads on the **Jazz Articulations** page in **Engrave > Engraving Options**.

In Engrave mode, smooth jazz articulations have a handle at each end that you can use to move the start and end of each smooth jazz articulation independently. You can also move whole individual jazz articulations graphically.

RELATED LINKS

[Project-wide engraving options for jazz articulations](#) on page 761

Changing the type/length of existing jazz articulations

You can change the type and length of jazz articulations after you have input them, for example, if you want to change a smooth doit to a long bend doit. You can specify the type/length of jazz articulations when using the Ornaments panel but not when using the ornaments popover.

PROCEDURE

1. In Write mode, select the notes whose jazz articulation you want to change.
2. In the Ornaments panel, click the jazz articulation you want in the **Jazz** section.

RESULT

The jazz articulation shown on the selected notes is changed.

TIP

You can also change the type/duration of jazz articulations using the **In** and **Out** properties in the **Jazz Articulations** group in the Properties panel.

EXAMPLE



Short bend doit



Medium bend doit



Long bend doit

RELATED LINKS

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Changing the line style of smooth jazz articulations

You can change the line style of smooth jazz articulations individually, independently of your project-wide settings. For example, if you want selected smooth falls to have straight lines instead of wavy lines.

PROCEDURE

1. Select the notes with smooth jazz articulations whose line style you want to change. You can do this in Write mode and Engrave mode.

NOTE

You must select notes with smooth jazz articulations on the same side, for example, only select notes with smooth jazz articulations before them.

2. In the Properties panel, select one of the following line styles from the **In line style** menu and/or **Out line style** menu in the **Jazz Articulations** group:

- **Straight**
- **Wavy**
- **Dashed**

NOTE

In line style is available when you select notes with smooth jazz articulations before them, and **Out line style** is available when you select notes with smooth jazz articulations after

them. Both are available when you select notes with smooth jazz articulations on both sides.

RESULT

The line style of the selected smooth jazz articulations is changed.

TIP

- You can reset jazz articulations back to their default line style by selecting them and choosing **Edit > Reset Appearance**.
 - You can change the default line style of each smooth jazz articulation independently on the **Jazz Articulations** page in **Engrave > Engraving Options**.
-

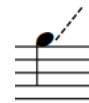
EXAMPLE



Doit smooth with straight line



Doit smooth with wavy line



Doit smooth with dashed line

RELATED LINKS

[Changing the type/length of existing jazz articulations](#) on page 763

[Project-wide engraving options for jazz articulations](#) on page 761

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Deleting jazz articulations

You can remove jazz articulations from notes after you have input them. However, because jazz articulations are considered an intrinsic part of notes rather than a separate item, you must select and delete them differently from other items.

PROCEDURE

1. In Write mode, select the notes from which you want to remove jazz articulations.
 2. In the Ornaments panel, click **Remove** in the **Jazz** section.
-

RESULT

All jazz articulations are removed from the selected notes.

RELATED LINKS

[Input methods for ornaments, arpeggio signs, glissando lines, and jazz articulations](#) on page 229

Page numbers

Page numbers are used to give each page a unique number, and indicate its position relative to other pages. Just as in newspapers and books, musical scores and parts use page numbers to make sure the music stays in the correct order.

Because you can have multiple flows in a single project in Dorico Pro, you do not need to change page numbers manually in most cases. However, if you have separate files that together make up a single piece, page number changes are necessary to make sure the page numbers continue seamlessly from movement to movement.

In such cases, you can change the default page numbers. For example, if you want to have four pages of front matter before the first page of music in the score, but you want the first page of music in the score to be shown as page 1, you can insert a page number change on the first page of music.

Page numbers are layout-specific in Dorico Pro, meaning you can change the page numbers in each layout independently of the others. For example, you can change the page numbers in the score but show the default page numbers in the parts.

Page numbers in Dorico Pro use a text token to ensure the number is correct.

NOTE

You must have a text frame containing the page number token on every page on which you want page numbers to be shown.

The default master pages contain text frames with page number tokens. You can change the position of page number text frames in the master page editor, which changes the position of page numbers on all pages that use that master page. You can also move page number text frames on individual pages.

You can also change the type of number used to show page numbers in each layout. For example, if you want the front matter to use Roman numerals but the music pages to use Arabic numerals, you can change the type of number together with the page number.

RELATED LINKS

[Page Number Change dialog](#) on page 312

[Inserting page number changes](#) on page 311

[Master page overrides](#) on page 308

[Removing page number changes](#) on page 313

[Inputting frames](#) on page 322

[Text tokens](#) on page 332

Moving page numbers in master pages

In order to change where page numbers are shown, you must move the text frames that contain page numbers. The most efficient way to do this is to move the text frames containing page numbers in master page formats.

PROCEDURE

1. In Engrave mode, double-click a master page pair whose page number position you want to change in the **Master Pages** section of the Pages panel.
2. In the master page editor, select the text frames that contain page numbers.
3. Move the text frames in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
4. Click **Apply**, then **Close**.

RESULT

The selected text frames are moved.

TIP

When you move text frames, values for **Left**, **Top**, **Right**, and **Bottom** in the **Frames** group of the Properties panel are changed to reflect the distance of the corresponding edge of the frame from the page margin, but the values are only visible if the corresponding constraint is locked.

You can also use these properties to move text frames by changing the values in the value fields.

- **Right/Left** move the right/left edges of frames horizontally.
- **Top/Bottom** move the top/bottom edges of frames vertically.

You can lock/unlock constraints for each text frame in the **Frames** section of the Formatting panel.

RELATED LINKS

[Frame constraints](#) on page 340

[Master pages](#) on page 301

Page number paragraph styles

The paragraph style for page numbers controls all aspects of their appearance, including their font, size, and horizontal alignment. You can edit the existing page number paragraph style, and create additional page number paragraph styles, in the **Paragraph Styles** dialog.

- You can open the **Paragraph Styles** dialog in Engrave mode by choosing **Engrave > Paragraph Styles**.

Dorico Pro offers a single paragraph style for page numbers by default, but you can create other paragraph styles for page numbers. For example, if you want page numbers to appear bold and

centered at the tops of pages in full score layouts but appear italic and on the outer edges of pages in part layouts, you can create a new paragraph style based on the existing **Page Number** paragraph style, but rename it and change the settings.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

[Text editor options in Engrave mode](#) on page 371

[Changing the paragraph style of text](#) on page 373

[Creating paragraph styles](#) on page 368

Changing the page number numeral style

Page numbers can appear as Arabic or Roman numerals. You can change the numeral style of page numbers project-wide in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose page number numeral style you want to change.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Page Numbers** section, select one of the following options from the **Use** menu:
 - **Number**
 - **Roman numeral**
5. Click **Apply**, then **Close**.


RESULT

The page number numeral style is changed project-wide in the selected layouts.
You can change settings for other layouts before closing the dialog.

Changing the page number numeral style for individual pages

Page numbers can appear as Arabic or Roman numerals. You can change the numeral style for individual page numbers.

PROCEDURE

1. In Engrave mode, in the music area, open the layout whose page number numeral style you want to change.
2. In the **Pages** section of the Pages panel, select a page.
3. Open the **Page Number Change** dialog in any of the following ways:
 - Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.
 - Click **Insert Page Number Change**.

4. In the **Page Number Change** dialog, enter the number of the page from which you want to change the page number numeral style in the **From page** field.
5. Select the numeral style you want from the following options for **Sequence type**:

- **Number**
- **Roman numeral**

6. Click **OK** to save your changes and close the dialog.

RESULT

The page number numeral style is changed until the next page number change or the end of the project, whichever comes first.

RELATED LINKS

[Inserting page number changes](#) on page 311

Hiding/Showing page numbers

You can hide/show page numbers in each layout independently, including specifying whether to hide/show a page number on the first page. For example, you can show page numbers on every page in the score but hide page numbers on the first page in the parts.

NOTE

To show page numbers, there must be a text frame containing the page number token on the page. The default master page formats for first pages do not contain text frames containing page number tokens, so you must add these if you want to show page numbers on first pages in your project that use the default master page formats.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show page numbers. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Page Setup** in the page list.
 4. In the **Page Numbers** section, select one of the following options from the **Visibility** menu:
 - **Always shown**
 - **Always hidden**
 - **Not on first page**
 5. Click **Apply**, then **Close**.
-

RESULT

- If you select **Always shown**, page numbers are shown on all pages that have a text frame containing the page number token in the selected layouts.
- If you select **Always hidden**, page numbers are hidden on all pages in the selected layouts, including on pages that have a text frame containing the page number token.
- If you select **Not on first page**, page numbers are hidden on the first page in the selected layouts, but shown on all other pages that have a text frame containing the page number token.

NOTE

Your per-layout setting for whether page numbers are hidden/shown above flow headings affects whether page numbers are shown on pages where they are higher on the page than flow headings.

RELATED LINKS

[Page Number Change dialog](#) on page 312

[Inserting page number changes](#) on page 311

[Inputting frames](#) on page 322

[Flow headings](#) on page 318

[Hiding/Showing information in running headers above flow headings](#) on page 348


Hiding/Showing page numbers on individual pages

You can change when page numbers are shown on individual pages, independently of your settings for showing page numbers in each layout.

NOTE

To show page numbers, there must be a text frame containing the page number token on the page. The default master page formats for first pages do not contain text frames containing page number tokens, so you must add these if you want to show page numbers on first pages in your project that use the default master page formats.

PROCEDURE

1. In the music area, open the layout in which you want to hide/show page numbers.
 2. In the **Pages** section of the Pages panel, select a page.
 3. Open the **Page Number Change** dialog in any of the following ways:
 - Right-click in the **Pages** section and choose **Insert Page Number Change** from the context menu.
 - Click **Insert Page Number Change**.

 4. In the **From page** field, enter the number of the page from which you want to hide/show page numbers.
 5. Optional: Change the value for **First page number**.
First page number is 1 by default. If you do not want to change the page number together with changing the visibility of page numbers, enter the existing page number in this field.
 6. Select one of the following options from the **Visibility** menu:
 - **Always shown**
 - **Always hidden**
 - **Not on first page**
 7. Click **OK** to save your changes and close the dialog.
-

RESULT

The visibility of page numbers is changed in the layout currently open in the music area, from the page number specified until the next page number change with a different setting or the end of the project, whichever comes first.

EXAMPLE

If you want to see page numbers up to page 3 but hide page numbers from page 4, enter 4 for **From page**, enter 4 for **First page number**, and select **Always hidden** for **Visibility**.

RELATED LINKS

[Page Number Change dialog](#) on page 312

[Inserting page number changes](#) on page 311

[Inputting frames](#) on page 322

Pedal lines

Pedal lines indicate to performers which piano pedals to use, and can also give performance instructions, such as how far down to depress the pedals and when to lift the pedal to clear the resonance.

Most pianos have either two or three pedals. These pedals are:

Sustain pedal

The sustain pedal controls the dampers on the piano strings, which is why it is also known as the “damper pedal”. It is also the most commonly used pedal. Depressing the sustain pedal removes the dampers, allowing the strings to resonate longer. Sustain pedals are usually on the right.



An example sustain pedal line

Sostenuto pedal

The *sostenuto* pedal only allows the strings of the notes currently depressed on the keyboard to resonate. It is also known as the “middle pedal” as it is usually in the middle of the other pedals.



An example sostenuto pedal line

Una corda pedal

The *una corda* pedal shifts the action inside the piano so that the hammers hit fewer strings than normal. Historically, this caused hammers only to hit one string, not the usual three, which is where the name comes from. Because this reduces the volume and impact of the sound, it is also known as the “soft pedal”.



An example una corda pedal line

Dorico Pro offers comprehensive notational and playback support for piano pedal lines. You can create pedaling for the sustain, *sostenuto*, and *una corda* pedals, with support for modern sustain pedaling techniques, including changing the pedal level over the course of a single pedal instruction.

In Dorico Pro, pedal lines are considered playing techniques because they alter the sound produced by the instrument. Therefore, pedal lines are included in the Playing Techniques panel in Write mode and you can input them using the playing techniques popover. However, pedal

lines have additional, unique requirements that do not apply to other playing techniques, such as retakes, pedal level changes, start signs, end signs, and continuation lines.

RELATED LINKS

[Input methods for playing techniques and pedal lines](#) on page 238

[Pedal lines in playback](#) on page 788

[Pedal line start signs, hooks, and continuation lines](#) on page 782

[Pedal line start, continuation, and restorative text](#) on page 786

Sustain pedal retakes and pedal level changes

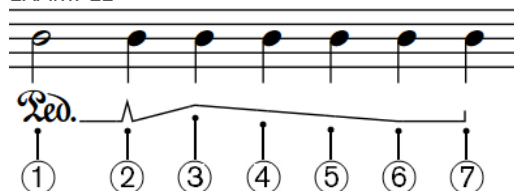
Pedal retakes indicate where a player should lift the sustain pedal, which dampens the piano's strings and clears the resonance, before depressing the pedal again. Pedal level changes indicate a change to how far the pedal is depressed.

Dorico Pro provides clear representations of pedal retakes and level changes.

NOTE

You can only add pedal retakes and level changes to sustain pedal lines.

EXAMPLE



Example pedal line with retake and level changes

- 1 Ped. glyph
 - 2 Retake
 - 3 One quarter depressed
 - 4 Half depressed
 - 5 Three quarters depressed
 - 6 Fully depressed
 - 7 Line end hook
-

RELATED LINKS

[Removing retakes and pedal level changes](#) on page 777

[Input methods for playing techniques and pedal lines](#) on page 238

Sustain pedal lines in Engrave mode

When you select sustain pedal lines in Engrave mode, handles appear at the start/end of each pedal line, and on any retakes or pedal level changes on the line. These handles allow you to

move each part of the pedal line independently, and to change the pedal levels at the start, end, and at each retake or pedal level change.



A sustain pedal with a retake in Engrave mode

There are two handles for the start of the pedal line, three for retakes and pedal level changes, and three for the end of the pedal line.

NOTE

Sostenuto and *una corda* pedal lines only have a single handle at their start/end, which allows you to move their start/end positions graphically, but only horizontally.

You can move each handle with the keyboard, with the mouse, and using the Properties panel. Each handle corresponds to a property in either the **Pedal Lines** group or the **Pedal Line Retakes** group of the Properties panel.

NOTE

Pedal levels cannot be lower than 0 or higher than 1.

- 1 is fully depressed.
- 0 is not depressed.

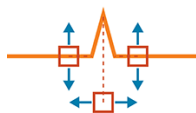
Start of sustain pedal lines

There are two handles at the start of pedal lines.



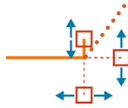
- The left handle moves the start point of the pedal line. You can move this handle to the right/left.
- The right handle changes the start pedal level of the pedal line. You can move this handle upwards/downwards. This changes the angle of the pedal continuation line in relation to the next retake or pedal level change, or the end of the pedal line.

Pedal level changes and retakes



- The left handle changes the pedal level before the retake. You can move this handle upwards/downwards.
- The right handle changes the pedal level after the retake. You can move this handle upwards/downwards.
- The bottom handle corresponds to the position of the pedal level change or retake. You can move this handle to the right/left.

End of sustain pedal lines



- The top handle changes the hook length. You can move this handle upwards/downwards.
- The right handle changes the pedal level at the end of the pedal line. You can move this handle upwards/downwards.
- The bottom handle moves the end point of the pedal line. You can move this handle to the right/left.

RELATED LINKS

[Moving pedal lines graphically](#) on page 779

Changing the type of pedal line retakes

You can change existing retakes on sustain pedal lines to pedal level changes and vice versa.

For example, if you do not want the pedal to be released completely between the old and new levels, change the type to **Change Level** instead of **Retake**.

PROCEDURE

1. In Engrave mode, select the retake or pedal level change whose type you want to change.
2. In the Properties panel, activate **Retake type** in the **Pedal Line Retakes** group.
3. Choose the type you want from the following options:
 - **Retake**
 - **Change Level**

RESULT

The type of pedal line retake is changed.

NOTE

The appearance of the new type of pedal line retake depends on the pedal levels already set on each side. For example, a retake notch is only shown on one side of the retake if the pedal level on the other side is set to 0.

Changing the start level of pedal lines

You can change the start level of individual sustain pedal lines by moving start level handles upwards/downwards.

PROCEDURE

1. In Engrave mode, select the right handles on the start signs whose start pedal levels you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the start level handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.

- Press **Alt-Down Arrow** to move them downwards.
 - Press **Ctrl/Cmd-Alt-Up Arrow** to snap the level to 0 (not depressed).
 - Press **Ctrl/Cmd-Alt-Down Arrow** to snap the level to 1 (fully depressed).
 - Click and drag the handles upwards/downwards to the level you want.
-

RESULT

The start level of the selected pedal line is changed.

TIP

Start level in the **Pedal Lines** group of the Properties panel is activated when you change the start level of pedal lines.

You can also use this property to change the start level of pedal lines by changing the value in the value field. For example, 1 is fully depressed and 0 is not depressed.

Deactivating the property resets the selected pedal lines to their default start level.

RELATED LINKS

[Sustain pedal lines in Engrave mode](#) on page 772

Changing pedal levels at retakes and pedal level changes

You can change both the start level and end level of individual sustain pedal lines at retakes and pedal level changes by moving the corresponding handles upwards/downwards.

The end level is the pedal level immediately before the retake or pedal level change occurs, and the start level is the pedal level immediately after the retake or pedal level change occurs.

PROCEDURE

1. In Engrave mode, select one of the handles on the retakes or pedal level changes whose start/end pedal level you want to change.
 - Select the left handle to change the end pedal level.
 - Select the right handle to change the start pedal level.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the start level handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.
 - Press **Ctrl/Cmd-Alt-Up Arrow** to snap the level to 0 (not depressed).
 - Press **Ctrl/Cmd-Alt-Down Arrow** to snap the level to 1 (fully depressed).
 - Click and drag the handles upwards/downwards to the level you want.
 3. Optional: Repeat steps 1 and 2 for any other handles.
-

RESULT

The pedal levels of the selected retakes or pedal level changes are changed.

TIP

The following properties in the **Pedal Lines** group of the Properties panel are activated when you change the corresponding level at retakes and pedal level changes:

- **Start level at retake**
- **End level at retake**

You can also use these properties to change the corresponding level at retakes and pedal level changes by changing the values in the value fields. For example, 1 is fully depressed and 0 is not depressed.

Deactivating the properties resets the selected pedal lines to their default start/end levels.

RELATED LINKS

[Sustain pedal lines in Engrave mode](#) on page 772

Changing the end level of pedal lines

You can change the end level of individual sustain pedal lines by moving end level handles upwards/downwards.

NOTE

You can only change the end level of pedal lines that have a hook as their end sign.

PROCEDURE

1. In Engrave mode, select the right handles on the end hooks whose end pedal levels you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the end level handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.
 - Press **Ctrl/Cmd-Alt-Up Arrow** to snap the level to 0 (not depressed).
 - Press **Ctrl/Cmd-Alt-Down Arrow** to snap the level to 1 (fully depressed).
 - Click and drag the handles upwards/downwards to the level you want.
-

RESULT

The end levels of the selected pedal lines are changed.

TIP

End level in the **Pedal Lines** group of the Properties panel is activated when you change the end level of pedal lines.

You can also use this property to change the end level of pedal lines by changing the value in the value field. For example, 1 is fully depressed and 0 is not depressed.

Deactivating the property resets the selected pedal lines to their default end level.

RELATED LINKS

[Sustain pedal lines in Engrave mode](#) on page 772

Removing retakes and pedal level changes

You can remove pedal retakes and level changes without deleting the sustain pedal line or changing its rhythmic position.

PROCEDURE

1. In Write mode, select the note at the rhythmic position of the retake or pedal level change you want to remove.

NOTE

You can only remove one retake or pedal level change at a time.

2. Remove the retake or pedal level change in any of the following ways:

- Open the playing techniques popover, enter **nonotch** into the popover, then press **Return**.

NOTE

nonotch must be spelled as one word, without a space.

- Choose **Edit > Pedal Lines > Remove Retake**. You can also choose this option from the context menu.

RESULT

The selected retake or pedal level change is removed, and the pedal line returns to its previous level as set by either the start of the pedal line, or the retake or pedal level change immediately preceding the one you removed.

RELATED LINKS

[Playing techniques popover](#) on page 238

Positions of pedal lines

The default placement of pedal lines is below the bottom staff, even if there are only notes in the upper staff for the right hand. They are placed outside all other notations, including octave lines, slurs, and articulations.

If one pedal is used, it is placed as close to the bottom of the staff as possible, while remaining outside of all other notations.

If multiple pedals are used simultaneously, they are organized below the bottom of the staff as follows:

1. Sustain pedal: closest to the staff
2. *Sostenuto* pedal: below the sustain pedal line
3. *Una corda* pedal: furthest from the staff

The beginning of the glyph/text that indicates the start position of pedal lines aligns with the note to which it applies. If you are using a line end hook to indicate the end of pedal lines, the hook aligns with the note or rhythmic position to which it applies.

You can move pedal lines to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

NOTE

You cannot move retakes or pedal level changes rhythmically. You must remove them and input a new retake or pedal level change at the position you want.

You can move pedal lines graphically in Engrave mode. However, this does not change the rhythmic positions to which they are attached.

You can change the default positions of all pedal lines project-wide on the **Pedal Lines** page in **Engrave > Engraving Options**. For example, you can change values for the minimum distances between pedal lines and staves, pedal lines and other pedal lines, and the position of pedal lines relative to noteheads and grace notes.

RELATED LINKS

- [Project-wide engraving options for pedal lines](#) on page 781
- [Pedal line start, continuation, and restorative text](#) on page 786
- [Pedal line start signs, hooks, and continuation lines](#) on page 782
- [Moving pedal lines graphically](#) on page 779
- [Lengthening/Shortening pedal lines](#) on page 781
- [Input methods for playing techniques and pedal lines](#) on page 238

Moving pedal lines rhythmically

You can move pedal lines to new rhythmic positions after they have been input. Any retakes or pedal level changes on the pedal lines are also moved.

NOTE

If you want to move retakes or pedal level changes independently of the pedal line, you must first remove them from their original positions and input new retakes or pedal level changes at the new positions.

PROCEDURE

1. In Write mode, select the pedal lines you want to move.

NOTE

When using the mouse, you can only move one pedal line rhythmically at a time.

2. Move the pedal lines in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the pedal line to the right/left.
-

RESULT

A single pedal line is moved to the next/previous notehead on that staff.
Multiple pedal lines are moved according to the current rhythmic grid value.

NOTE

Pedal lines can only be moved along staves. If you want to move a pedal line across staves, you must delete the pedal line and input a new pedal line on the other staff.

RELATED LINKS

- [Lengthening/Shortening pedal lines](#) on page 781

[Sustain pedal lines in Engrave mode](#) on page 772

[Input methods for playing techniques and pedal lines](#) on page 238

Moving pedal lines graphically

You can move pedal lines, retakes, and pedal level changes graphically without changing the rhythmic positions to which they apply. You can also move the start/end of pedal lines independently, meaning you can lengthen/shorten them graphically.

NOTE

You can only change the angle of pedal lines by changing the level.

PROCEDURE

1. In Engrave mode, select one of the following:
 - The pedal lines you want to move.
 - The start/end handles of the pedal lines whose start/end you want to move.
 - The bottom handles of the retakes and pedal level changes you want to move.

NOTE

- You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.
 - You can move multiple pedal lines together, but only upwards/downwards.
 - You can move handles on multiple pedal lines together, but only to the right/left.
-

2. Move the pedal lines or handles in any of the following ways:
 - Press **Alt-Right Arrow** to move pedal lines and handles to the right.
 - Press **Alt-Left Arrow** to move pedal lines and handles to the left.
 - Press **Alt-Up Arrow** to move whole pedal lines upwards.
 - Press **Alt-Down Arrow** to move whole pedal lines downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected pedal lines or handles are moved to new graphical positions.

TIP

The following properties in the **Pedal Lines** group of the Properties panel are activated automatically when you move pedal lines in the corresponding directions:

- **Start X offset** moves the start of pedal lines horizontally.
- **End X offset** moves the end of pedal lines horizontally.
- **Y offset** moves whole pedal lines vertically.

X offset in the **Pedal Line Retakes** group of the Properties panel is activated automatically when you move pedal retakes or pedal level changes horizontally.

For example, if you move a whole pedal line to the right, both handles are moved, so **Start X offset** and **End X offset** are both activated. You can also use all of these properties to move pedal lines, retakes, and pedal level changes, and lengthen/shorten pedal lines graphically, by changing the values in the value fields.

Deactivating the properties resets the selected pedal lines to their default positions.

RELATED LINKS

[Lengthening/Shortening pedal lines](#) on page 781

[Sustain pedal lines in Engrave mode](#) on page 772

Changing the position of pedal lines relative to grace notes individually

You can change the start/end positions of individual pedal lines relative to grace notes, independently of your project-wide settings.

PROCEDURE

1. Select the pedal lines whose position relative to grace notes you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate any of the following properties in the **Pedal Lines** group:
 - **Starts before grace notes**
 - **Ends before grace notes**
 3. Activate/Deactivate the corresponding checkboxes.
-

RESULT

When the checkboxes are activated, the corresponding parts of the selected pedal lines are positioned before grace notes.

When the checkboxes are deactivated, the corresponding parts of the selected pedal lines are positioned after grace notes.

TIP

- You can adjust the precise position of pedal lines in further detail in Engrave mode.
 - You can change the position of all pedal lines relative to grace notes project-wide on the **Pedal Lines** page in **Engrave > Engraving Options**.
-

EXAMPLE



Pedal line starting/ending before grace notes



Pedal line starting/ending after grace notes

RELATED LINKS

[Project-wide engraving options for pedal lines](#) on page 781

[Moving pedal lines graphically](#) on page 779

Lengthening/Shortening pedal lines

You can lengthen/shorten pedal lines rhythmically after they have been input.

PROCEDURE

1. In Write mode, select the pedal lines you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one pedal line at a time.

2. Lengthen/Shorten the pedal lines in any of the following ways:
 - To lengthen them by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
 - To shorten them by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.
 - To snap the end of a single pedal line to the next notehead, press **Ctrl/Cmd-Shift-Alt-Right Arrow**.
 - To snap the end of a single pedal line to the previous notehead, press **Ctrl/Cmd-Shift-Alt-Left Arrow**.

NOTE

- You can only lengthen/shorten pedal lines according to the current rhythmic grid value when multiple pedal lines are selected.
 - When using the keyboard, you can only move the end of pedal lines. You can move the start of pedal lines by moving the whole line, or by clicking and dragging the start handle.
-
- Click and drag the circular handle at the start/end to the right/left.
-

RESULT

Single pedal lines are lengthened/shortened according to the current rhythmic grid value or to the next/previous notehead, whichever is closer.

Multiple pedal lines are lengthened/shortened according to the current rhythmic grid value.

TIP

You can move pedal lines graphically in Engrave mode, including changing their graphical length.

RELATED LINKS

[Positions of pedal lines](#) on page 777

[Moving pedal lines rhythmically](#) on page 778

[Moving pedal lines graphically](#) on page 779

Project-wide engraving options for pedal lines

You can find options for the project-wide appearance and position of pedal lines on the **Pedal Lines** page in **Engrave > Engraving Options**.

The options on the **Pedal Lines** page allow you to change the symbol shown at the start of each type of pedal line, the appearance of pedal line symbols on subsequent systems, the appearance of pedal continuation lines, and the width of retake notches. You can also set precise values for the gaps between pedal lines and the staff or other objects.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Pedal line start signs, hooks, and continuation lines

Pedal lines normally comprise a start sign, a continuation line, and an end hook. This indicates clearly to performers where to depress each type of pedal, how long to keep it depressed, and where to lift it.

In Dorico Pro, you can change the appearance of each part of pedal lines both individually and for all pedal lines project-wide. For example, you can show all pedal lines with a glyph as their start sign, but change the start sign of an individual pedal line to show text instead.

You can select any whole pedal line in Write mode and change most aspects of their appearance according to the type of pedal line, such as their continuation line or start sign.

For sustain pedals only, you can select each segment of a sustain pedal independently in Engrave mode, and set different properties for each segment. Sustain pedal lines have independent segments on each separate system on which they appear.

TIP

If you are changing the appearance of many pedal lines, it might be easier to change the corresponding project-wide settings on the **Pedal Lines** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for pedal lines](#) on page 781

[Sustain pedal lines in Engrave mode](#) on page 772

Changing the start sign appearance of pedal lines

You can change the appearance of the start of pedal lines individually, independently of your project-wide settings. Pedal line start signs can be shown as variations of the traditional pedal line glyph, other symbols, or text.

PROCEDURE

1. Select the pedal lines whose start sign appearance you want to change. You can do this in Write mode and Engrave mode.

NOTE

The pedal lines you select must be the same type, for example, only sustain pedal lines.

2. In the Properties panel, activate **Sign appearance** in the **Pedal Lines** group.
 3. Select one of the options from the menu.
The options are different according to the type of pedal line selected.
-

RESULT

The start sign appearance of the selected pedal lines is changed.

TIP

- Deactivating **Sign appearance** returns the selected pedal lines to your default setting for start sign appearance.
 - You can change the default start sign appearance of all pedal lines project-wide on the **Pedal Lines** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Project-wide engraving options for pedal lines](#) on page 781

Changing the type of hook at the start/end of pedal lines

You can change the type of hook shown at the start/end of pedal lines individually.

NOTE

You can only change the start hook type of pedal lines that have a hook as their start sign, and you can only change the end hook type of pedal lines that have a continuation line.

PROCEDURE

1. Select the pedal lines whose hook type you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group:
 - **Line start hook**
 - **Line end hook**
 3. Select one of the following options from each menu:
 - **No Hook**
 - **Vertical Hook**
 - **Slant Hook**
 - **Inverse Hook**
-

RESULT

The hook type at the start/end of the selected pedal lines is changed.

TIP

You can change the default appearance of all pedal lines project-wide on the **Pedal Lines** page in **Engrave > Engraving Options**.

Lengthening/Shortening pedal line hooks

You can change the length of hooks shown at the start/end of pedal lines individually, independently of each other and independently of your project-wide settings.

For example, if you have a pedal line with a hook at the start/end, you can make the end hook longer without changing the length of the start hook.

NOTE

This only applies to pedal lines that have a hook as their start sign and/or end sign.

PROCEDURE

1. In Engrave mode, select the top handle at the start/end of the pedal lines whose hooks you want to lengthen/shorten.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The length of the selected pedal line hooks is changed.

TIP

- The following properties in the **Pedal Lines** group of the Properties panel are activated automatically when you move the corresponding pedal line hook:
 - **Start hook length** changes the length of hooks at the start of pedal lines.
 - **End hook length** changes the length of hooks at the end of pedal lines.

You can also use these properties to lengthen/shorten pedal line hooks by changing the values in the value fields.

Deactivating the properties resets the selected pedal lines to their default hook length.

- You can change the default hook length for all pedal lines project-wide by changing the value for **Hook length** in the **Design** section of the **Pedal Lines** page in **Engrave > Engraving Options**. This value applies to hooks at the start/end of pedal lines.

Changing the continuation line type of pedal lines

You can change the type of continuation line used for the different types of pedal lines individually, independently of your project-wide settings.

PROCEDURE

1. Select the pedal lines whose continuation line type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Continuation type** in the **Pedal Lines** group.
3. Select one of the following continuation types from the menu:
 - **Line**
 - **Sign at End**
 - **Sign at End and Dashed Line**
 - **None**

RESULT

The continuation line type of the selected pedal lines is changed.

TIP

You can change the continuation type for all pedal lines project-wide on the **Pedal Lines** page in **Engrave > Engraving Options**. You can choose different continuation types for each pedal type, for example, you can have a line for sustain pedal lines and just a sign at the end for *una corda* pedal lines.

Lengthening/Shortening gaps and dashes in pedal continuation lines

You can change the length of dashes and the gaps between dashes in individual dashed pedal continuation lines, independently of your project-wide settings.

NOTE

This only applies to pedal lines with dashed continuation lines.

PROCEDURE

1. In Engrave mode, select the pedal lines whose dashes you want to change.
 2. In the Properties panel, activate the following properties, individually or together, in the **Pedal Lines** group.
 - **Dash length**
 - **Dash gap length**
 3. Change the values in the value fields.
-

RESULT

Increasing **Dash length** makes dashes in pedal continuation lines longer, decreasing the value makes dashes shorter.

Increasing **Dash gap length** makes gaps between dashes in pedal continuation lines longer, decreasing the value makes gaps shorter.

TIP

You can find options that change the default dash length and default gap length for all dashed pedal continuation lines project-wide by clicking **Advanced Options** in the **Design** section of the **Pedal Lines** page in **Engrave > Engraving Options**.

Changing the line width of pedal lines

You can change the thickness of continuation lines individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the pedal lines whose continuation line thickness you want to change.
 2. In the Properties panel, activate **Line width** in the **Pedal Lines** group.
The value resets to 0 automatically when you first activate the property.
 3. Change the value in the value field.
-

RESULT

Increasing **Line width** makes pedal continuation lines thicker, decreasing the value makes pedal continuation lines thinner.

TIP

You can change the default thickness for all pedal continuation lines project-wide in the **Design** section of the **Pedal Lines** page in **Engrave > Engraving Options**.

Parenthesizing pedal line continuation signs

You can show individual pedal line continuation signs with/without parentheses, independently of your project-wide setting. Pedal line continuation signs are shown by default at the start of new systems when pedal lines continue across system breaks.

PROCEDURE

1. Select the pedal lines whose continuation sign appearance you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Show continuation sign in parentheses** in the **Pedal Lines** group.
3. Activate/Deactivate the corresponding checkbox.

RESULT

Continuation signs are shown with parentheses when the checkbox is activated, and without parentheses when the checkbox is deactivated.

When the property is deactivated, pedal lines follow your project-wide setting.

TIP

You can change the default appearance of all pedal line continuation signs project-wide in the **Design** section of the **Pedal Lines** page in **Engrave > Engraving Options**.

Pedal line start, continuation, and restorative text

All types of pedal lines can have text as their start signs, instead of glyphs or hooks. You can override the text shown at the start of pedal lines that have text start signs, you can change the continuation text shown at the start of new systems, and you can override the restorative text shown at the end of *una corda* pedal lines.

You can change the design of all pedal lines project-wide according to their type in the **Design** section of the **Pedal Lines** page in **Engraving Options**, and you can change the appearance of individual pedal lines, independently of your project-wide settings.

Pedal lines that use a text indication rather than a symbol

For pedal lines such as *una corda* or sustain that have text for their start sign, such as **Ped. Text**, rather than the more ornate symbol, you can override the text shown at the start of the pedal line and replace it with your preferred performance direction.

Continuation sign/text

When pedal lines continue onto a new system, a continuation sign/text is shown in parentheses by default. If the pedal line is using text for their start sign, such as **Ped. Text**, rather than a symbol, you can change the text shown at the start of a new system and replace it with your preferred performance direction.

Una corda pedal lines

The equivalent to the final pedal lift for the *una corda* pedal marking is the indication to return to *tre corde*. You can override the *tre corde* text shown at the end of the pedal line and replace it with your preferred performance direction.

Changing the start text shown in pedal lines

You can change the text shown at the start of individual pedal lines that use text as their start sign.

PROCEDURE

1. Select the pedal lines whose start text you want to override. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Text** in the **Pedal Lines** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text shown at the start of the selected pedal lines is changed.

Deactivating **Text** restores the default start text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

Changing the pedal line continuation text shown

You can change the text shown at the start of new systems when pedal lines cross system breaks.

NOTE

This only applies to pedal lines that use text as their start sign.

PROCEDURE

1. Select the pedal lines whose continuation text you want to override. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Continuation text** in the **Pedal Lines** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The continuation text shown at the start of new systems for the selected pedal lines is changed.

Deactivating **Continuation text** restores the default continuation text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

Changing the restorative text shown in una corda pedal lines

The equivalent to the final pedal lift for *una corda* pedal lines is the indication to return to *tre corde*. You can change the *tre corde* text shown at the end of individual *una corda* pedal lines.

NOTE

This only applies to *una corda* pedal lines that use text as their start sign.

PROCEDURE

1. Select the *una corda* pedal lines whose restorative text you want to override. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Restorative text** in the **Pedal Lines** group.
 3. Enter the text you want into the value field.
 4. Press **Return**.
-

RESULT

The restorative text shown at the ends of the selected *una corda* pedal lines is changed. Deactivating **Restorative text** restores the default restorative text for the selected pedal lines.

NOTE

Deactivating properties permanently deletes any custom text entered.

Pedal lines in playback

Pedal lines are automatically played back in Dorico Pro.

The three piano pedals send MIDI controllers as follows:

- Sustain pedal lines send MIDI controller 64 (Sustain).
- *Sostenuto* pedal lines send MIDI controller 66 (Sostenuto).
- *Una corda* pedal lines send MIDI controller 67 (Soft Pedal).

Some piano VST instruments, such as Pianoteq and Garritan CFX Concert Grand, support partial depression of the sustain pedal. Consult the manufacturer's documentation for more information.

Playback Options

You can find options for how Dorico Pro plays back pedaling on the **Pedal Lines** page in **Play > Playback Options**.

You can control the following parameters of pedal line playback:

- The length of the initial pedal depression
- The length of a retake in the middle of a pedal line
- The length of the final pedal release
- Whether initial depressions and retakes are played before or after the onset of the notes or chords at their rhythmic positions

RELATED LINKS

[Playback Options dialog](#) on page 405

Pedal lines imported from MusicXML files

Sustain pedal lines can be imported from MusicXML files. MusicXML can only describe the sustain pedal, and it cannot describe changes in pedal depression level.

Playing techniques

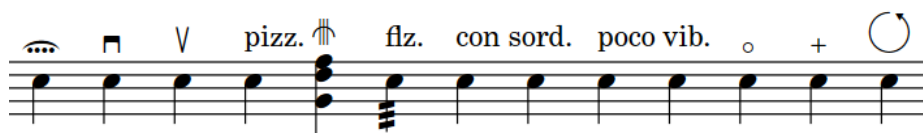
The term “playing techniques” covers a wide range of instructions intended to tell performers to modify the sound of the notes they are playing, for example, by changing their embouchure or changing the position of their bow, or by modifying their instrument, such as adding a mute or depressing a pedal.

In Dorico Pro, playing techniques can be expressed as symbols or as text. All available playing techniques can be found in the Playing Techniques panel in Write mode, organized by instrument family. For example, you can find pedal lines in the **Keyboard** section of the Playing Techniques panel.

NOTE

Because pedal lines have additional, unique requirements that do not apply to other playing techniques, such as retakes, start signs, and continuation lines, they are documented separately. Pedal lines also have their own group in the Properties panel that is separate from the **Playing Techniques** group.

Adding playing techniques can change how the instrument plays back. For example, adding pizzicato to a violin staff activates a key switch that changes the sound produced by the VST instrument.



Some of the playing techniques in Dorico Pro

RELATED LINKS

[Input methods for playing techniques and pedal lines](#) on page 238

[Playing techniques in playback](#) on page 803

[Pedal lines](#) on page 771

Project-wide engraving options for playing techniques

You can find options for the project-wide appearance and position of playing techniques on the **Playing Techniques** page in **Engrave > Engraving Options**.

The options on the **Playing Techniques** page allow you to change the distance between playing techniques and the staff, the arrangement of multiple text playing techniques at the same rhythmic position, the default horizontal offset of text playing techniques, and playing technique continuation styles.

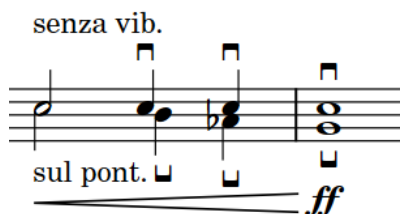
There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Positions of playing techniques

Playing techniques, both as text and symbols, are placed above the staff. On vocal staves, they are placed above the staff and below dynamics. In multiple-voice contexts, playing techniques for the up-stem voices are placed above the staff and playing techniques for the down-stem voices are placed below the staff.



Placement of playing techniques with two voices on the same staff

Playing technique texts use a plain font, neither bold nor italic, so they are not confused with expressive text and dynamics.

NOTE

This does not apply to pedal lines, as they use a separate font style to other playing techniques.

You can move playing techniques to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move playing techniques graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the default positions of all playing techniques project-wide on the **Playing Techniques** page in **Engrave > Engraving Options**.

RELATED LINKS

[Pedal line start, continuation, and restorative text](#) on page 786

[Project-wide engraving options for playing techniques](#) on page 790

[Moving playing techniques graphically](#) on page 792

Moving playing techniques rhythmically

You can move playing techniques to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the playing techniques you want to move.

NOTE

When using the mouse, you can only move one playing technique rhythmically at a time.

2. Move the playing techniques in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the playing technique to the right/left to the notehead you want.

RESULT

A single playing technique is moved to the next or previous notehead on that staff.
Multiple playing techniques are moved according to the current rhythmic grid value.

RELATED LINKS

[Moving pedal lines rhythmically](#) on page 778

Moving playing techniques graphically

You can move playing techniques graphically without changing the rhythmic positions to which they apply.

NOTE

These steps do not apply to pedal lines.

PROCEDURE

1. In Engrave mode, select the playing techniques you want to move.
2. Move the playing techniques in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected playing techniques are moved to new graphical positions.

TIP

Start offset in the **Playing Techniques** group of the Properties panel is activated automatically when you move playing techniques.

- **Start offset X** moves playing techniques horizontally.
- **Start offset Y** moves playing techniques vertically.

You can also use this property to move playing techniques by changing the values in the value fields.

Deactivating the property resets the selected playing techniques to their default positions.

RELATED LINKS

[Moving pedal lines graphically](#) on page 779

Changing the placement of playing techniques relative to the staff

You can change the placement of individual playing techniques relative to the staff.

NOTE

These steps do not apply to pedal lines.

PROCEDURE

1. Select the playing techniques whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Placement** in the **Playing Techniques** group.
 3. Choose one of the following options:
 - **Above**
 - **Below**
-

RESULT

The selected playing techniques appear above/below the staff.

RELATED LINKS

[Moving pedal lines graphically](#) on page 779

Adding text to playing techniques

You can add text above or alongside playing techniques after they have been input, for example, to clarify the intention of the playing technique.

NOTE

These steps do not apply to pedal lines.

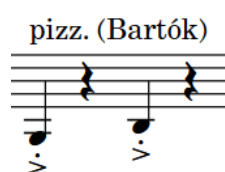
PROCEDURE

1. Select the playing techniques to which you want to add text. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Alternative text** in the **Playing Techniques** group.
 3. Enter the text you want into the value field.
 4. Press **Return**.
-

RESULT

The text you entered into the value field is shown directly after text playing techniques, and directly above symbol playing techniques.

EXAMPLE



Alternative text added to text playing technique



Alternative text added to symbol playing technique

RELATED LINKS

[Pedal line start, continuation, and restorative text](#) on page 786

Erasing the background of text playing techniques

You can erase the background of individual text playing techniques, for example, to ensure they remain legible when crossing barlines.

PROCEDURE

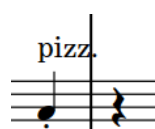
1. In Engrave mode, select the playing techniques whose backgrounds you want to erase.
2. In the Properties panel, activate **Erase background** in the **Playing Techniques** group.

RESULT

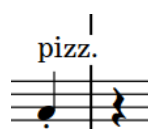
The backgrounds of the selected playing techniques erase whatever is behind them, creating a blank area around each playing technique.

Deactivating **Erase background** returns the selected playing techniques to the default non-erased background.

EXAMPLE



Text playing technique with non-erased background



Text playing technique with erased background

AFTER COMPLETING THIS TASK

You can change the padding between playing techniques and each edge of their erased areas.

Changing the erasure padding of text playing techniques

You can change the erasure padding of individual playing techniques, including changing the padding between playing techniques and each edge of their erased areas independently.

PROCEDURE

1. In Engrave mode, select the text playing techniques whose erasure padding you want to change.
2. In the Properties panel, activate the **Erasure padding** properties, individually or together, in the **Playing Techniques** group.
 - **L** changes the padding between playing techniques and their left edge.

- **R** changes the padding between playing techniques and their right edge.
 - **T** changes the padding between playing techniques and their top edge.
 - **B** changes the padding between playing techniques and their bottom edge.
3. Change the values in the value fields.
-

RESULT

Increasing the values increases the padding, decreasing the values decreases the padding.

TIP

You can change the default erasure padding of all playing techniques project-wide in the **Design** section of the **Playing Techniques** page in **Engrave > Engraving Options**. However, this does not allow you to change the padding of each edge independently.

Hiding/Showing playing techniques

You can hide/show playing techniques individually, for example, if your expression map requires you to input a playing technique to trigger the correct playback but you do not want that technique to appear in the music.

PROCEDURE

1. Select the playing techniques you want to hide or the signposts of hidden playing techniques you want to show. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate/deactivate **Hidden** in the **Playing Techniques** group.
-

RESULT

The selected playing techniques are hidden when **Hidden** is activated, and shown when it is deactivated.

Signposts are shown at the positions of each hidden playing technique, so you can always find them again. However, signposts are not printed by default.

TIP

- If you do not want to show playing technique signposts, choose **View > Signposts > Playing Techniques**. Playing technique signposts are shown when a tick appears beside **Playing Techniques** in the menu, and hidden when no tick appears.
 - You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**, which applies to chord symbols, playing techniques, and time signatures.
-

RELATED LINKS

[Expression maps](#) on page 451

[Signposts](#) on page 281

Custom playing techniques

Custom playing techniques allow you to represent any playing technique in any way you want, for example, if the default glyph used for a particular playing technique is not the one to which you or the players reading the music are accustomed.

As well as designing the appearance of custom playing techniques using existing glyphs, text, and your own graphics, you can define how they should affect playback.

You can create and edit custom playing techniques in the **Edit Playing Techniques** dialog and its related dialogs. You can find your custom playing techniques in their assigned category in the

Playing Techniques panel in Write mode. You can also input them using the popover by entering the popover text assigned to them.

RELATED LINKS

[Playing techniques in playback](#) on page 803

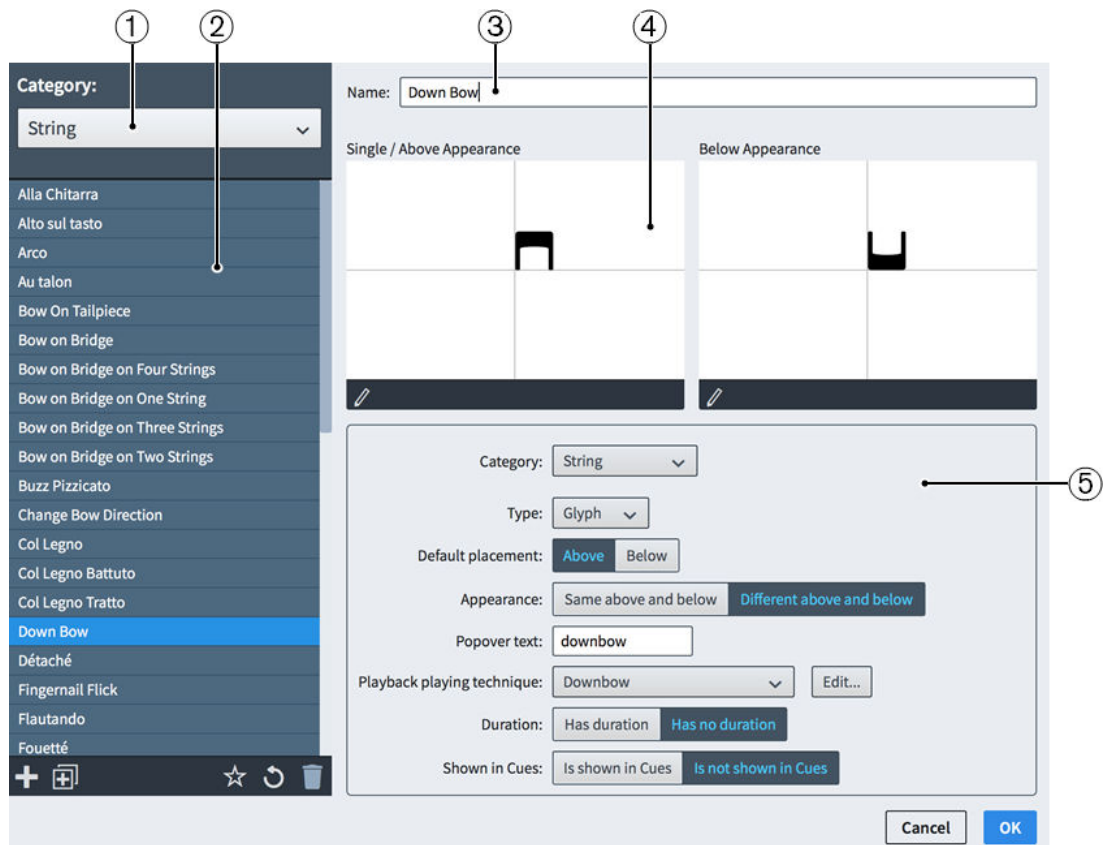
[Input methods for playing techniques and pedal lines](#) on page 238

Edit Playing Techniques dialog

The **Edit Playing Techniques** dialog allows you to add, edit, and delete custom playing techniques. It also allows you to change various settings relating to the appearance and function of all playing techniques in the project.

- You can open the **Edit Playing Techniques** dialog in Engrave mode by choosing **Engrave > Playing Techniques**, or by clicking **Add Playing Technique** in the action bar of any section in the Playing Techniques panel in Write mode.

You can also open it for a specific playing technique by selecting that playing technique in the Playing Techniques panel in Write mode and clicking **Edit Playing Technique** in the action bar for that section.



Edit Playing Techniques dialog






The **Edit Playing Techniques** dialog contains the following sections and options:

1 Category menu

Allows you to filter the list of playing techniques by selecting a category from the menu, such as **String** or **Choral**. This corresponds to the titles of sections in the Playing Techniques panel.

2 List of playing techniques

Contains all the playing techniques in the project within the currently selected category. The action bar at the bottom of the list contains the following options:

- **New**

Adds a new blank playing technique.
- **New from Selection**

Adds a new playing technique that is a duplicate of the playing technique currently selected.
- **Save as Default**

Saves the currently selected playing technique as a default in your user library, allowing you to use it in multiple projects.
- **Revert to Factory**

Removes all edits you have made to the selected predefined playing technique, returning it to its original settings and appearance.
- **Delete**

Deletes the selected playing technique.

NOTE

You cannot delete predefined playing techniques or any playing technique that is currently used in your project.

3 Name

Allows you to enter a new name or edit the existing name for the selected playing technique.

4 Preview

Displays the playing technique in its current form. If the playing technique is set to appear the same both above and below the staff, a single preview area is shown. If the playing technique is set to appear differently according to its staff-relative placement, the preview is split to show both possible appearances.

Clicking **Edit Composite** in the action bar below the preview opens the **Edit Playing Technique** dialog, where you can edit the appearance of the playing technique. This button is only available for **Glyph** playing techniques.

5 Playing technique options

You can change the following options relating to the appearance and function of the selected playing technique:

- **Category**
Allows you to select an instrument family category for the selected playing technique, for example, if you duplicated a **String** technique but want to save your new playing technique in the **Wind** category.
- **Type**
Allows you to choose whether the playing technique is a **Glyph** or **Text**. This affects how the technique appears in the preview.

If you select **Text**, a **Text** field appears beside the **Type** menu. You can enter any text into the field, and select any font style from the menu beside the field. The playing technique appears on the left of the preview.

If you select **Glyph**, the playing technique appears in the middle of the preview. Selecting **Glyph** also allows you to edit the playing technique in the Edit Playing Technique dialog.

- **Default placement**

Allows you to choose whether the playing technique is placed **Above** or **Below** the staff by default.

- **Appearance**

Allows you to choose whether the playing technique appears the same on either side of the staff, or whether it has a different appearance on each side. If you choose **Different above and below**, you can edit each appearance independently.

- **Popover text**

Allows you to set the text you want to enter into the popover to input the playing technique.

- **Playback playing technique**

Allows you to choose the playback playing technique for the playing technique, that is, the action that changes the sample sound used.

- **Duration**

Allows you to set whether the playing technique **Has duration**, and can appear across a range of notes, or **Has no duration**, and can only appear at one rhythmic position.

NOTE

This only affects the visual duration of the playing technique. You can also change the playback duration of a playing technique in the **Edit Playback Playing Techniques** dialog.

- **Shown in Cues**

Allows you to choose whether the playing technique appears in cues when playing techniques are shown in cues.

RELATED LINKS

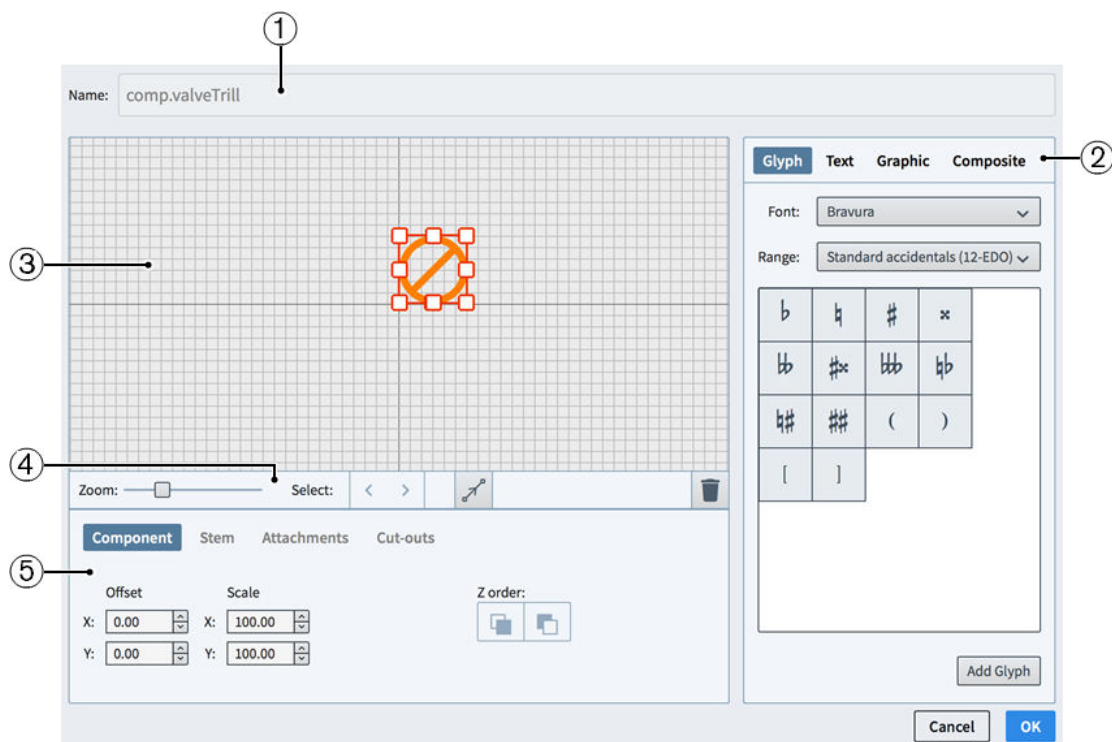
[Edit Playback Playing Techniques dialog](#) on page 801

[Playing Techniques panel](#) on page 241

Edit Playing Technique dialog

The **Edit Playing Technique** dialog allows you to design custom playing techniques and edit the appearance and arrangement of playing techniques.

- You can open the **Edit Playing Technique** dialog from within the **Edit Playing Techniques dialog** by selecting the playing technique whose design you want to edit from the list and clicking **Edit Composite** in the action bar below the preview. Its **Type** must be set to **Glyph** in order for you to do this.



Edit Playing Technique dialog

The **Edit Playing Technique** dialog contains the following sections and options:

1 Name

Contains the saved name for predefined playing techniques, or an automatically generated name for new playing techniques. You cannot change this name.

2 Component selector

Allows you to choose components to add to the playing technique. You can add different types of components by clicking the respective tab titles.

- **Glyph**, for example, ♭ or ♯. You can use different styles of glyphs by selecting different fonts and different ranges from the menus. Click **Add Glyph** to add the selected glyph to the playing technique.

NOTE

A full list of the different ranges of glyphs is available on the SMuFL website.

- **Text**, including numbers and other text. You can use numbers and text from the available **Preset text** list, or select any font available from the menu and enter your preferred text into the text box at the bottom. Click **Add Text** to add the selected text, or input text, to the playing technique.
- **Graphic**: Allows you to load a new graphic file, or select an existing graphic from the **Select existing** list, in SVG, PNG, or JPG format. You can see a preview of the graphic in the **Preview** box. Click **Add Graphic** to add the selected graphic to the playing technique.
- **Composite**: Allows you to select a composite from the list. Click **Add Composite** to add the selected composite to the playing technique.

3 Editor

Allows you to arrange and edit the components that make up the playing technique. You can arrange and edit components by clicking and dragging them in the editor and by using the controls at the bottom of the dialog. You can also use the handles on each component to change their size.

4 Editor action bar

Contains selection and view options for the editor.

- **Zoom**
Allows you to change the zoom level in the editor.
- **Select**
Allows you to select the next/previous component.

- **Show Attachments**



Shows all the attachments on all components in the editor.

- **Delete**



Deletes the selected component.

5 Controls

Contains controls that allow you to edit individual components. Controls are divided into tabs according to the aspect of the selected component they affect. For playing techniques, only the **Component** and **Attachments** tabs are available as the other tabs do not apply to playing techniques.

The **Component** tab contains the following options:

- **Offset:** Controls the position of the selected component. **X** moves it horizontally, **Y** moves it vertically.
- **Scale:** Controls the size of the selected component. For graphics, **X** controls its width, **Y** controls its height.

NOTE

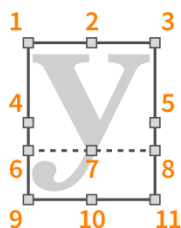
Although some components scale their height and width independently, others retain their aspect ratio, meaning only one value affects their overall size.

- **Z order:** Allows you to **Bring Forward** or **Send Backward** the selected component in relation to other components when they overlap.

The **Attachments** tab is only available if the playing technique comprises at least two separate components. It contains the following options:

- **Attachment from:** Sets the attachment point on the component to the left of the selected component to which the selected component attaches. We recommend that you select a right edge attachment point for **Attachment from**.
- **Attachment to:** Sets the attachment point on the selected component which attaches to the component to its left. We recommend that you select a left edge attachment point for **Attachment to**.

There are eight attachment points for glyphs and graphics, and eleven for text, due to the extra space required for letters that extend below the baseline. The example diagram helps you visualize how these points relate to components.



The attachment points have the following names in the **Edit Playing Technique** dialog:

- 1 **Top Left**
- 2 **Top Center**
- 3 **Top Right**
- 4 **Middle Left**
- 5 **Middle Right**
- 6 **Baseline Left** (text only)
- 7 **Baseline Center** (text only)
- 8 **Baseline Right** (text only)
- 9 **Bottom Left**
- 10 **Bottom Center**
- 11 **Bottom Right**

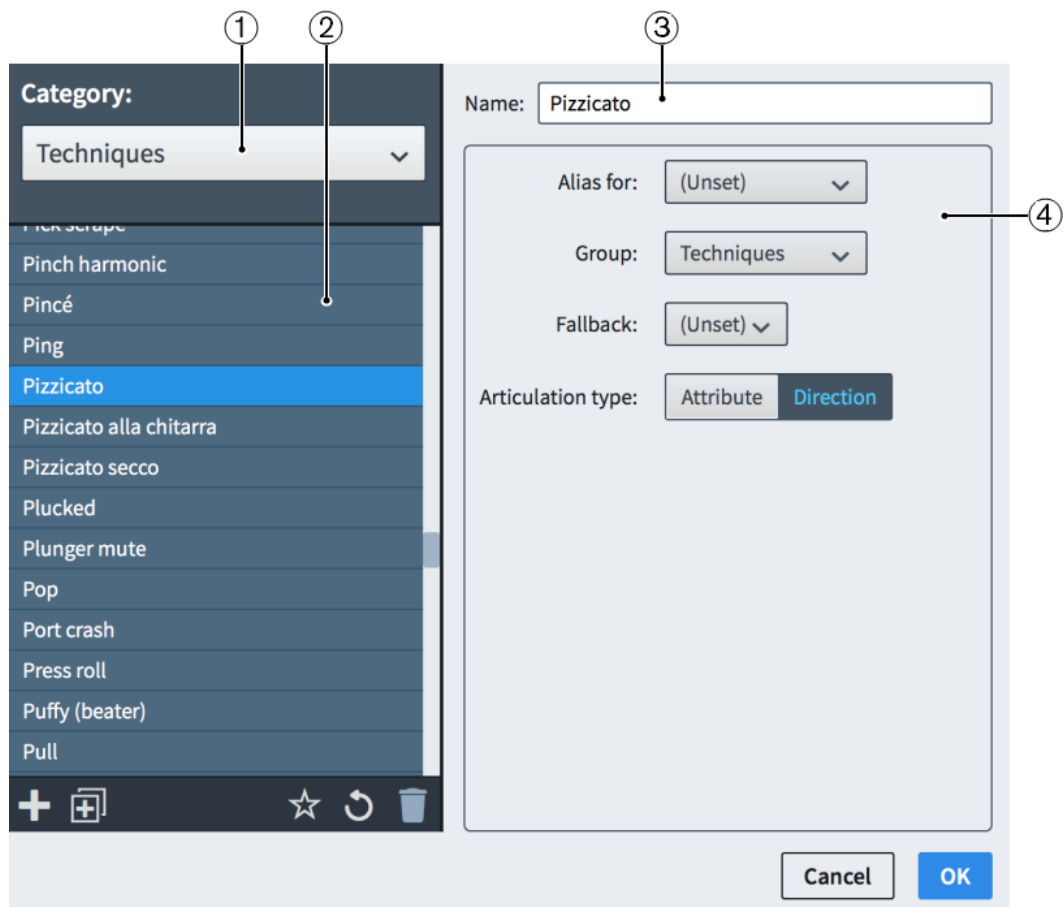
RELATED LINKS

[Edit Playing Techniques dialog](#) on page 796

Edit Playback Playing Techniques dialog

The **Edit Playback Playing Techniques** dialog allows you to define new playback playing techniques and edit existing ones, for example, to create a new playback playing technique with the correct playback settings for a new custom playing technique you have designed.

- You can open the **Edit Playback Playing Techniques** dialog by clicking **Edit** beside **Playback playing technique** in the **Edit Playing Techniques** dialog.



Edit Playback Playing Techniques dialog

The **Edit Playback Playing Techniques** dialog contains the following sections and options:

1 Category menu

Allows you to filter the list of playback playing techniques by selecting a category from the menu, such as **Techniques** or **Dynamics**.

2 List of playback playing techniques

Contains all the playback playing techniques in the project within the currently selected category.

The action bar at the bottom of the list contains the following options:

- **New**



Adds a new blank playback playing technique.

- **New from Selection**



Adds a new playback playing technique that is a duplicate of the playback playing technique currently selected.

- **Save as Default**



Saves the currently selected playback playing technique as the default, allowing you to use it in multiple projects.

- **Revert to Factory**



Removes all edits you have made to the selected predefined playback playing technique, returning it to its original settings.

- **Delete**



Deletes the selected playback playing technique.

NOTE

You cannot delete predefined playing techniques or any playing technique that is currently used in your project.

3 Name

Allows you to edit or enter the name of the playback playing technique. This is the name shown in lists in the **Edit Playing Techniques**, **Expression Maps**, and **Percussion Maps** dialogs.

4 Playback options

- **Alias for:** Allows you to specify another playback playing technique that is equivalent to the present one.
- **Group:** Sets the group in which this playback playing technique appears.
- **Fallback:** Allows you to specify another playback playing technique that can be used if the present playing technique is not available.
- **Articulation type:** Sets the duration over which the playback playing technique takes effect. **Attribute** applies only to the note at the rhythmic position where the playing technique is found, such as a staccato articulation, while **Direction** applies to all following notes until it is replaced by another playing technique, such as pizzicato.

RELATED LINKS

[Edit Playing Techniques dialog](#) on page 796

[Edit Playing Technique dialog](#) on page 798

Using custom playing techniques in multiple projects

By default, custom playing techniques are only available in the project in which you created them. You can save them as default to use them in multiple projects.

PROCEDURE

1. In Engrave mode, choose **Engrave > Playing Techniques** to open the **Edit Playing Techniques** dialog.
2. In the list on the left of the dialog, select the playing technique you want to use in multiple projects.
3. Click **Save as Default** in the action bar.
4. Click **OK** to save your changes and close the dialog.

RESULT

The selected playing technique is saved as your default and can be used in all projects.

RELATED LINKS

[Custom playing techniques](#) on page 795

[Edit Playing Techniques dialog](#) on page 796

Playing techniques in playback

Each playing technique you can create in Write mode corresponds to a technique that you can map in the **Expression Maps** dialog.

- You can open the **Expression Maps** dialog in Play mode by choosing **Play > Expression Maps**.

In the **Techniques** section of the dialog, you can edit existing techniques. You can also create new combinations of playing techniques in the **Technique Combinations** dialog. For example, you can combine **Pizzicato** and **Tremolo** to allow the pizzicato and tremolo techniques to be applied to the same note simultaneously.

When you input a playing technique in Write mode, the expression map looks for that playing technique. If it cannot be found, the playing technique applied either remains the same as the previous technique or reverts to the natural technique.

Custom playing techniques that use playback playing techniques that do not already exist in expression maps do not play back automatically. In order for them to play back appropriately, you must add them to the expression maps for each instrument for which you want to use them. You must also assign an action for each custom playing technique that determines how the switch required to execute the technique is controlled.

You can see which playing techniques are being applied in the **Playing Techniques** lane, which you can show by expanding individual instruments in Play mode.

TIP

If you have input a playing technique but cannot hear a change in the sound, that could be because you are using a combination of playing techniques that the expression map does not expect. For example, if you input a new playing technique without cancelling an existing playing technique, the expression map cannot process the two playing techniques together if the expression map does not have an entry for those two techniques combined.

To avoid playing technique clashes, input a “naturale”, or “nat.”, playing technique to return the software instrument to its natural state. You can then input new playing techniques without clashes.

RELATED LINKS

[Expression Maps dialog](#) on page 452

[Technique Combinations dialog](#) on page 456

Rehearsal marks

Rehearsal marks are an ordered sequence of letters or numbers, which along with bar numbers, provide a reference point for music that has multiple players, and make the chronological sequence of the music clear.

They tell performers where they are in the piece, and allow performers to orient and co-ordinate themselves easily in rehearsals and concerts. Rehearsal marks can also be used to indicate significant changes in the music, and you can freely decide their positions.

They can also be useful when preparing parts and scores, as you can use rehearsal marks and bar numbers to compare quickly a part to the score and check it is correct. In Dorico Pro, rehearsal marks follow an automatic sequence, ensuring there are never duplicate rehearsal marks.

In Dorico Pro, rehearsal marks are categorized as system objects. Therefore, rehearsal marks follow your per-layout settings for the visibility and positioning of system objects, which you can change on the **Staves and Systems** page in **Setup > Layout Options**.

RELATED LINKS

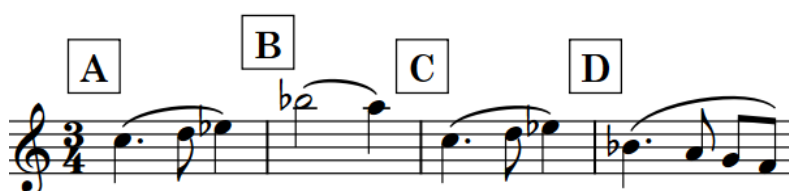
[Inputting rehearsal marks](#) on page 249

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

General placement conventions for rehearsal marks

Rehearsal marks should be at noticeable positions in the score so they can be seen easily. They should use a large, non-italic bold font, and be positioned above the system and outside the music.



Rehearsal marks should be positioned above barlines, and not below the system. Although you can input rehearsal marks at rhythmic positions within a bar in Dorico Pro, this is not common practice. Depending on the style of music and the context, it can be helpful to input a double barline beneath each rehearsal mark.

In order to ensure they are easily noticeable, and cannot be confused with bar numbers if you are using numbers for rehearsal marks, rehearsal marks should be shown in an enclosure. You can change the shape and size of rehearsal mark enclosures.

The placement of rehearsal marks relative to the music is discretionary, but they are most helpful to players when they coincide with a change in the music, such as a tempo change or a change in texture. They are also helpful when placed at a point in the music where players are likely to start

from in order to rehearse a specific section, such as a significant solo entry or the start of a difficult passage.

In general, it is good practice to place rehearsal marks at regular intervals as well as at significant moments. It is often recommended to have rehearsal marks every 5-20 bars to reduce the amount of bars players need to count before or after a rehearsal mark.

If a rehearsal mark coincides with a tempo change, you should position the tempo text to the right of the rehearsal mark. However, if space is tight, the text can be positioned above or below the rehearsal mark. The position of the rehearsal mark should remain clear, so it should not be moved away from the barline to which it applies, otherwise its position can be misunderstood. Dorico Pro automatically adjusts staff spacing to ensure rehearsal marks are correctly positioned.



The vertical spacing between the top two staves is increased to allow room for the rehearsal mark and the tempo marks.

RELATED LINKS

[Inputting rehearsal marks](#) on page 249

[Input methods for bars and barlines](#) on page 201

[Changing the rehearsal mark enclosure type](#) on page 806

Project-wide engraving options for rehearsal marks

You can find options for the project-wide appearance and position of rehearsal marks on the **Rehearsal Marks** page in **Engrave > Engraving Options**.

For example, you can change the sequence type of rehearsal marks, their default positions, and whether they are shown in enclosures.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Rehearsal mark enclosure size and padding values](#) on page 807

Changing the rehearsal mark enclosure type

Rehearsal marks are usually shown in an enclosure, which can be a rectangle or a circle. You can change the enclosure type of all rehearsal marks project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Rehearsal Marks** in the page list.
3. In the **Enclosure** section, choose one of the following options for **Enclosure type**:

- **Rectangle**
 - **Circle**
 - **No enclosure**
-

RESULT

The enclosure type of all rehearsal marks in your project is changed. The default size of the enclosure is relative to the font size of the rehearsal marks, but your padding values also determine the size and shape of the enclosure.

EXAMPLE



Rehearsal mark with a rectangle enclosure



Rehearsal mark with a circle enclosure



Rehearsal mark with no enclosure

Rehearsal mark enclosure size and padding values

You can change the default shape and size of rehearsal mark enclosures on the **Rehearsal Marks** page in **Engraving Options**. You can change the minimum dimensions, line thickness, and padding values of rehearsal mark enclosures.

All enclosures

Enclosure line thickness

Sets the thickness of enclosure lines for both rectangle and circle enclosures. The default is 1/8 of a space. The examples have a thickness of 1/2 a space.



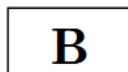
Rectangle rehearsal mark enclosure

The figure shows a rectangle rehearsal mark enclosure with default settings. The minimum height and minimum width are both 4 spaces, horizontal padding is 3/4 of a space, and minimum bottom and minimum top padding are both 1/8 of a space.



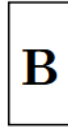
Minimum width

Sets a minimum value for the width of enclosures. In this example, the value was increased from 4 spaces to 8 spaces.



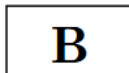
Minimum height

Sets a minimum value for the height of enclosures. In this example, the value was increased from 4 spaces to 8 spaces.



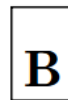
Left and right padding between text and enclosure

Sets the value for the distance between the two sides of the enclosure and the rehearsal mark within it. In this example, the value was increased from 3/4 of a space to 3 spaces.



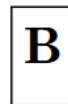
Top padding between text and enclosure

Sets the value for the distance between the top line of the enclosure and the rehearsal mark within it. In this example, the value was increased from 1/2 a space to 2 spaces.



Bottom padding between text and enclosure

Sets the value for the distance between the bottom line of the enclosure and the rehearsal mark within it. In this example, the value was increased from 1/8 of a space to 2 spaces.



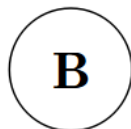
Circle rehearsal mark enclosure

The figure shows a circle rehearsal mark enclosure with default settings. The minimum diameter is 4 spaces, and the minimum padding is 1/4 of a space.



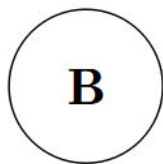
Minimum diameter

Sets a minimum value for the diameter of the enclosure. In this example, the value was increased from 4 spaces to 8 spaces.



Minimum padding between text and enclosure

Sets the value for the distance between the enclosure line and the rehearsal mark within it. In this example, the value was increased from 1/4 of a space to 2 spaces.



Positions of rehearsal marks

Rehearsal marks are placed above the staff and at the same positions as other system objects.

You can move rehearsal marks to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move rehearsal marks graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the default positions of all rehearsal marks project-wide, and set values for the minimum distances between rehearsal marks and staves, and rehearsal marks and other items, on the **Rehearsal Marks** page in **Engrave > Engraving Options**.

Rehearsal marks are categorized as system objects in Dorico Pro, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, if you want rehearsal marks to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

[Project-wide engraving options for rehearsal marks](#) on page 806

[Moving rehearsal marks graphically](#) on page 810

[Changing the positions of system objects](#) on page 926

Moving rehearsal marks rhythmically

You can move rehearsal marks to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the rehearsal marks you want to move.

NOTE

When using the mouse, you can only move one rehearsal mark rhythmically at a time, and you can only drag it to existing barlines.

2. Move the rehearsal marks in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the rehearsal mark to barlines to the right/left.

RESULT

A single rehearsal mark is moved to existing barlines to the right/left.

Multiple rehearsal marks are moved according to the current rhythmic grid value.

NOTE

Only one rehearsal mark can exist at each rhythmic position. If a rehearsal mark passes over another rehearsal mark as part of its move, the existing rehearsal mark is deleted and replaced by the rehearsal mark being moved.

You can undo this action, but any rehearsal marks deleted in the process are only restored if you moved the rehearsal mark using the keyboard.

Moving rehearsal marks graphically

You can move rehearsal marks graphically, without changing the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the rehearsal marks you want to move.
2. Move the rehearsal marks in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The graphical positions of the selected rehearsal marks are changed.

TIP

Start offset in the **Rehearsal Marks** group of the Properties panel is activated automatically when you move rehearsal marks.

- **Start offset X** moves rehearsal marks horizontally.
- **Start offset Y** moves rehearsal marks vertically.

You can also use this property to move rehearsal marks by changing the values in the value fields.

Deactivating the property resets the selected rehearsal marks to their default positions.

Deleting rehearsal marks

You can delete rehearsal marks in full score and part layouts.

NOTE

Deleting a rehearsal mark in any layout deletes the rehearsal mark from all layouts.

PROCEDURE

1. In Write mode, select the rehearsal marks you want to delete.

2. Press **Backspace** or **Delete**.
-

RESULT

The selected rehearsal marks are deleted. Any subsequent rehearsal marks are adjusted until the next change in the sequence or the end of the flow. For example, if you delete the first rehearsal mark, the second rehearsal mark shows either the letter A, the number 1, or the bar number, depending on your choice of sequence type.

RELATED LINKS

[Changing the rehearsal mark sequence type](#) on page 811

Changing the order of rehearsal marks

By default, the rehearsal mark sequence resets at the start of each flow. If you want the rehearsal mark sequence to continue across flows, for example, to avoid having multiple rehearsal marks with the same letter in the same project, you can change the index position of a rehearsal mark.

Changing the index position changes the shown number or letter. For example, index position 1 appears as rehearsal mark A or 1, position 2 appears as B or 2, and so on.

You can also change the index position of a rehearsal mark to avoid showing a letter that could easily be confused with another letter or another number, such as I or O.

PROCEDURE

1. Select the rehearsal mark whose index position you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Index** in the **Rehearsal Marks** group.
 3. Change the value in the value field.
-

RESULT

The selected rehearsal mark changes according to the **Index** value and its sequence type.

Any subsequent rehearsal marks in the same sequence follow the new index automatically. For example, if you changed a rehearsal mark from A to P, the next rehearsal mark changes from B to Q.

NOTE

You can also change the sequence type of rehearsal marks, for example, if you want rehearsal mark C to appear as rehearsal mark 3.

Changing the rehearsal mark sequence type

Rehearsal marks can be letters, numbers, or bar numbers. You can change the sequence type of individual rehearsal marks, and create secondary rehearsal mark sequences.

In Dorico Pro, you can use all three available rehearsal mark sequences simultaneously. For example, you can have the main sequence of rehearsal marks showing letters, but also have a secondary sequence of numbers to mark different moments, perhaps entry points for a solo line, and also highlight prominent bar numbers within those sections.

TIP

You can change the sequence type used for all rehearsal marks project-wide on the **Rehearsal Marks** page in **Engraving Options**.

PROCEDURE

1. Select the rehearsal mark whose sequence type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Sequence type** in the **Rehearsal Marks** group.
3. Select one of the following options from the menu:
 - **Letters**
 - **Numbers**
 - **Bar numbers**

RESULT

The selected rehearsal mark now displays a letter, a number, or the current bar number.

If it is the first rehearsal mark in either the letters sequence or the numbers sequence in the flow, it shows either A or 1. If there are already rehearsal marks in either the letters sequence or the numbers sequence in the flow, it shows the next letter or number according to the index.

NOTE

You can change the index of a rehearsal mark sequence independently of other rehearsal mark sequences. However, you cannot change the bar number sequence using this method.

RELATED LINKS

[Project-wide engraving options for rehearsal marks](#) on page 806

[Adding bar number changes](#) on page 531

Adding prefixes/suffixes to rehearsal marks

You can add both prefixes and suffixes to individual rehearsal marks.

PROCEDURE

1. Select the rehearsal marks to which you want to add a prefix or suffix. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate one of the following properties in the **Rehearsal Marks** group:
 - **Prefix**
 - **Suffix**
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text you entered into the value field is added to the selected rehearsal marks as a prefix or a suffix.

TIP

You can add a custom prefix/suffix to all rehearsal marks project-wide on the **Rehearsal Marks** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for rehearsal marks](#) on page 806

Editing the rehearsal mark font style

You can edit the formatting of the font style used for all rehearsal marks project-wide.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
 2. Select **Rehearsal Mark Font** from the **Font style** menu.
 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Click **OK** to save your changes and close the dialog.
-

RESULT

The formatting of the rehearsal mark font style is changed project-wide.

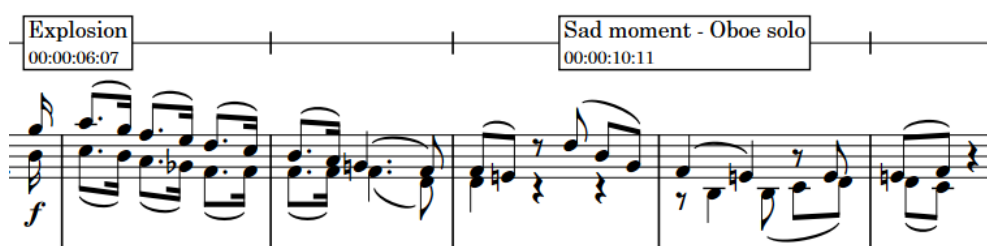
RELATED LINKS

[Edit Font Styles dialog](#) on page 364

[Project-wide engraving options for rehearsal marks](#) on page 806

Markers

Markers are labels locked to a particular position in time, most commonly in relation to a video. They typically indicate an important moment that requires musical prominence, and composers often use them to help shape the writing process.



Markers on a timecode staff showing custom text and timecodes

By default, markers in Dorico Pro show the default text "Marker" and also include the timecode of their fixed position in time.

In Dorico Pro, you can use markers in any project. However, because they are most commonly used in conjunction with video, markers are included in the Video panel in Write mode. There is also a **Markers** track in Play mode that displays markers, and allows you to input new ones.

You can use markers to help find suitable tempos for your project, as Dorico Pro can calculate possible tempos between important markers so that the markers occur on strong beats in the time signature.

Any markers you input are automatically included when you export MIDI.

RELATED LINKS

- [Inputting markers/timecodes](#) on page 249
- [Changing the text shown in markers](#) on page 815
- [Markers section of the Video panel](#) on page 250
- [Markers track](#) on page 427
- [Find Tempo dialog](#) on page 251
- [Defining markers as important](#) on page 818

Project-wide engraving options for markers

You can find options controlling the project-wide design, position, and appearance of markers on the **Markers** page in **Engrave > Engraving Options**.

For example, you can change whether markers include the timecode of their position, whether markers are shown above or below timecodes, the thickness of the enclosure line, and the default vertical position of markers.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Changing the vertical position of markers

You can show markers above or below the system, and you can show them on a separate single-line staff above a selected instrument family group.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the vertical position of markers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers** in the page list.
4. Choose one of the following options for **Vertical position**:
 - **Above system**
 - **Below system**
 - **Timecode staff**
5. Optional: If you chose **Timecode staff**, select the bracketed instrument family above which you want to show the timecode staff from the **Position timecode staff above bracket** menu.
6. Click **Apply**, then **Close**.

RESULT

The vertical position of markers is changed in the selected layouts.

NOTE

If you show markers on a timecode staff, timecodes are also shown on the staff by default. If you only want to show markers on a separate staff and exclude timecodes, you must then change **Timecode frequency on timecode staff** to **Never**.

RELATED LINKS

[Changing the timecode frequency](#) on page 821

Changing the text shown in markers

The default text shown in new markers is "Marker". You can change the text shown in each marker individually.

PROCEDURE

1. Select the markers whose text you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Marker text** in the **Markers** group.
 3. Enter the text you want.
 4. Press **Return**.
-

RESULT

The text shown in the selected markers is changed. It uses the **Marker Text Font** font style.

TIP

You can also enter custom text for markers when inputting them using the **Add Marker** dialog, and change marker text in the **Markers** section of the Video panel in Write mode.

RELATED LINKS

[Add Marker dialog](#) on page 250

[Markers section of the Video panel](#) on page 250

Editing the marker/timecode font styles

You can edit the formatting of the font styles used for all markers and timecodes project-wide, for example, if you want markers to appear bold and italic. Markers and timecodes use different fonts, meaning you can change them independently of each other.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
 2. Select one of the following font styles from the **Font style** menu:
 - **Marker Text Font**: Used for markers
 - **Marker Timecode Font**: Used for timecodes
 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Optional: If required, repeat steps 2 and 3 to change the other font.
 5. Click **OK** to save your changes and close the dialog.
-

RESULT

The formatting of the selected font styles is changed project-wide.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

Moving markers rhythmically

You can move markers to new rhythmic positions. However, as markers have a fixed position in time, moving markers relative to the notated music automatically changes the tempo on either side of the marker.

TIP

If you want to move a marker to a new time position, for example, if you want to move it from 25 seconds to 28 seconds, you must change the timecode of the marker.

PROCEDURE

1. In Write mode, select the marker you want to move.

NOTE

You can only move one marker at a time.

2. Move the marker according to the current rhythmic grid in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.
 - Click and drag it to the right/left.

RESULT

The selected marker is moved to a new rhythmic position. However, its fixed position in time is not changed. Therefore, the tempo immediately preceding the marker automatically updates so that the marker occurs at the correct time. For example, moving a marker to the right increases the preceding tempo.

Any gradual tempo changes between the preceding tempo change or the start of the flow and the marker are removed.

NOTE

The tempo change affects the positions of all other markers in the flow relative to the notated music.

RELATED LINKS

[Markers](#) on page 814

[Inputting markers/timecodes](#) on page 249

Changing the timecodes of markers

You can change the timecode of markers, for example, if the video is edited and the marker now occurs ten seconds later.

NOTE

Because this changes where markers occur in the project, this also moves markers relative to the notated music.

PROCEDURE

1. In Write mode, click **Video** in the Notations toolbox to show the Video panel.
2. In the **Markers** section, double-click the timecode you want to change.
3. Enter the new timecode you want into the value field.
4. Press **Return**.

RESULT

The timecode of the marker is changed. The marker automatically moves relative to the music to reflect its new time position.

RELATED LINKS

[Markers section of the Video panel](#) on page 250

[Moving markers rhythmically](#) on page 816

Defining markers as important

You can define individual markers as important, which allows them to be considered when finding suitable tempos in the **Find Tempo** dialog.

PROCEDURE

1. In Write mode, click **Video** in the Notations toolbox to show the Video panel.
2. In the **Markers** section, activate the checkbox in the **Imp.** column for each marker you want to define as important.

RESULT

Markers with activated checkboxes are defined as important. The **Find Tempo** button at the bottom of the **Markers** section becomes available.

RELATED LINKS

[Find Tempo dialog](#) on page 251

Hiding/Showing markers

By default, markers are shown in full score layouts and hidden in part layouts. You can hide and show markers in each layout independently, for example, if markers are helpful for the conductor to see but not for the players.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show markers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers** in the page list.
4. Activate/Deactivate **Show markers**.
5. Click **Apply**, then **Close**.

RESULT

Markers are hidden/shown in the selected layouts.

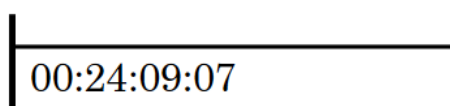
RELATED LINKS

[Changing the vertical position of markers](#) on page 815

Timecodes

Timecodes indicate an exact position in time, usually in the context of a video. They allow precise synchronization between multiple elements, such as music and moving images, and can be used as a reference tool.

Timecodes are displayed in the format hh:mm:ss:ff, which is two-digit hours, minutes, seconds, and frames.



A timecode on a timecode staff

In Dorico Pro, you can specify the type of timecode from the following types:

Non-drop frame timecodes

Each frame is numbered sequentially from the preceding one without skipping any frame numbers.

Non-drop frame timecodes are shown with the suffix **fps** and use a colon separator between seconds and frames, for example, 00:00:01:05.

Drop frame timecodes

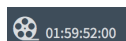
Some frame numbers are skipped in order to accommodate the difference in frame rate between 29.97 fps and 30 fps. In every minute except every tenth minute, two timecode numbers are dropped from the frame count.

Drop frame timecodes are shown with the suffix **dfps** and use a semicolon separator between the seconds and frames, for example, 00:00:01;05.

Timecodes in Dorico Pro are flow-specific, meaning you can set timecodes for each flow that are completely independent of the timecodes for other flows. You can set timecodes in the **Video Properties** dialog, including for flows without a video.

NOTE

The timecodes shown in flow cards in the **Flows** panel in Setup mode reflect the timecode at the start of the flow, which can be different to the timecode you set in the **Video Properties** dialog. For example, if you set the **Timecode start** to 02:00:00:00 but also set the **Flow attachment position** to 8 quarter note beats, and the tempo is 60 bpm, the timecode shown in the flow card is 01:59:52:00.



You can show timecodes on their own single-line staff and at different intervals. Additionally, you can change the time displayed in the **Transport** window to be the timecode rather than elapsed time, which is shown by default.

RELATED LINKS


[Frame rates](#) on page 129

- [Video Properties dialog](#) on page 126
- [Editing the marker/timecode font styles](#) on page 816
- [Showing timecodes on a separate staff](#) on page 820
- [Changing the timecode frequency](#) on page 821
- [Changing the content shown in the transport display](#) on page 447

Changing the initial timecode value

You can change the timecode at which each flow in your project starts, for example, if you are using a separate project for the second reel of a film. You can also change the initial timecode in projects without videos.

PROCEDURE

1. In Write mode, select an item in the flow whose initial timecode value you want to change.
2. In the Notations toolbox, click **Video** to show the Video panel.

3. In the Video panel, click **Properties** to open the **Video Properties** dialog.
4. In the **Video Properties** dialog, change the value for **Timecode start**.
5. Click **OK** to save your changes and close the dialog.

RESULT

The initial timecode for the flow in which you selected an item is changed.

RELATED LINKS

- [Timecodes](#) on page 819
- [Changing the start position of videos](#) on page 127

Showing timecodes on a separate staff

You can show timecodes on a separate single-line staff in each layout independently, as this can make timecodes clearer in the score. You can also specify above which bracketed instrument group the timecode staff appears.

NOTE

- If you show timecodes on a separate staff, markers are also shown on this staff.
- You cannot show timecodes on multiple staves in a system.

PREREQUISITE

Markers are shown in the selected layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to show timecodes on a separate staff.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Markers** in the page list.
4. For **Vertical position**, choose **Timecode staff**.

5. Select the bracketed instrument family above which you want to show the timecode staff from the **Position timecode staff above bracket** menu.
 6. Click **Apply**, then **Close**.
-

RESULT

A separate timecode staff is shown above the top instrument staff that belongs to the selected instrument family group.

TIP

You can change the default distance between timecode staves and other staves on the **Vertical Spacing** page in **Setup > Layout Options**.

RELATED LINKS

[Timecodes](#) on page 819

[Hiding/Showing markers](#) on page 818

[Changing the vertical position of markers](#) on page 815

Hiding/Showing timecodes in markers

You can hide/show timecodes within all markers project-wide and show them above/below the marker text, for example, to ensure the precise positions of key moments are clearly labelled. This is in addition to your per-layout settings for showing timecodes on a separate staff.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Markers** in the page list.
 3. Choose one of the following options for **Timecode in markers**:
 - **Show timecode**
 - **Do not show timecode**
 4. Optional: Choose one of the following options for **Order of information, if timecode shown**:
 - **Text above timecode**
 - **Timecode above text**
 5. Click **Apply**, then **Close**.
-

RELATED LINKS

[Markers](#) on page 814

[Showing timecodes on a separate staff](#) on page 820

Changing the timecode frequency

You can show timecodes at different intervals in layouts in which timecodes are shown on a separate staff. For example, you can show timecodes every bar in full score layouts but only at the start of each system in part layouts.

NOTE

We do not recommend that you show timecodes every bar in layouts with multi-bar rests, as the result is illegible overlapping timecodes. If you want to show timecodes in part layouts with

multi-bar rests, we recommend either showing timecodes only at the start of each system or not showing multi-bar rests in the layout.

PREREQUISITE

Markers are shown in the selected layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the timecode frequency. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Markers** in the page list.
 4. Optional: If the selected layouts do not show timecodes on a separate staff, choose **Timecode staff** for **Vertical position**.
 5. Choose one of the following options for **Timecode frequency on timecode staff**:
 - **Start of system**
 - **Every bar**
 - **Never**
 6. Click **Apply**, then **Close**.
-

RELATED LINKS

[Hiding/Showing markers](#) on page 818

[Hiding/Showing multi-bar rests](#) on page 865

Repeat endings

For music with repeated passages, repeat endings show which bars are played at the end of each repetition, with different endings each time if required. They are also known as “volta lines”, or as “first and second endings”, but in this documentation, we refer to them as “repeat endings”.

Repeat endings comprise two or more segments, where each segment contains a different possible ending. When you input repeat endings, Dorico Pro automatically inputs an end repeat barline at the end of the first segment. Segments in repeat endings are clearly marked with solid lines above and a number that indicates on which repeat the segment is to be played.



A repeat ending with three possible endings

Dorico Pro allows you to create repeat endings containing any number of segments, and allows you to control which segments are used for each playthrough. For example, you might want a repeat ending with two segments but four total playthroughs, where the first two playthroughs use the first repeat ending segment and the final two playthroughs use the second repeat ending segment.

In Dorico Pro, repeat endings are categorized as system objects. Therefore, repeat endings follow your per-layout settings for the visibility and positioning of system objects, which you can change on the **Staves and Systems** page in **Setup > Layout Options**.

RELATED LINKS

[Input methods for repeats and tremolos](#) on page 253

[Dividing playthroughs across repeat ending segments](#) on page 824

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

Changing the total number of playthroughs in repeat endings

By default, each segment in repeat endings is played once, so each segment shows a single digit that indicates the playthrough for which it is used. You can increase the total number of playthroughs for repeat endings individually so that segments are played more than once.

PROCEDURE

1. Select the repeat endings whose total number of repeats you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **No. times played** in the **Repeat Endings** group.
3. Change the value in the value field.

NOTE

You cannot have fewer repeats than the number of segments.

RESULT

The total number of repeats in the selected repeat endings is changed. This is updated automatically in the layout.

By default, Dorico Pro automatically adds any repeats not already assigned to specific segments to the final closed segment.

AFTER COMPLETING THIS TASK

Once you have set the total number of repeats, you can then change which segment is used for each playthrough.

RELATED LINKS

[Repeats in playback](#) on page 436

Dividing playthroughs across repeat ending segments

You can control how the total number of playthroughs is divided across the different segments in individual repeat endings.

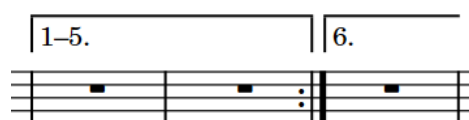
PROCEDURE

1. In Engrave mode, select an individual segment in the repeat ending structure whose included playthroughs you want to change.
 2. In the Properties panel, activate **Times played for segment** in the **Repeat Endings** group.
 3. Enter the number of each playthrough that you want to include in the selected segment.
For example, for a repeat ending with six playthroughs, enter 4,5,6 to include the 4th, 5th, and 6th playthroughs in the second segment.
-

RESULT

The playthroughs included in the selected segment are changed.

EXAMPLE



Default distribution of repeats



Customized distribution of repeats

Project-wide engraving options for repeat endings

You can find options controlling the project-wide design, position, and appearance of repeat ending segments on the **Repeat Endings** page in **Engrave > Engraving Options**.

The options on the **Repeat Endings** page allow you to change the ends of repeat ending lines, the appearance of numbers and hooks, and the default position of repeat endings.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Lengthening/Shortening segments in repeat endings

You can increase/decrease the number of bars included in each segment of repeat endings by lengthening/shortening each segment independently.

PROCEDURE

1. In Write mode, select the repeat ending you want to lengthen/shorten.

NOTE

You can only lengthen/shorten one repeat ending segment at a time.

2. Select the circular handle at the end of the segment you want to lengthen/shorten.



The selected handle in the middle has a thicker line.

3. Click and drag the handle to the right/left to snap it to the next/previous barline.

NOTE

Segments must contain at least one bar.

4. Optional: Repeat steps 1 to 3 for each segment in the repeat ending.
-

RESULT

The selected segment is lengthened/shortened.

NOTE

- This does not automatically input or reposition repeat barlines. You must input repeat barlines as appropriate manually.
 - You can also lengthen/shorten the final segment in a single repeat ending by selecting the repeat ending and using the following key commands:
 - Press **Shift-Alt-Right Arrow** to lengthen the final segment.
 - Press **Shift-Alt-Left Arrow** to shorten the final segment.
-

RELATED LINKS

[Moving repeat endings graphically](#) on page 826

Positions of repeat endings

Repeat endings are placed above the staff at the same positions as other system objects, and their hooks align with barlines. They are commonly positioned outside of other notations, but some long items, such as gradual tempo changes, can be placed above repeat endings.

You can change the positions of repeat endings individually and by changing their default positions project-wide. For example, you can override the default position for individual repeat endings if the musical material at those positions requires more vertical space.

You can move repeat endings to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move each repeat ending segment graphically in Engrave mode and independently of other segments in the repeat ending; however, this does not change the rhythmic positions to which they are attached.

You can change the default appearance and position of all repeat endings project-wide on the **Repeat Endings** page in **Engrave > Engraving Options**.

Repeat endings are categorized as system objects in Dorico Pro, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, for example, if you want repeat endings to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

[Project-wide engraving options for repeat endings](#) on page 824

[Moving repeat endings graphically](#) on page 826

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

Moving repeat endings rhythmically

You can move repeat endings to different rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the repeat ending you want to move.

NOTE

You can only move one repeat ending rhythmically at a time.

2. Move the repeat ending to the next/previous bar in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.
 - Click and drag it to the right/left.

RESULT

The selected repeat ending is moved to the next/previous bar.

NOTE

- This does not automatically input or reposition repeat barlines. You must input repeat barlines manually as appropriate.
- Only one repeat ending can exist at each rhythmic position. If any part of a selected repeat ending collides with any part of another repeat ending as part of its move, the other repeat ending is deleted. However, its repeat barlines are not deleted.

You can undo this action, but any repeat endings deleted in the process are only restored if you moved the repeat ending using the keyboard.

Moving repeat endings graphically

You can move repeat endings graphically without changing their rhythmic positions. You can also move the start/end of repeat ending segments independently, meaning you can lengthen/shorten them graphically.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:

- Repeat ending segments
- Individual handles on repeat ending segments

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the repeat ending segments or handles in any of the following ways:

- Press **Alt-Right Arrow** to move them to the right.
- Press **Alt-Left Arrow** to move them to the left.
- Press **Alt-Up Arrow** to move them upwards.
- Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected repeat ending segments or handles are moved graphically.

TIP

The following properties in the **Repeat Endings** group of the Properties panel are activated automatically when you move repeat ending segments in the corresponding directions:

- **Start X offset** moves start repeat ending segment handles horizontally.
- **End X offset** moves end repeat ending segment handles horizontally.
- **Y offset** moves whole repeat ending segments vertically.

For example, if you move a whole repeat ending segment to the right, both handles are moved, so **Start X offset** and **End X offset** are both activated. You can also use all three properties to move and lengthen/shorten repeat endings graphically by changing the values in the value fields.

Deactivating the properties resets the selected repeat ending segments to their default positions.

RELATED LINKS

[Moving repeat endings rhythmically](#) on page 826

[Lengthening/Shortening segments in repeat endings](#) on page 825

Repeat endings in Engrave mode

In Engrave mode, you can change the appearance of repeat endings and repeat ending segments individually, independently of your project-wide settings on the **Repeat Endings** page in **Engraving Options**.

In Engrave mode, each segment in repeat endings has two square handles.



You can select and move each handle independently.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

RELATED LINKS

[Project-wide engraving options for repeat endings](#) on page 824

Changing the text shown in repeat endings

You can replace the text shown in individual segments in repeat endings, which by default shows the playthrough numbers for the segment, with custom text.

PROCEDURE

1. In Engrave mode, select the repeat ending segments whose text you want to change.
 2. In the Properties panel, activate **Custom text** in the **Repeat Endings** group.
 3. Enter the text you want into the value field.
 4. Press **Return**.
-

RESULT

The text shown in the selected segments is changed.

Deactivating **Custom text** restores the default text for the selected repeat ending segments.

NOTE

Deactivating properties permanently deletes any custom text entered.

Changing the appearance of individual final repeat ending segments

You can change the appearance of the line ends in the final segments of individual repeat endings, independently of your project-wide settings.

PROCEDURE

1. Select the repeat endings whose final segment appearance you want to change. You can do this in Write mode and Engrave mode.

NOTE

In Engrave mode, you can select any segment in the repeat ending.

2. In the Properties panel, activate **End of line** in the **Repeat Endings** group.
 3. Select one of the following options from the menu:
 - **Open, short**
 - **Open, full length**
 - **Closed**
-

RESULT

The end of the line of the final segment in the selected repeat endings is changed.

TIP

You can change the appearance of final segments in all repeat endings project-wide in the **Segments** section of the **Repeat Endings** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for repeat endings](#) on page 824

Lengthening/Shortening repeat ending hooks

You can lengthen/shorten the hooks in repeat endings individually, independently of your project-wide settings.

NOTE

You cannot change the hook length of an individual segment in a repeat ending. Changing the hook length affects the whole repeat ending.

PROCEDURE

1. In Engrave mode, select the repeat endings whose hooks you want to lengthen/shorten.
 2. In the Properties panel, activate **Hook length** in the **Repeat Endings** group.
 3. Change the value in the value field.
-

RESULT

Increasing the value makes repeat ending hooks longer. Decreasing the value makes repeat ending hooks shorter.

TIP

You can change the default length of all repeat ending hooks project-wide on the **Repeat Endings** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for repeat endings](#) on page 824

Repeat endings in MusicXML files

All aspects of repeat endings can be imported from and exported in MusicXML files.

However, while MusicXML can represent this, segments in the middle of sets of endings cannot have an open right-hand end in Dorico Pro.

Repeat markers

Repeat markers show that musical material is to be repeated, but unlike repeat endings, repeat markers often involve jumping to different positions and sections in the music instead of moving through the music consecutively.

2. Und im - mer
3. Es quoll und

⊕ Coda
nun wußt' ich wohl

⊕ Coda

In Dorico Pro, repeat markers are divided into the following types:

Repeat jumps

Specify the position from which players or playback must jump, such as *D.C. al Coda*. You can qualify the conditions under which repeat jumps are used, such as “second time only”.

Repeat jumps are right-aligned with their rhythmic position, meaning their text or symbol ends at that rhythmic position and extends to the left.

D.C. al Coda

D.S. al Fine

Repeat sections

Specify the destinations for jumps, such as *segno* or *coda*, or where the music should end, such as *Fine*. In Dorico Pro, coda sections that start mid-system are automatically separated from the preceding music with a gap.

Repeat markers are left-aligned with their rhythmic position, meaning their text or symbol starts at that rhythmic position and extends to the right.

⌘

⊕ Coda

Fine

By default, repeat markers are shown on a single line, but you can show them on two lines individually to reduce their horizontal length if necessary. You can also customize their paragraph styles, including changing their font size, in the **Paragraph Styles** dialog and use the options on the **Repeat Markers** page in **Engrave > Engraving Options** to customize their appearance.

RELATED LINKS

- [Input methods for repeats and tremolos](#) on page 253
- [Showing repeat markers on one/two lines](#) on page 833
- [Paragraph Styles dialog](#) on page 366
- [Repeats in playback](#) on page 436

Project-wide engraving options for repeat markers

You can find options controlling the project-wide design, position, and appearance of repeat markers on the **Repeat Markers** page in **Engrave > Engraving Options**.

The options on the **Repeat Markers** page allow you to change the appearance, design, and length of repeat markers, the default gap before coda sections that start mid-system, and their default position. You can also change the order of symbols and text in repeat markers, the scale size of symbols compared to text, and the letter case for repeat marker text.

The following appearance presets are provided in the **Repeat Markers Preset** section:

- **Standard**
Based on the most commonly-used conventions in current rock/pop sheet music publishing, which produce shorter, more abbreviated instructions.
- **Gould**
Based on the recommendations made in Elaine Gould's book "Behind Bars", which is better suited for classical and concert music as it produces longer, more explicit instructions.

NOTE

Gould also recommends placing repeat markers below the staff instead of above it.

- **Custom**
A mixture of settings according to your preference. This preset is automatically selected when you override an appearance preset by changing individual options.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

- [Engraving Options dialog](#) on page 299
- [Changing the placement of repeat markers relative to the staff](#) on page 836

Repeat marker paragraph styles

Repeat markers use paragraph styles to format their fonts, including their size, spacing, alignment, and other formatting options. Because the different types of repeat markers require different formatting, they each have a separate paragraph style by default.

Dorico Pro provides the following default paragraph styles for repeat markers:

- **Repeat Marker Jumps**
The default paragraph style used for repeat jumps, such as *D.C. al Coda*.
- **Repeat Marker Sections**
The default paragraph style used for repeat sections, such as *a coda*.

By default, the formatting of these paragraph styles is the same but you can edit paragraph styles independently of each other in the **Paragraph Styles** dialog, for example, if you want to decrease the size of repeat jumps but leave repeat sections with their default size.

NOTE

The **Repeat Marker Jumps** paragraph style inherits settings from the **Repeat Marker Sections** style. If you change the **Repeat Marker Sections** paragraph style, this also affects any corresponding options for the **Repeat Marker Jumps** paragraph style that have not been overridden.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

[Changing the text shown in repeat markers](#) on page 833

[Showing repeat markers on one/two lines](#) on page 833

Changing the size of coda/segno symbols

You can change the default size of all coda and segno symbols project-wide and independently of each other. This does not affect the size of text in repeat markers.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Repeat Markers** in the page list.
 3. In the **Design** section, change the value for **Scale factor for coda symbols**.
 4. Change the value for **Scale factor for segno symbols**.
 5. Click **Apply**, then **Close**.
-

RESULT

The size of coda and segno symbols relative to repeat marker text is changed project-wide.

Changing the index for repeat markers

You can change the index of individual repeat markers, for example, if a flow requires two different codas with different symbols so players can tell them apart.

By default, all repeat markers of the same type have the same appearance, even when there are multiple repeat markers in the flow.

NOTE

You cannot change the index of *Fine* or *D.C.* repeat markers.

PROCEDURE

1. Select the repeat marker whose index you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate the following properties, individually or together as appropriate for your selection, in the **Repeat Markers** section:
 - **Marker index**
 - **'Jump to' index**
3. Change the values in the value fields.

NOTE

You can only enter values between 1 and 3.

RESULT

Marker index changes the order of the selected repeat marker relative to other repeat markers of the same type.

'Jump to' index changes the destination of the selected repeat marker.

TIP

You can change the default appearance of all multiple repeat markers project-wide in the **Repeat Sections** section of the **Repeat Markers** page in **Engrave > Engraving Options**.

EXAMPLE

If you have two codas in a flow with two different D.S. al Coda markers, you might set **Marker index** to 1 for the first coda and 2 for the second, then set **'Jump to' index** to 1 for the first D.S. al Coda marker and 2 for the second.

D.S. % al \oplus

D.S. al Coda marker with default indexes

D.S. %% al \oplus 2

D.S. al Coda marker with both indexes set to 2

RELATED LINKS

[Project-wide engraving options for repeat markers](#) on page 831

Changing the text shown in repeat markers

You can change the text shown in individual repeat markers, for example, if you are typesetting a score with an unusual repeat marker instruction.

PROCEDURE

1. Select the repeat markers whose text you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Custom text** in the **Repeat Markers** group.
 3. Enter the text you want into the value field.
 4. Press **Return**.
-

RESULT

The text shown in the selected repeat markers is changed. This replaces the text in the selected repeat markers without removing any symbols.

RELATED LINKS

[Project-wide engraving options for repeat markers](#) on page 831

Showing repeat markers on one/two lines

You can show individual repeat markers either on a single line or spread across two lines independently of your per-layout settings, for example, if a single long repeat marker extends beyond the page margins in one part layout.

NOTE

You can only change the word wrapping of repeat jumps, such as *D.C. al Fine* and *D.S. al Coda*, that do not have custom text.

PROCEDURE

1. In Engrave mode, select the repeat markers whose word wrapping you want to change.
 2. In the Properties panel, activate **Word wrap** in the **Repeat Markers** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

The selected repeat markers are shown on two lines when the checkbox is activated, and on one line when the checkbox is deactivated.

When the property is deactivated, repeat markers follow your per-layout setting for word wrapping.

TIP

You can show all repeat markers on two lines in each layout independently in the **Repeat Markers** section of the **Staves and Systems** page in **Setup > Layout Options**. For example, you can show them on one line in the full score but on two lines in part layouts.

EXAMPLE



The example shows two musical staves. The left staff is labeled "D.C. al Coda" and shows a repeat marker with the text "D.C. al Coda" on a single line. Below it is the caption "Repeat marker without word wrapping". The right staff is also labeled "D.C. al Coda" but shows the same repeat marker with the text "D.C. al Coda" wrapped onto two lines. Below it is the caption "Repeat marker with word wrapping".

RELATED LINKS

[Layout Options dialog](#) on page 90

Changing the barline shown before codas

You can change the default barline shown before all codas project-wide that are preceded by a repeat jump, for example, if you want to show double barlines in such cases instead of normal barlines.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Barlines** in the page list.
 3. In the **Repeats** section, choose one of the following options for **Barline coinciding with repeat jump before Coda**:
 - **Double barline**
 - **Single barline**
 4. Click **Apply**, then **Close**.
-

RESULT

The barline shown automatically before codas immediately preceded by a repeat jump is changed project-wide.

Positions of repeat markers

Repeat markers are placed above the staff by default, and at the same positions as other system objects. Coda sections are separated from the preceding music by a gap in the system.

You can move repeat markers to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move repeat markers graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached. You can adjust the size of individual mid-system gaps before codas by adjusting the note spacing at their rhythmic positions in Engrave mode.

You can change the default positions of all repeat markers project-wide, set values for the minimum distances between repeat markers and staves and other items, and set the default mid-system gap preceding coda sections on the **Repeat Markers** page in **Engrave > Engraving Options**. You can change the default placement of repeat markers relative to the staff in each layout independently in the **Repeat Markers** section of the **Staves and Systems** page in **Setup > Layout Options**.

Repeat markers are categorized as system objects in Dorico Pro, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, for example, if you want repeat markers to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

[Project-wide engraving options for repeat endings](#) on page 824

[Adjusting note spacing at individual rhythmic positions](#) on page 388

[Changing the placement of repeat markers relative to the staff](#) on page 836

[Changing the positions of system objects](#) on page 926

Moving repeat markers rhythmically

You can move repeat markers to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the repeat markers you want to move.

NOTE

When using the mouse, you can only move one repeat marker rhythmically at a time.

2. Move the selected repeat markers in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag it to the right/left.

RESULT

The selected repeat markers are moved according to the current rhythmic grid value.

Moving repeat markers graphically

You can move repeat markers graphically, without changing the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the repeat markers you want to move.

2. Move the repeat markers in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The graphical positions of the selected repeat markers are changed.

TIP

Start offset in the **Repeat Markers** group of the Properties panel is activated automatically when you move repeat markers.

- **Start offset X** moves repeat markers horizontally.
- **Start offset Y** moves repeat markers vertically.

You can also use this property to move repeat markers by changing the values in the value fields.

Deactivating the property resets the selected repeat markers to their default positions.

RELATED LINKS

[Positions of repeat markers](#) on page 835

Changing the placement of repeat markers relative to the staff

You can change the default placement of repeat markers relative to the staff in each layout independently, including showing them both above and below the staff.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the staff-placement of repeat markers.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Repeat Markers** section, choose one of the following options for **Default placement for repeat jumps and 'Fine'**:
 - **Above staff**
 - **Below staff**
 - **Above and below bottom staff**
 5. Click **Apply**, then **Close**.
-

RESULT

The placement of all repeat markers relative to the staff is changed in the selected layouts.

Including/Excluding repeats in playback after repeat jumps

By default, Dorico Pro plays back all playthroughs in all types of repeat structures. You can manually include/exclude repeats indicated by repeat markers, repeat endings, and repeat barlines in playback after individual repeat jumps independently of your project-wide setting.

NOTE

You can only include/exclude repeats after repeat jumps, such as *D.C. al Fine* and *D.S. al Coda*.

PROCEDURE

1. Select the repeat jumps after which you want to include/exclude repeats in playback. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Replay repeats** in the **Repeat Markers** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

Repeats are included in playback after the selected repeat jumps when the checkbox is activated, and excluded from playback when the checkbox is deactivated.

When the property is deactivated, repeat markers follow your project-wide setting for including repeats in playback after repeat jumps.

TIP

You can include/exclude all repeats after all repeat jumps project-wide on the **Repeats** page in **Play > Playback Options**.

RELATED LINKS

[Playback Options dialog](#) on page 405

Changing the number of playthroughs at repeat barlines

End repeat barlines typically indicate that the preceding music is played through twice. You can change the number of playthroughs for each end repeat barline individually.

PROCEDURE

1. Select the end repeat barlines whose number of playthroughs you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Play n times** in the **Time Signatures** group.
3. Change the value in the value field.

NOTE

The minimum value is 2.

RESULT

The number of times the music preceding the selected end repeat barlines is played through is changed. A marker is shown at system object positions that indicates the number of playthroughs set when this is 3 or more.

EXAMPLE



Final repeat barline with the default 2 playthroughs set



Final repeat barline with 4 playthroughs set and marker shown

RELATED LINKS

[Including/Excluding repeats in playback after repeat jumps](#) on page 837

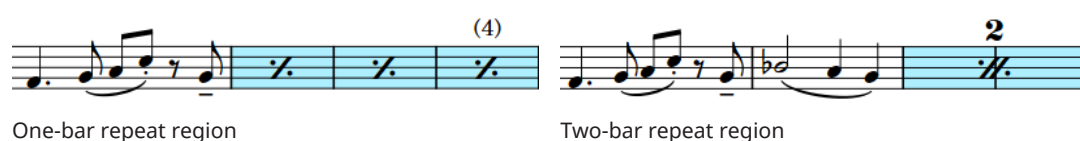
[Changing the total number of playthroughs in repeat endings](#) on page 823

[Repeats in playback](#) on page 436

Bar repeats

Bar repeats indicate that the musical material in preceding bars must be repeated exactly, but without notating that material again. Bar repeats can comprise groups of one, two, or four bars.

For example, a one-bar repeat indicates that the material in one bar is repeated, meaning every bar in the region repeats the same material. A four-bar repeat indicates that the material in the previous four bars is repeated.



This notational short-hand can make repetitive music easier to read, as performers must only read the repeated phrase once and then simply count how many times they repeat it. Bar repeats can also save horizontal space, as bar repeat symbols are usually narrower than the equivalent fully written-out bars.

In Dorico Pro, bar repeat regions are used to display bar repeats, meaning as many bar repeat symbols as necessary to fill the region are shown automatically.

By default, bar repeat regions are highlighted with a colored background, as this makes them easier to see. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are not printed, and you can hide and show them at any time.

You can also show adjacent bar repeat regions, for example, if you want to use a two-bar repeat in the first iteration of a phrase, and then a four-bar repeat to indicate the whole phrase is repeated. When two different bar repeat regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.



Phrase containing two adjacent bar repeat regions

RELATED LINKS

[Inputting bar repeats](#) on page 264

[Repeats popover](#) on page 254

[Bar repeat counts](#) on page 842

[Bar repeat grouping](#) on page 846

[Hiding/Showing bar repeat region highlights](#) on page 842

[Moving bar repeat regions](#) on page 841

[Lengthening/Shortening bar repeat regions](#) on page 841
[Hiding/Showing multi-bar rests](#) on page 865

Project-wide engraving options for bar repeats

You can find options controlling the project-wide design and appearance of bar repeats on the **Bar Repeats** page in **Engrave > Engraving Options**.

The options on the **Bar Repeats** page allow you to change the frequency of bar repeat counts, the appearance of bar repeat counts, and how bar repeats are grouped when a four-bar phrase contains a single bar followed by a three-bar repeat.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Changing the length of the repeated phrase in bar repeat regions

You can change the number of bars that make up the repeated phrase in individual bar repeats after you have input them, for example, if you want the region to repeat the previous two bars rather than the previous four bars.

NOTE

You cannot repeat more bars than exist before the bar repeat region. For example, if a bar repeat region follows the first notated bar in a flow, you cannot increase the number of bars in the repeated phrase.

PROCEDURE

1. Select the bar repeat regions whose phrase length you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, select one of the following options from the **No. bars** menu in the **Bar Repeat Regions** group:
 - **One bar**
 - **Two bars**
 - **Four bars**
-

RESULT

The number of bars that make up the repeated phrase in the selected bar repeat regions is changed. This is also reflected in playback.

TIP

- Any dynamics you add within bar repeat regions affect the playback of the repeated music.
 - You can also change the length of the repeated phrase by opening the repeats popover and changing the entry.
-

RELATED LINKS

[Bar repeat grouping](#) on page 846
[Inputting bar repeats](#) on page 264

[Repeats popover](#) on page 254
[Changing existing items](#) on page 280

Moving bar repeat regions

You can move bar repeat regions to different rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the bar repeat region you want to move.

NOTE

You can only move one bar repeat region at a time.

2. Move the bar repeat region to the right/left in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.
 - Click and drag it to the right/left.

RESULT

The selected bar repeat region is moved to bars to the right/left.

When you move bar repeat regions using the keyboard, they are moved to the right by the duration of their grouping, for example, two-bar repeats are moved two bars to the right. However, when you move them to the left, they are always moved to the next bar, regardless of their grouping.

When you move bar repeat regions using the mouse, they are always moved to the next/previous bar.

NOTE

Only one bar repeat region can exist at each rhythmic position. If any part of a selected bar repeat region collides with any part of another bar repeat region as part of its move, the other bar repeat region is shortened to accommodate the one you moved. In some cases, this means the grouping of the other bar repeat region is changed or it is deleted entirely.

You can undo this action and restore the previous length of the other bar repeat region.

Lengthening/Shortening bar repeat regions

You can lengthen/shorten bar repeat regions after they have been input.

PROCEDURE

1. In Write mode, select the bar repeat region you want to lengthen/shorten.

NOTE

You can only lengthen/shorten one bar repeat region at a time.

2. Lengthen/Shorten the bar repeat region in any of the following ways:
 - Press **Shift-Alt-Right Arrow** to lengthen the region by the duration of its grouping.
 - Press **Shift-Alt-Left Arrow** to shorten the region by the duration of its grouping.

NOTE

Key commands lengthen/shorten items by moving their end only.

- Click and drag the start/end handle to the next/previous bar.
-

RESULT

The bar repeat region is lengthened/shortened.

NOTE

- The minimum length of a bar repeat region is one bar. If you shorten regions with longer groupings, such as every four bars, the length of the region is halved until a one-bar repeat region remains.
- Only one bar repeat region can exist at each rhythmic position. If any part of a selected bar repeat region collides with any part of another bar repeat region when it is lengthened/shortened, the other bar repeat region is shortened to accommodate this. In some cases, this means the grouping of the other bar repeat region is changed or it is deleted entirely.

You can undo this action and restore the previous lengths of all bar repeat regions involved.

RELATED LINKS

[Bar repeats](#) on page 839

[Bar repeat grouping](#) on page 846

[Hiding/Showing multi-bar rests](#) on page 865

Hiding/Showing bar repeat region highlights

You can hide/show colored highlights for bar repeat regions at any time, for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

- Choose **View > Highlight Bar Repeat Regions**.
-

RESULT

Highlights on bar repeat regions are shown when a tick appears beside **Highlight Bar Repeat Regions** in the menu, and hidden when no tick appears.

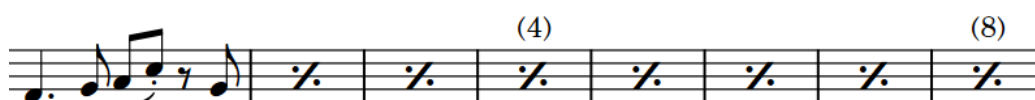
Bar repeat counts

Bar repeat counts are numbers shown at regular intervals either above or below bar repeats, to help players keep track of how many bars have passed. The intervals are usually based on typical musical phrases, such as every four or eight bars.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

Because bar repeats must start with a fully notated phrase of at least one bar, the bar repeat count starts from the notated bar rather than the first bar in the bar repeat region. For example, the third bar in a bar repeat region shows the count number 4, as that bar is the fourth time the original notated bar is played.



Bar repeat region with counts shown every four bars

In Dorico Pro, you can change the start count of each bar repeat region, how frequently bar repeat counts are shown, whether they are parenthesized, and customize the font style used for bar repeat counts.

NOTE

The **Bar Repeat Count** font style also affects the appearance of counts on slash regions.

RELATED LINKS

[Changing the bar repeat count appearance](#) on page 844

[Changing the bar repeat count frequency](#) on page 844

[Changing the bar repeat count font](#) on page 845

[Repeats popover](#) on page 254

[Inputting bar repeats](#) on page 264

[Hiding/Showing bar number ranges on multi-bar rests](#) on page 526

Changing the start count of bar repeats

You can change the number from which individual bar repeats start, for example, if you want to notate the first bar in a repeated phrase at the start of each system but show a continuous count across multiple bar repeats.

NOTE

- The start count applies to the first bar in the bar repeat, which is the notated bar. For example, changing the start count of a one-bar repeat region lasting three bars to 5, with bar repeat counts shown every four bars, causes the count at the end of the bar repeat region to show the number 8.
 - Bar repeat counts are only shown on one-bar repeat regions.
-

PROCEDURE

1. Select the one-bar repeat regions whose start count you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Count from** in the **Bar Repeat Regions** group.
 3. Change the value in the value field.
-

RESULT

The number and position of bar repeat counts on the selected bar repeats is changed. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the second bar in the bar repeat region instead of the third.

EXAMPLE



Three systems of musical notation in bass clef, 4/4 time. Each system contains a bar repeat symbol followed by three bars of music. The count '(4)' is placed above the end of each system.

Separate bar repeats on multiple systems in the same part layout repeats with the default count



Three systems of musical notation in bass clef, 4/4 time. Each system contains a bar repeat symbol followed by three bars of music. The counts '(4)', '(8)', and '(12)' are placed above the end of each system, indicating a continuous region.

Separate bar repeats on multiple systems in the same part layout with their counts changed to imply a continuous region

RELATED LINKS

[Bar repeat counts](#) on page 842

Changing the bar repeat count frequency

You can change how often counts are shown on individual one-bar repeat regions independently of your project-wide setting, for example, if you want to show the count after eight bars on a single bar repeat region.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

PROCEDURE

1. Select the one-bar repeats whose count frequency you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Count frequency** in the **Bar Repeat Regions** group.
 3. Change the value in the value field.
-

RESULT

The count frequency is changed for the selected bar repeat regions.

TIP

You can also change the default count frequency for all bar repeat regions project-wide on the **Bar Repeats** page in **Engrave > Engraving Options**.

RELATED LINKS

[Bar repeat counts](#) on page 842

[Project-wide engraving options for bar repeats](#) on page 840

[Changing the bar repeat count appearance](#) on page 844

[Hiding/Showing bar number ranges on multi-bar rests](#) on page 526

Changing the bar repeat count appearance

You can show individual bar repeat counts with or without parentheses, or not show any repeat count at all, independently of your project-wide setting.

NOTE

Bar repeat counts are only shown on one-bar repeat regions.

PROCEDURE

1. Select the one-bar repeats whose count appearance you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Count appearance** in the **Bar Repeat Regions** group.
 3. Select one of the following options from the menu:
 - **Parenthesized**
 - **No parentheses**
 - **Don't show**
-

RESULT

The appearance of counts on the selected bar repeat regions is changed.

TIP

You can also change the default appearance of all bar repeat counts project-wide on the **Bar Repeats** page in **Engrave > Engraving Options**.

RELATED LINKS

[Bar repeat counts](#) on page 842

[Project-wide engraving options for bar repeats](#) on page 840

[Changing the bar repeat count frequency](#) on page 844

Changing the bar repeat count font

You can change the font style used for all bar repeat and slash region counts project-wide in the **Edit Font Styles** dialog, for example, if you want counts to appear bold and italic.

PROCEDURE

1. In Engrave mode, choose **Engrave > Font Styles** to open the **Edit Font Styles** dialog.
 2. Select **Bar Repeat Count** from the **Font style** menu:
 3. Activate the following options, individually or together, to change the corresponding aspect of the font:
 - **Font family**
 - **Size**
 - **Style**
 - **Underlined**
 4. Click **OK** to save your changes and close the dialog.
-

RESULT

The font style used for counts on bar repeats and slash regions is changed project-wide.

RELATED LINKS

[Bar repeat counts](#) on page 842

[Edit Font Styles dialog](#) on page 364

Moving bar repeat counts

You can move individual bar repeat counts graphically without changing the rhythmic positions to which they apply, for example, to accommodate other items at the same position better.

NOTE

If you want to move bar repeat counts because you want to change the bar to which the number applies, you can change the start count instead.

PROCEDURE

1. In Engrave mode, select the bar repeat counts you want to move.
2. Move the selected bar repeat counts in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected bar repeat counts are moved to new graphical positions.

TIP

Number offset in the **Bar Repeat Regions** group of the Properties panel is activated automatically when you move bar repeat counts in the corresponding directions:

- **Number offset X** moves bar repeat counts horizontally.
- **Number offset Y** moves bar repeat counts vertically.

You can also use this property to move bar repeat counts graphically by changing the values in the value fields.

Deactivating the property resets the selected bar repeat counts to their default positions.

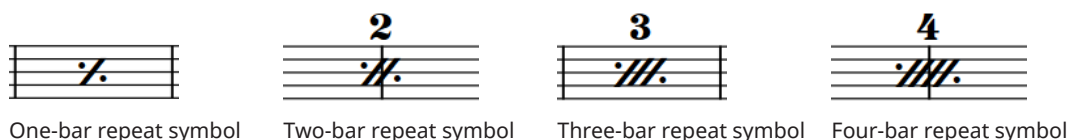
RELATED LINKS

[Changing the start count of bar repeats](#) on page 843

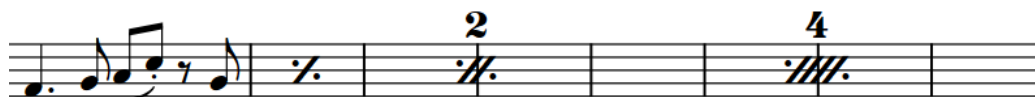
Bar repeat grouping

Bar repeat grouping allows you to condense longer bar repeat regions, which can be helpful in very regular music as it can simplify the overall phrasing.

The symbols shown on the staff are different for the different groupings, and two-bar and four-bar repeats also show a number to indicate how many bars are included in the group.



You can specify the grouping when inputting bar repeats, and you can change the grouping of bar repeats after they have been input. Depending on where the bar repeat region starts and ends relative to the written material, Dorico Pro automatically adjusts the displayed symbols to achieve an accurate result. For example, an eight-bar phrase containing a single notated bar followed by seven one-bar repeats grouped every four bars is automatically shown with a one-bar repeat, two-bar repeat, then four-bar repeat to fill the seven bars.



Eight-bar phrase with seven one-bar repeats grouped every four bars

TIP

You can also choose to show a three-bar repeat to complete a four-bar phrase on the **Bar Repeats** page in **Engrave > Engraving Options**; however, this is less commonly used than a combination of one-bar and two-bar repeats.

RELATED LINKS

- [Repeats popover](#) on page 254
- [Inputting bar repeats](#) on page 264

Changing bar repeat grouping

You can change how bar repeats are grouped after they have been input, for example, if you want to group a region of one-bar repeats every two bars.

PROCEDURE

1. Select the bar repeat regions whose grouping you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, select one of the following options from the **Group every** menu in the **Bar Repeat Regions** group:
 - **One bar**
 - **Two bars**
 - **Four bars**

NOTE

The options available depend on the minimum length of the selected bar repeat regions. For example, if you select bar repeat regions that last three bars, only **One bar** and **Two bars** are available in the menu.

RESULT

The grouping in the selected bar repeat regions is changed. Dorico Pro automatically calculates the clearest way to group the region. For example, an eight-bar phrase containing a single notated bar followed by seven one-bar repeats grouped every four bars is automatically shown with a one-bar repeat, two-bar repeat, then four-bar repeat to fill the seven bars.

RELATED LINKS

[Bar repeat grouping](#) on page 846

[Inputting bar repeats](#) on page 264

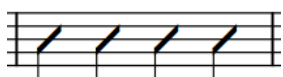
[Repeats popover](#) on page 254

Rhythm slashes

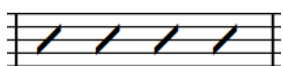
Rhythm slashes are diagonal lines positioned on staves that are used to indicate that performers should play something, but without specifying the exact rhythms and pitches. They are often accompanied by chord symbols to indicate the set of notes the performer should use.

There are two different types of rhythm slashes:

- Slashes with stems, which usually indicate the rhythm to be played, but not the pitches.



- Slashes without stems, which do not usually indicate either rhythms or pitches.



Slashes with stems are also known as “rhythmic notation”, and slashes without stems are also known as “slash notation”.

In Dorico Pro, you can present both types of rhythm slashes simultaneously by using a combination of slash regions and slash voices.

RELATED LINKS

[Slash voices](#) on page 1044

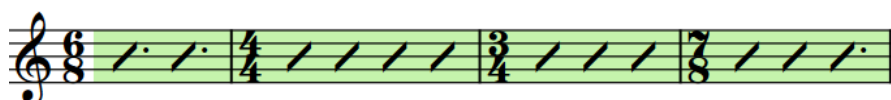
[Chord symbols](#) on page 564

[Inputting slash regions](#) on page 263

[Inputting notes into slash voices](#) on page 160

Slash regions

Slash regions automatically display rhythm slashes as appropriate for the meter throughout their duration, for example, they show four slashes per bar in 4/4 and two slashes per bar in 6/8. A single slash region can extend across multiple different meters.



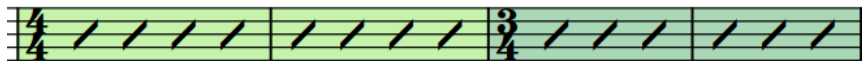
A single slash region covering multiple different meters

Multiple slash regions can exist at the same rhythmic position. When slash regions overlap, Dorico Pro treats this as a multiple-voice context and changes the staff position of slashes automatically.

By default, slash regions are highlighted with a colored background, as this makes them easier to see. As you zoom out, the highlights become more opaque, which is especially useful when viewing full score layouts in galley view. These highlights are not printed, and you can hide and show them at any time.

Each region has a handle at the start and end, which you can use to move and lengthen/shorten regions.

When two different slash regions are adjacent, they alternate highlight colors to ensure the separate regions are always identifiable.



Two adjacent slash regions with different highlight colors

You can use slash regions and slash voices in the same project and at the same rhythmic positions, for example, you can input a slash region where you do not want to be specific about the rhythm, then input notes in a slash voice for a single bar where you want to specify an exact rhythm.

RELATED LINKS

- [Slash voices](#) on page 1044
- [Project-wide engraving options for rhythm slashes](#) on page 850
- [Slash region counts](#) on page 855
- [Slashes in multiple-voice contexts](#) on page 851
- [Moving slash regions](#) on page 854
- [Lengthening/Shortening slash regions](#) on page 854

Hiding/Showing slash region highlights

You can hide/show the colored highlights for slash regions at any time, for example, if you want to show the highlights when inputting music but hide them when engraving.

PROCEDURE

- Choose **View > Highlight Slash Regions**.

RESULT

Highlights on slash regions are shown when a tick appears beside **Highlight Slash Regions** in the menu, and hidden when no tick appears.

RELATED LINKS

- [Slash voices](#) on page 1044

Project-wide engraving options for rhythm slashes

You can find options controlling the project-wide design and appearance of rhythm slashes in the **Rhythmic slashes** section of the **Notes** page in **Engrave > Engraving Options**. These options affect both slash voices and slash regions.

The options in the **Rhythmic slashes** section of the **Notes** page allow you to change the design of slashes, both with and without stems, whether slashes are shown with rhythm dots in compound time signatures, and the frequency, appearance, and position of slash region counts. For example, you can choose to show slash region bar counts on every bar.

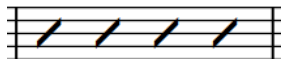
The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

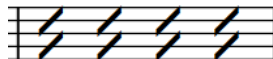
- [Engraving Options dialog](#) on page 299

Slashes in multiple-voice contexts

Multiple slash regions and slash voices can exist at the same rhythmic positions. In multiple-voice contexts for slash voices and when slash regions overlap, Dorico Pro automatically changes their staff position and offset to accommodate all slashes as legibly as possible.



Single slash region



Two slash regions, one up-stem and one down-stem

You can set default per-flow settings for the position and offset of slashes relative to other slashes at the same rhythmic positions on the **Voices** page in **Write > Notation Options**.

NOTE

These options affect all rhythm slashes, including notes in slash voices as well as slash regions.

You can also control the positions of rhythm slashes relative to each other manually by changing their stem/voice direction and by changing their staff position.

RELATED LINKS

[Note positions in multiple-voice contexts](#) on page 1039

[Changing the voice of existing notes](#) on page 287

[Changing the staff position of rhythm slashes](#) on page 852

Changing the voice direction of slash regions

You can change the voice direction of slash regions individually. When multiple slash regions overlap, this affects their stem directions.

PROCEDURE

1. Select any part of each slash region whose voice direction you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Voice direction** in the **Slash Regions** group.
 3. Choose one of the following options:
 - **Up**
 - **Down**
-

RESULT

The voice direction, and therefore stem direction, of the selected slash regions is changed.

NOTE

This only affects the direction of stems in slash regions on the middle line of the staff and when multiple slash regions exist at the same rhythmic position. For example, if you change the voice direction of a slash region on the bottom line of the staff to **Down**, its stem direction does not change if it does not overlap with another slash region.

RELATED LINKS

[Stem direction](#) on page 943

Changing the staff position of rhythm slashes

You can change the staff position of rhythm slashes in both slash voices and slash regions, for example, to accommodate other notes at the same rhythmic positions better. By default, rhythm slashes are positioned on the middle line of the staff.

PROCEDURE

1. Select the rhythm slashes whose staff position you want to change. You can do this in Write mode and Engrave mode.
 - For notes in slash voices, you must select every note whose staff position you want to change.
 - For slash regions, you can select any part of each region whose staff position you want to change.
2. In the Properties panel, activate **Slash pos.** in the corresponding group for the type of rhythm slash whose staff position you want to change:
 - **Notes and Rests** for notes in slash voices
 - **Slash Regions** for slash regions
3. Change the value in the value field.

RESULT

The staff position of the selected rhythm slashes is changed. For example, changing the **Slash pos.** value to 4 positions rhythm slashes on the top line of a five-line staff, while -4 positions them on the bottom line.

If any of the rhythm slashes have stems, their stem direction is adjusted automatically.

RELATED LINKS

[Stem direction](#) on page 943

Hiding/Showing notes alongside slash regions

You can hide/show notes at the same rhythmic positions as slash regions, for example, if you want to input notes to hear in playback but only want to show the slash region, or if you want to notate suggested notes in addition to the slash region.

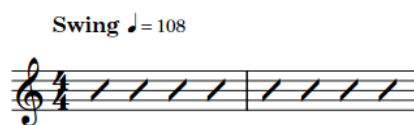
PROCEDURE

1. Select any part of each slash region alongside which you want to hide/show other notes. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Show other voices** in the **Slash Regions** group.

RESULT

All notes in other voices present alongside the selected slash regions are shown when **Show other voices** is activated, and hidden when it is deactivated.

EXAMPLE



Notes hidden alongside a slash region



Notes shown alongside a slash region

RELATED LINKS

[Slash regions](#) on page 849

[Slash voices](#) on page 1044

[Hiding/Showing slash region highlights](#) on page 850

Hiding/Showing padding rests before/after slash regions

You can hide/show padding rests before/after slash regions that start partway through bars individually, for example, if you have other notes at those positions and the rests would be misleading.

By default, Dorico Pro automatically shows implicit padding rests around slash regions that start/end partway through bars, so that the full duration of each bar is clear.

PROCEDURE

1. Select any part of each slash region whose padding rests you want to hide/show.
2. In the Properties panel, activate the following properties, individually or together, in the **Slash Regions** group:
 - **Hide rests before start**
 - **Hide rests after end**

RESULT

Padding rests are hidden on the corresponding side of the selected slash regions. For example, activating both properties hides padding rests both before and after the selected slash regions.

RELATED LINKS

[Implicit vs. explicit rests](#) on page 860

Splitting slash regions

You can split slash regions after they have been input, for example, if you later want to input more precise notation in the middle of an existing slash region.

PROCEDURE

1. In Write mode, select a slash in each slash region you want to split, immediately to the right of where you want to split them.
2. Press **U**.

RESULT

The slash regions are split immediately to the left of the selected slashes. Each part now has its own start/end handles, which you can use to lengthen/shorten each part independently.

RELATED LINKS

[Changing the slash region count frequency](#) on page 856

[Lengthening/Shortening slash regions](#) on page 854

Moving slash regions

You can move slash regions to different rhythmic positions after they have been input. Because multiple slash regions can exist at the same rhythmic position, you can also move slash regions so they overlap with other slash regions.

PROCEDURE

1. In Write mode, select any part of each slash region you want to move.
2. Move the selected slash regions to the right/left in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

NOTE

You cannot move slash regions rhythmically with the mouse.

RESULT

The selected slash regions are moved to the right/left according to the current rhythmic grid value. If any part of them overlap rhythmic positions with other slash regions, the staff positions of slashes are automatically adjusted to accommodate multiple slash regions at the same positions.

RELATED LINKS

[Slashes in multiple-voice contexts](#) on page 851

[Changing the voice direction of slash regions](#) on page 851

Lengthening/Shortening slash regions

You can lengthen/shorten slash regions after they have been input. Because multiple slash regions can exist at the same rhythmic position, you can also lengthen/shorten slash regions so they overlap with other slash regions.

PROCEDURE

1. In Write mode, select any part of each slash region you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one slash region at a time.

2. Lengthen/Shorten the selected slash regions in any of the following ways:
 - To lengthen them by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
 - To shorten them by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.

NOTE

Key commands lengthen/shorten items by moving their end only.

- Click and drag the circular handle at the start/end to the right/left.
-

RESULT

The selected slash regions are lengthened/shortened according to the current rhythmic grid value. If any part of them overlap rhythmic positions with other slash regions, the staff positions of slashes are automatically adjusted to accommodate multiple slash regions at the same positions.

RELATED LINKS

[Slashes in multiple-voice contexts](#) on page 851

[Changing the voice direction of slash regions](#) on page 851

Hiding/Showing stems in slash regions

You can hide/show stems on slashes in individual slash regions. By default, slashes in slash regions are shown without stems.

PROCEDURE

1. Select any part of each slash region in which you want to hide/show stems. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Slash type** in the **Slash Regions** group.
3. Choose one of the following options:
 - **With stems**
 - **Without stems**

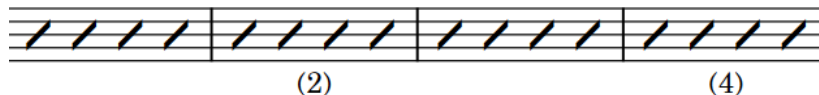
RESULT

Stems are hidden in the selected slash regions when you choose **Without stems**, and shown when you choose **With stems**.

Slash region counts

Slash region counts are numbers shown at regular intervals, either above or below slash regions, to help players keep track of how many bars have passed. The intervals are usually based on typical musical phrases, such as every four or eight bars.

By default, slash region counts are shown every four bars and are placed below the staff.



Slash region with counts shown every two bars

In Dorico Pro, you can change the start count of each slash region, how frequently slash region counts are shown, their staff-relative placement, whether they are parenthesized, and customize the font style used for slash region counts.

NOTE

Slash region counts use the same font style as bar repeat counts.

RELATED LINKS

[Slash regions](#) on page 849

[Project-wide engraving options for rhythm slashes](#) on page 850

[Changing the slash region count appearance](#) on page 857

[Changing the bar repeat count font](#) on page 845

Changing the start count of slash regions

You can change the number from which individual slash region counts start, for example, if you want to input more precise notation between two slash regions but want the count to appear to continue across the regions.

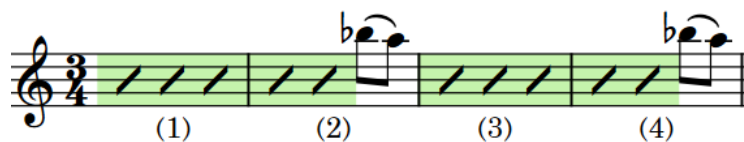
PROCEDURE

1. Select any part of each slash region whose start count you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Count from** in the **Slash Regions** group.
3. Change the value in the value field.

RESULT

The number and position of counts on the selected slash regions is changed. For example, changing the start count from 1 to 2, with counts shown every four bars, causes the count to appear on the third bar in the slash region instead of the fourth.

EXAMPLE



Two separate slash regions, where the start count on the second region has been changed so it appears to continue on from the first region.

Changing the slash region count frequency

You can change how frequently counts are shown on slash regions independently of your project-wide setting, for example, if you want to show the count after eight bars on a single slash region. By default, slash region counts are shown every four bars.

PROCEDURE

1. Select any part of each slash region whose count frequency you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Count frequency** in the **Slash Regions** group.
3. Change the value in the value field.

RESULT

The count frequency is changed for the selected slash regions.

TIP

You can also change the default count frequency for all slash regions project-wide in the **Rhythmic slashes** section of the **Notes** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for rhythm slashes](#) on page 850

[Splitting slash regions](#) on page 853

Changing the slash region count appearance

You can show individual slash region counts with or without parentheses, or not show any count at all, independently of your project-wide setting.

PROCEDURE

1. Select any part of each slash region whose count appearance you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Count appearance** in the **Slash Regions** group.
3. Select one of the following options from the menu:
 - **Parenthesized**
 - **No parentheses**
 - **Don't show**

RESULT

The appearance of counts on the selected slash regions is changed.

TIP

You can also change the default appearance of all slash region counts project-wide in the **Rhythmic slashes** section of the **Notes** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for rhythm slashes](#) on page 850

Moving slash region counts

You can move individual slash region counts graphically without changing the rhythmic positions to which they apply, for example, to accommodate other items at the same position better.

NOTE

If you want to move slash region counts because you want to change the bar to which the number applies, you can change the start count instead.

PROCEDURE

1. In Engrave mode, select the slash region counts you want to move.
2. Move the selected slash region counts in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The selected slash region counts are moved to new graphical positions.

TIP

Count offset in the **Slash Regions** group of the Properties panel is activated automatically when you move slash region counts in the corresponding directions:

- **Count offset X** moves slash region counts horizontally.
- **Count offset Y** moves slash region counts vertically.

You can also use this property to move slash region counts graphically by changing the values in the value fields.

Deactivating the property resets the selected slash region counts to their default positions.

RELATED LINKS

[Changing the start count of slash regions](#) on page 856

Changing the placement of slash region counts relative to the staff

You can change whether counts on individual slash regions appear above or below the staff, independently of your project-wide setting.

NOTE

Changing the placement of slash region counts relative to the staff affects all counts on the region. You cannot change the placement of a single count independently of other counts on the same slash region.

PROCEDURE

1. Select any part of each slash region whose count staff-relative placement you want to change.
 2. In the Properties panel, activate **Count position** in the **Slash Regions** group.
 3. Choose one of the following options:
 - **Above**
 - **Below**
-

RESULT

The placement of all counts relative to the staff on the selected slash regions is changed.

TIP

You can change the default placement of all slash region counts project-wide in the **Rhythmic slashes** section of the **Notes** page in **Engrave > Engraving Options**.

RELATED LINKS









[Project-wide engraving options for rhythm slashes](#) on page 850

Rests

Rests are markings with a rhythmic value that indicate no note is played for that duration. Each note duration has an equivalent rest, for example, a quarter note rest is different to a sixteenth note rest.

All notes and rests within a bar must add up to the duration of the bar, according to the prevailing time signature.

The table shows some examples of notes and the rests with the equivalent rhythmic value.

Duration	Note	Rest
Half		
Quarter		
Eighth		
Sixteenth		

During note input, Dorico Pro automatically fills the gaps between notes with implicit rests of the appropriate duration. Therefore, it is usually not necessary to input rests in Dorico Pro.

RELATED LINKS

[Implicit vs. explicit rests](#) on page 860

[Inputting rests](#) on page 164

[Deleting rests](#) on page 863

General placement conventions for rests

Rests are positioned at the rhythmic position at the start of their duration, and not in the middle of beats as this can cause confusion over when the rest begins and ends. Rests are aligned with other items at the same rhythmic position.

The only exception is whole bar rests, which are positioned at the visual center of bars. This way, they are clearly distinguishable from half note and whole note rests that are followed by notes in the same bar.

Rests stay within the staff wherever possible. They do not move above or below the staff when the notes around them are very high or very low.

However, on staves with multiple voices, rests are placed higher on the staff, or above the staff, for up-stem voices and lower on the staff, or below the staff, for down-stem voices.



Example rest positions in a multiple-voice context

Rests in multiple voices must not overlap. You can consolidate rests so that only one is shown when multiple voices have a rest of the same duration at the same rhythmic position.

The precise vertical positioning of rests is limited, as their detailed shapes require specific positions relative to staff lines and staff spaces.

RELATED LINKS

[Deleting rests](#) on page 863

[Turning explicit rests into implicit rests](#) on page 862

Implicit vs. explicit rests

Implicit rests are automatically shown around the notes you input, and their duration automatically follows the time signature and their position in the bar. Explicit rests are rests that are explicitly entered during note input by forcing their duration, or rests that were imported from a MusicXML file.

Dorico Pro notates implicit rests according to the current time signature, for example, different implicit rests are shown in 6/8 compared to 4/4. This also applies if you later change the time signature for existing notes and rests.

Therefore, it is not necessary to input rests in Dorico Pro, as implicit rests are automatically shown around the notes that you input. You can turn implicit rests into explicit rests by forcing their duration to be fixed.



A quarter note input at the fourth eighth note of the bar in a 6/8 time signature has a dotted quarter implicit rest at the start of the bar.



A quarter note input at the fourth eighth note of the bar in a 4/4 time signature has two implicit rests, a quarter and an eighth, at the start of the bar.

Explicit rests cannot be suppressed when using the **Starts voice** and **Ends voice** properties to hide rests before the first note in voices and after the last note in voices.

You can show rest colors to see which rests are implicit and which are explicit in your project.

RELATED LINKS

[Inputting rests](#) on page 164

[Forcing the duration of notes/rests](#) on page 158

[Turning explicit rests into implicit rests](#) on page 862

[Deleting rests](#) on page 863

[Showing rest colors](#) on page 863

Implicit rests in multiple-voice contexts

In Dorico Pro, implicit rests are shown automatically to fill in rhythmic positions around notes, including when there are multiple voices on the staff. However, in these contexts you might want more control over when and where rests are shown.

Usually, rests or notes are shown for whole bars when voices contain at least one note in the bar. This helps make the rhythmic position of every note in all voices in the bar immediately clear.

When there are multiple voices on a staff, implicit rests are shown in every bar in which there are notes of any duration in more than one voice. However, there might be circumstances in which you do not want to show rests either before the first note in a voice or after the last note in a voice when there are multiple voices on the staff. For example, it can be useful to hide rests when a voice is being used to show passing notes within a bar that otherwise contains a single melodic line.



A second voice used to notate passing notes

TIP

By default, Dorico Pro consolidates rests when multiple voices have rests of the same duration at the same rhythmic position.

You can show multiple rests at individual rhythmic positions by changing the vertical position of rests.

You can also change your project-wide settings for the consolidation of rests in multiple-voice contexts on the **Rests** page in **Notation Options**.

You can hide rests before the first note in voices and after the last note in voices individually by activating properties in the Properties panel. You can show rests that you have hidden by deactivating the corresponding property.



A phrase with multiple voices showing implicit rests. The same phrase without implicit rests.

You can choose when rests are shown in a number of different multiple-voice contexts project-wide on the **Rests** page in **Write > Notation Options**.

You can also delete rests from selected passages.

RELATED LINKS

[Per-flow notation options for rests](#) on page 862

[Moving rests vertically](#) on page 866

[Deleting rests](#) on page 863

Turning explicit rests into implicit rests

Implicit rests and explicit rests behave differently. For example, you can hide implicit rests using the Properties panel, but you cannot hide explicit rests or rests with forced durations.

NOTE

You can only hide implicit rests using **Starts voice** and **Ends voice** in the **Notes and Rests** group of the Properties panel.

PROCEDURE

1. In Write mode, select the explicit rests you want to turn into implicit rests.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected explicit rests are now implicit rests. You can check this by showing rest colors.

RELATED LINKS

[Showing rest colors](#) on page 863

[Deleting rests](#) on page 863

Per-flow notation options for rests

You can find per-flow options controlling how rests are positioned and notated, and when rests are shown, on the **Rests** page in **Notation Options**.

For example, you can change whether bar rests are shown in additional voices, when dotted rests are permitted, and the default positions of rests in different contexts.

You can open **Notation Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write > Notation Options** in Write mode or **Setup > Notation Options** in Setup mode.
- Click **Notation Options** in the **Flows** panel in Setup mode.



You can then click **Rests** in the page list.

Project-wide engraving options for rests

You can find options for the project-wide appearance of rests on the **Rests** page in **Engrave > Engraving Options**.

The options on the **Rests** page allow you to change the style, appearance, width, and precise position of rests, including multi-bar rests during flows and multi-bar rests at the end of flows. For example, the default appearance of multi-bar rests at the end of flows is to show “tacet al fine”, but you can show the total bar count instead.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Showing rest colors

You can show implicit rests and explicit rests in different colors.

PROCEDURE

- Choose **View > Note and Rest Colors > Implicit Rests**.

RESULT

Rest colors are shown when a tick appears beside **Implicit Rests** in the menu, and hidden when no tick appears.

When rest colors are shown, rests in your project appear gray if they are implicit, and black if they are explicit. For example, this can be useful to help diagnose why rests do not disappear when you activate **Starts voice** and **Ends voice**, as these properties only hide implicit rests.

Once you have identified rests as explicit rests, you can delete them. The implicit rests that replace them now respect the **Starts voice** and **Ends voice** properties.

EXAMPLE



Rests colored black, as they appear without implicit rests shown



Rests colored gray to indicate implicit rests

Deleting rests

You can delete both implicit rests and explicit rests, for example, if you want to hide rests before/after notes in another voice used to show passing notes.

NOTE

- If you want to delete rests because multiple rests of the same duration appear at the same position in multiple-voice contexts, you can choose to consolidate these rests in the **Rest positioning** section of the **Rests** page in **Notation Options**.
- You cannot delete rests from unpitched percussion instruments.

PROCEDURE

1. In Write mode, select the rests you want to delete.

TIP

You can select rests individually, or make a larger selection that contains the rests you want to delete.

2. Choose **Edit > Remove Rests**.

RESULT

All rests in the selection are deleted. This is done by automatically activating **Starts voice** and **Ends voice** in the **Notes and Rests** group of the Properties panel so that no rests are shown in the selected regions.

TIP

You can undo deleting rests immediately.

You can also show rests again later by selecting the notes or rests immediately to the right/left of deleted rests and deactivating the corresponding **Starts voice** or **Ends voice** properties in the **Notes and Rests** group of the Properties panel.

RELATED LINKS

[Rests](#) on page 859

[Per-flow notation options for rests](#) on page 862

[Implicit vs. explicit rests](#) on page 860

[Large selections](#) on page 274

[Implicit rests in multiple-voice contexts](#) on page 861

Hiding/Showing bar rests in empty bars

You can hide/show bar rests in empty bars in each layout in your project independently of other layouts. For example, you can hide bar rests in full score layouts but show bar rests in part layouts.

Bar rests are usually shown in empty bars in music to indicate to performers that they have nothing to play. However, there are contexts in which it is preferable to hide bar rests in empty bars, and instead leave the bar completely empty.

For example, hiding bar rests in empty bars is sometimes the preferred visual aesthetic in large scores, so that it is quicker to identify bars containing music. You can also hide bar rests in layouts where you want to include other instructions, such as verbal indications for performers to do something other than play notated pitches.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show bar rests in empty bars.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Players** in the page list.
 4. In the **Bar Rests and Multi-bar Rests** section, activate/deactivate **Show bar rests in empty bars**.
 5. Click **Apply**, then **Close**.
-

RESULT

All bar rests in empty bars in the selected layouts are shown when the checkbox is activated, and hidden when the checkbox is deactivated.

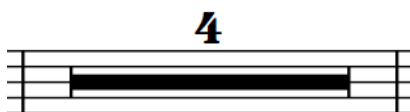
RELATED LINKS

[Hiding/Showing multi-bar rests](#) on page 865

Multi-bar rests

Multi-bar rests group two or more consecutive empty bars together into a single unit, commonly shown with a thick horizontal line positioned on the middle staff line, known as an “H-bar”. They

can reduce the horizontal space required by multiple empty bars and can make it easier for players to find their place in the music.



A multi-bar rest representing four empty bars

NOTE

Multi-bar rests are split by items positioned within their range, such as system text, rehearsal marks, and holds and pauses. This includes when the items are invisible, except for hidden tempo marks, such as those input in the **Time** track in Play mode. However, if items are positioned at the start of the first bar in a multi-bar rest, that bar remains part of the subsequent multi-bar rest.

You can hide/show multi-bar rests in each layout independently in Dorico Pro, and you can hide/show bar number ranges below them.

By default, the multi-bar rest bar counts only appear once between the staves of grand-staff instruments.

You can find options controlling the project-wide appearance, design, width, and content of multi-bar rests on the **Rests** page in **Engrave > Engraving Options**.

RELATED LINKS

[Hiding/Showing bar number ranges on multi-bar rests](#) on page 526

[Time track](#) on page 421

Hiding/Showing multi-bar rests

You can hide/show multi-bar rests in each layout in your project independently of other layouts, and choose whether bar repeats are consolidated into multi-bar rests. For example, you can hide multi-bar rests in full score layouts but show multi-bar rests in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show multi-bar rests. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Bar Rests and Multi-bar rests** section, choose one of the following options for **Consolidate**:
 - **None**
 - **Multi-bar Rests**
 - **Multi-bar Rests and Bar Repeats**
5. Click **Apply**, then **Close**.

RESULT

- When you choose **None**, no multi-bar rests are shown in the selected layouts. Each empty bar is shown separately.

- When you choose **Multi-bar Rests**, any adjacent empty bars are consolidated into multi-bar rests in the selected layouts. However, bar repeats prevent the consolidation of multi-bar rests, even if there are no other notes in those bars.
- When you choose **Multi-bar Rests and Bar Repeats**, any adjacent empty bars or bars that only contain bar repeats are consolidated into multi-bar rests in the selected layouts. Multi-bar rest counts are also shown above consolidated bar repeats.

RELATED LINKS

[Bar repeats](#) on page 839

[Multi-bar rests](#) on page 864

[Hiding/Showing bar number ranges on multi-bar rests](#) on page 526

Hiding/Showing tacet al fine on multi-bar rests at the end of flows

You can change the appearance of multi-bar rests that extend to the end of flows in all layouts project-wide. By default, multi-bar rests that extend to the end of flows show “tacet al fine” above the staff instead of the total bar count.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Rests** in the page list.
3. In the **Multi-bar Rests** section, choose one of the following options for **Multi-bar rests that extend to the end of the flow**:
 - **Show tacet al fine**
 - **Show bar count**
4. Optional: Change the value for **Minimum number of bars’ rest at the end of flow to show ‘tacet al fine’**.
5. Click **Apply**, then **Close**.

RESULT

The appearance of all multi-bar rests at the end of flows is changed project-wide. Changing the value for **Minimum number of bars’ rest at the end of flow to show ‘tacet al fine’** changes when “tacet al fine” is shown to only multi-bar rests containing the set number of bars or more.

Moving rests vertically

You can change the vertical position of rests individually, for example, if you want to change the staff line from which a whole bar rest hangs, or you want to show rests for all voices at a particular rhythmic position.

Moving rests vertically shows multiple rests at that rhythmic position if more than one voice on the staff has a rest of the same duration. By default, Dorico Pro consolidates rests in multiple-voice contexts and automatically positions rests in multiple-voice contexts to avoid collisions.

NOTE

You cannot change the vertical position of rests when using the mouse.

PROCEDURE

1. Select the rests whose vertical positions you want to change, or rests at the rhythmic positions where you want to see rests for every voice. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Rest pos.** in the **Notes and Rests** group.

3. Change the value in the value field.

RESULT

Increasing the value moves rests upwards, decreasing the value moves rests downwards. Position 0 is the middle line of the staff.

If there are multiple voices on the staff with rests of the same duration, multiple rests are now shown.

TIP

- Deactivating **Rest pos.** returns the selected rests to their default positions.
 - You can choose to show all rests in every voice or only show one rest for all voices in the **Rest positioning** section of the **Rests** page in **Notation Options**.
 - You can change the horizontal position of rests, and the spacing around them, in Engrave mode when **Note Spacing** is activated, in the same ways as changing the position of notes.
-

RELATED LINKS

[Notation Options dialog](#) on page 139

[Note spacing](#) on page 381

[Adjusting note spacing at individual rhythmic positions](#) on page 388

[Adjusting the spacing of individual notes/items independently of their rhythmic positions](#) on page 389

Slurs

Slurs are tapered, curved lines that join notes to indicate legato articulation and phrasing.

Depending on the context and the instrument to which they apply, slurs can have additional meanings to simply marking phrases. For example, for wind players, a slur indicates that all the notes in the phrase are played in the same breath and without re-tonguing or re-articulating any notes. For string players, a slur indicates that all the notes in the phrase are played legato and under one bow. For singers, slurs indicate that more than one note is sung to the same syllable.

Slurs can be placed both above and below the staff, depending on the stem directions of the notes to which they apply. In order to keep slur endpoints close to notes, slurs are placed outside articulations on notes in the middle of slurs, but between notes and larger articulations on the first/last notes of slurs. For example, accents and stress marks are placed outside the ends of slurs but staccato and tenuto marks are placed inside the ends of slurs by default.



Slurs both above and below the staff, including a cross-staff slur

You can change the placement of accent, marcato, stress, and unstress articulations relative to slurs in the **Slurs** section of the **Articulations** page in **Engrave > Engraving Options**.

NOTE

Slurs must not be confused with ties, which look superficially similar, but instead join notes of the same pitch to indicate that they are played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.

RELATED LINKS

[Inputting slurs](#) on page 265

[Ties](#) on page 966

[Project-wide engraving options for articulations](#) on page 499

General placement conventions for slurs

The placement of slurs relative to the staff, and therefore their curvature direction, depends on the stem direction of the notes within the slur. Depending on whether slurs are placed on the notehead or stem side of notes, their endpoint positions are different.

Slur direction

A slur on a single staff always curves upwards and is placed above the notes, unless all of the notes under the slur are up-stem, in which case it curves downwards and is placed below the notes. If a slur applies to a mixture of up-stem and down-stem notes, it is placed above the staff and curves upwards.



Examples of the slur direction changing according to the stem direction

You can set your preference for whether slurs follow the stem direction, or always appear above notes, on the **Slurs** page in **Engrave > Engraving Options**.

NOTE

In jazz scores, slurs are sometimes treated as an articulation and so positioning all slurs above the staff is preferred.

Stem-side slurs between unbeamed notes

In Dorico Pro, slurs appear between the stems of unbeamed notes when placed on their stem side, and the default setting is for them to attach a short distance from the end of the stem.



You can change where slurs attach to stems by adjusting **Vertical offset from end of stem** in the **Endpoint Positioning** section of the **Slurs** page in **Engrave > Engraving Options**.

RELATED LINKS

[Slur endpoint position relative to other items](#) on page 872

Slur position relative to tie chains

There are different conventions for the position of slurs relative to tie chains in music for modern use and historical editions.

Modern practice is for slurs to start on the first note in tie chains, and end on the last note in tie chains. This makes the full length of the phrase visually clear to the performer, which helps their performance, and is the default in Dorico Pro.



Slur ending on the last note in a tie chain



Slur starting from the first note in a tie chain

However, in historical editions, slurs might end on the first note in a tie chain, and start on the last note in a tie chain. Both of these changes save vertical space, as shorter slurs do not extend as far above or below a staff.



Slur ending on the first note in a tie chain



Slur starting on the last note in a tie chain

You can choose whether all slurs start on the first/last note in tie chains, and end on the first/last note in tie chains, on the **Slurs** page in **Engrave > Engraving Options**. There are different options for slurs between normal notes and slurs starting on grace notes.

Changing the position of slurs relative to tie chains

You can change the position of individual slurs relative to tie chains, including slurs starting on grace notes, for example, to save vertical space.

PROCEDURE

1. Select the slurs whose position relative to tie chains you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:
 - **Start pos. in tie chain**
 - **End pos. in tie chain**
3. Choose one of the following options for each property:
 - **First note**
 - **Last note**

RESULT

The position of the selected slurs relative to tie chains is changed.

TIP

You can change the default position of all slurs relative to tie chains project-wide on the **Slurs** page in **Engrave > Engraving Options**. There are different options for slurs between normal notes and slurs starting on grace notes.

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

Slur placement relative to grace notes

There are specific placement rules that affect slurs when they start from a grace note and end on a normal note immediately following the grace note.

These rules are:

- Slurs connect noteheads rather than stems.
- Slurs are scaled to match the proportions of grace notes.
- Slurs must not obscure ledger lines.
- Slurs are placed above notes if they would collide with the accidental of a standard note when placed below the notes.

You can adjust the values for the different parameters of the special placement rules. For example, you can change the vertical and horizontal offsets for the right-hand end of a grace note slur relative to the standard, full-sized notehead to which it is attached in the **Grace Notes** section of the **Slurs** page in **Engrave > Engraving Options**.

NOTE

These rules do not apply when slurs attach to a standard note at any rhythmic position beyond the note immediately following the grace note.

Due to the general placement conventions of grace notes, slurs in Dorico Pro appear below grace notes and curve downwards by default. Slurs starting from grace notes only appear above notes and curve upwards in up-stem voices in multiple-voice contexts.



Automatic changes to the curvature direction of slurs on grace notes in multiple-voice contexts

You can change the automatic placement of grace note slurs by changing the stem direction of a grace note, changing the direction of a slur, and using the slur handles in Engrave mode to adjust the position of a slur in finer detail.

RELATED LINKS

[Changing the curvature direction of slurs](#) on page 888

[Changing the stem direction of notes](#) on page 946

[General placement conventions for grace notes](#) on page 658

[Slurs in Engrave mode](#) on page 879

[Moving slurs and slur handles graphically](#) on page 881

Slur position relative to staff lines

Slur endpoints must not touch staff lines, and the high point of the arcs of slurs should not stop on staff lines.

This is the convention because a slur whose arc peaks on a staff line can create the appearance of a triangular wedge between the staff line and the curve of the slur. If a slur peaks on a staff line, you can adjust its height so that it peaks either above/below the staff.

NOTE

Although Dorico Pro automatically ensures slur endpoints do not touch staff lines, manual adjustments might be necessary to position the arcs of slurs correctly.

You can set a value for the minimum distance between slur endpoints and staff lines in the **Avoiding Collisions** section of the **Slurs** page in **Engrave > Engraving Options**. The default position of slur endpoints relative to staff lines is 1/4 space above/below, to ensure the start/end points do not touch the staff line.

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

[Changing the height of slurs](#) on page 885

Slur endpoint position relative to other items

In order to avoid collisions, the default positions of slur endpoints vary depending on whether slurs are placed on the notehead side or stem side of notes, their position relative to staff lines, and whether articulations, ties, and other slurs exist at the same rhythmic position.

Slur endpoints relative to noteheads and stems

The default position of slur endpoints relative to noteheads is 1/2 space above a notehead in a space on the staff, and 1/4 space above a notehead on a line on the staff.

You can change the vertical and horizontal offsets for the endpoints of slurs in the **Endpoint Positioning** section of the **Slurs** page in **Engraving Options**. However, you might also need to reduce the value for **Minimum gap inside slur curvature to avoid collisions** in the **Avoiding Collisions** section, as endpoints cannot be closer to noteheads than this value.

NOTE

This value affects all slur collisions in your project.

Slur endpoints relative to articulations

By default, articulations of force and stress are placed outside slur endpoints, and articulations of duration are placed inside slur endpoints, which automatically raises the endpoints.

You can position slur endpoints closer to articulations by reducing the value for **Minimum gap inside slur curvature to avoid collisions** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

NOTE

Changing this value affects the position of slur endpoints project-wide. You may find it more appropriate to move slur endpoints relative to articulations individually in Engrave mode.

Slur endpoints relative to ties and other slurs

The default position of slur endpoints is 1/4 space above an existing slur that starts/ends on the same note.

You can change this by increasing/decreasing the value for **Minimum vertical gap between two slurs starting or ending on the same note** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

To make slurs appear closer to tied notes, you can adjust the values for slur endpoint position relative to noteheads.

RELATED LINKS

[Slurs in Engrave mode](#) on page 879

[Moving slurs and slur handles graphically](#) on page 881

[Articulations](#) on page 497

Project-wide engraving options for slurs

You can find options for the project-wide appearance, position, and placement of slurs on the **Slurs** page in **Engrave > Engraving Options**.

The options on the **Slurs** page allow you to change the direction, style, height, and thickness of slurs. You can also set precise values for the positions of slurs relative to noteheads, stems, grace notes, and ties, and change the collision avoidance behavior of cross-staff slurs.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Cross-staff and cross-voice slurs

Cross-staff slurs start on one staff and end on another staff, and cross-voice slurs start in one voice and end in another voice.

Dorico Pro positions cross-staff and cross-voice slurs in the same way as it positions standard slurs, so their appearance might be the same as standard slurs. You can move and lengthen/shorten cross-staff and cross-voice slurs in the same ways as standard slurs; however, they do not behave in the same way.

For example, you cannot move cross-voice slurs to notes on the same staff in other voices, and you cannot lengthen cross-voice slurs to notes on the same staff in other voices. You also cannot shorten cross-voice slurs if noteheads under the slur are not in one of the voices in which the slur started/ended.

You can only move and lengthen/shorten cross-staff slurs to notes on the same staff as the corresponding endpoint. For example, if a cross-staff slur covers a phrase that starts on the bottom staff and ends on the upper staff, you can only shorten the cross-staff slur to the first note on the upper staff, you cannot shorten it to any notes on the bottom staff.

The different voices can be on the same staff, or on different staves.

RELATED LINKS

[Lengthening/Shortening slurs](#) on page 876

[Moving slurs rhythmically](#) on page 875

Inputting cross-staff and cross-voice slurs

You can input cross-staff and cross-voice slurs. For example, musical phrases in grand staff instruments, such as piano and harp, can span both staves and may need slurs to join them.

PROCEDURE

1. In Write mode, select the note from which you want the slur to start, in any voice or staff.
2. **Ctrl/Cmd**-click the note where you want the slur to end, in any voice and on any staff belonging to the same instrument as the note in step 1.

NOTE

Only select those two notes.

-
3. Press **S**.
-

RESULT

A cross-voice or cross-staff slur is input spanning the select notes. It is placed either above or below the notes, depending on the stem direction of the notes within the selection.

AFTER COMPLETING THIS TASK

You can change the curvature direction of individual slurs.

RELATED LINKS

[Changing the curvature direction of slurs](#) on page 888

Nested slurs

Nested slurs are two or more slurs used simultaneously, where the overarching slur shows the structure of the phrase and the inner slurs show the articulation within the phrase. They are also known as “slurs within slurs”.

Depending on the stem directions within the overarching outer slur and your settings on the **Slurs** page in **Engrave > Engraving Options**, inner slurs may appear on the opposite side of the staff to the outer slur.



A phrase with nested slurs

If you want to change the default distance between the endpoints of nested slurs, you can increase/decrease the project-wide value for **Minimum vertical gap between two slurs starting or ending on the same note** in the **Avoiding Collisions** section of the **Slurs** page in **Engraving Options**.

You can input nested slurs in the same ways as inputting standard slurs. By default, Dorico Pro makes automatic adjustments to their positioning to avoid collisions if you have not activated **Disable auto curve adjustment** in the **Slurs** group of the Properties panel in Engrave mode.

RELATED LINKS

[Enabling/Disabling slur collision avoidance](#) on page 892

Inputting nested slurs during step input

You can input nested slurs directly during step input, for example, if you already know how you want to phrase the notes you are currently inputting.

PROCEDURE

1. In Write mode, start note input.
 2. Press **S** twice to start two slurs from the currently selected note. One slur is the inner slur, the other slur is the outer slur.
 3. Input your notes. The slurs extend automatically as you continue inputting notes, even if there are rests between the notes you input.
 4. Press **Shift-S** once to end the inner slur on the currently selected note.
 5. Continue inputting notes.
 6. Optional: Start/End other inner slurs.
 7. Press **Shift-S** again to end the outer slur on the currently selected note.
-

RELATED LINKS

[Nested slurs](#) on page 874

Adding nested slurs to existing notes

You can add multiple slurs to existing notes so that they appear as nested slurs.

PROCEDURE

1. In Write mode, select the notes you want to include in the outer slur.
2. Press **S** to input the outer slur.
3. Select the notes within the outer slur that you want to place under an inner slur.
4. Press **S** to input the inner slur.
5. Optional: Repeat steps 3 and 4 for any other inner slurs you want.

NOTE

- You can input the outer slur and inner slurs in any order as Dorico Pro automatically adjusts slurs so that shorter slurs are positioned within longer slurs, and makes sure they do not collide.
- Slur collisions are not automatically avoided if you activate **Disable auto curve adjustment** in the **Slurs** group of the Properties panel for individual notes.

RELATED LINKS

[Slur collision avoidance](#) on page 892

Moving slurs rhythmically

You can move slurs to new rhythmic positions after they have been input. They are positioned according to your project-wide settings on the **Slurs** page in **Engraving Options**.

PROCEDURE

1. In Write mode, select the slurs you want to move.

NOTE

When using the mouse, you can only move one slur rhythmically at a time.

2. Move the slurs to the next or previous noteheads on the staff in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the next notehead on the staff.
 - Press **Alt-Left Arrow** to move them to the previous notehead on the staff.
 - Click and drag the slur to the right/left.

RESULT

The slurs are moved to the next or previous noteheads on the staff.

NOTE

The rhythmic duration of slurs is usually maintained. However, depending on the rhythms they cross as they move, slurs may cover longer/shorter durations than before they were moved.

AFTER COMPLETING THIS TASK

You can adjust the shape and position of individual slurs graphically in Engrave mode.

RELATED LINKS

[Slurs in Engrave mode](#) on page 879

[Moving slurs and slur handles graphically](#) on page 881

Lengthening/Shortening slurs

You can change the length of slurs rhythmically after they have been input.

NOTE

You can only lengthen/shorten cross-staff slurs to notes on the same staff as the corresponding endpoint, and you can only lengthen/shorten cross-voice slurs to notes in the same voice as the corresponding endpoint.

PROCEDURE

1. In Write mode, select the slurs you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one slur at a time.

2. Lengthen/Shorten the slurs in any of the following ways:
 - Press **Shift-Alt-Right Arrow** to lengthen the slur to the next notehead.
 - Press **Shift-Alt-Left Arrow** to shorten the slur to the previous notehead.

NOTE

Key commands lengthen/shorten items by moving their end only. You can move the start of slurs by moving the whole slur, or by clicking and dragging the start handle.

- Click and drag the start/end of the slur to the next/previous notehead.
-

RESULT

The selected slurs are lengthened/shortened.

RELATED LINKS

[Moving slurs rhythmically](#) on page 875

[Slurs in Engrave mode](#) on page 879

[Cross-staff and cross-voice slurs](#) on page 873

Slurs linked across multiple staves

Slurs of the same duration at the same rhythmic position on multiple staves can be linked together. This happens automatically when you copy and paste slurs or material including slurs between staves, or enter them simultaneously.

If slurs are linked, moving one slur in the linked group moves any slurs linked to it in the same way. Similarly, lengthening or shortening a slur in a linked group lengthens or shortens any slurs linked to it in the same way.

However, deleting one slur in a linked group only deletes the slur selected, not the whole group.

Linked slurs appear highlighted when any slur in the linked group is selected.



Three linked slurs with the top slur selected

You can also manually link and unlink slurs.

RELATED LINKS

[Inputting slurs](#) on page 265

[Unlinking slurs](#) on page 877

[Disabling automatic linking of dynamics and slurs when pasting](#) on page 279

Linking slurs together

Dorico Pro automatically links slurs of the same duration at the same rhythmic positions together when you copy and paste slurs or material including slurs between staves, or enter them simultaneously. However, you can also link slurs together manually.

PROCEDURE

1. In Write mode, select the slurs you want to link together.

NOTE

Only slurs that have the same duration and start at the same position can be linked together.

2. Choose **Edit > Slurs > Link**. You can also choose this option from the context menu.
-

RESULT

The selected slurs are linked together.

RELATED LINKS

[Slurs linked across multiple staves](#) on page 876

Unlinking slurs

You can unlink slurs manually that were automatically linked together, for example, if you want to lengthen/shorten them independently of each other.

PROCEDURE

1. In Write mode, select a slur from each linked group you no longer want to be linked.
 2. Choose **Edit > Slurs > Unlink**. You can also choose this option from the context menu.
-

RESULT

All slurs linked to the selected slurs are unlinked.

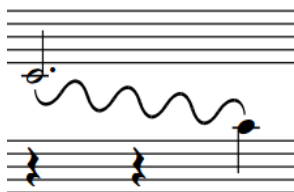
NOTE

You cannot only unlink a single slur from the group.

Slur segments

A standard slur consists of one segment. You can make more elaborate shapes with slurs with multiple segments, for example, to allow you to create more complex slur shapes than are possible with a single curved segment.

Adding more segments to a slur by default creates evenly spaced waves within its length. Therefore, having more segments makes each wave shorter.

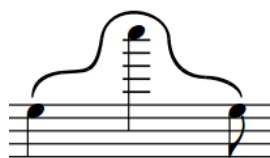


Slur with eight segments

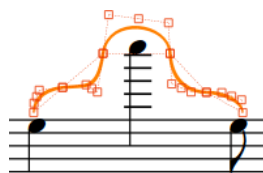
In Engrave mode, you can move each segment graphically, independently of the other segments in the slur, as each segment has its own set of five square handles. These allow you to form slurs into unusual and complicated shapes.

NOTE

You may find that you need more segments than there are curves in your planned shape, as in many cases you need a segment for each significant change of angle. In Dorico Pro, you can increase/decrease the number of segments in a slur at any time.



An unusual slur shape created using five segments.



The same slur, showing the positions of the handles of all five segments.

RELATED LINKS

[Moving slurs and slur handles graphically](#) on page 881

[Multi-segment slurs in Engrave mode](#) on page 880

Changing the number of segments in individual slurs

You can change the number of segments in individual slurs, for example, to allow you to create slurs with unusual shapes.

PROCEDURE

1. In Engrave mode, select the slurs whose number of segments you want to change.
 2. In the Properties panel, activate **Number of segments** in the **Slurs** group.
 3. Change the value in the value field.
-

RESULT

Increasing the value increases the number of slur segments. Decreasing the value decreases the number of slur segments.

AFTER COMPLETING THIS TASK

You can adjust the shape of slur segments in more detail using their handles.

NOTE

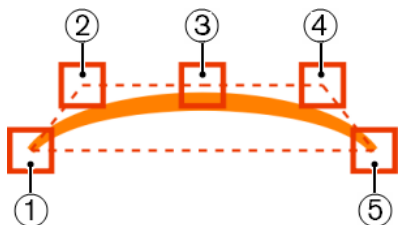
Handles on multi-segment slurs are connected to the corresponding type of handle on adjacent segments. Moving handles causes any connected handles to move the same amount in the opposite direction.

RELATED LINKS

[Moving slurs and slur handles graphically](#) on page 881

Slurs in Engrave mode

In Engrave mode, each slur has five square handles that you can move independently. When using slur handles to edit slurs in Engrave mode, each handle adjusts the corresponding part of the slur but can also affect the positions of other handles on the slur.



Slurs have the following handles in Engrave mode:

- 1 Left endpoint
- 2 Left control point
- 3 Slur height
- 4 Right control point
- 5 Right endpoint

For example, moving the left endpoint moves the start of a slur, but the rest of the handles stay in their existing positions. However, moving the right control point also causes the slur height handle to move. This gives you fine control over the shape of slurs, while ensuring the end result remains curved and smooth.

NOTE

Multi-segment slurs have additional links between control point handles that affect how they move in relation to other handles moving.

You can move these handles to change the shape of slurs with the keyboard, with the mouse, and by using properties in the **Slurs** group of the Properties panel.

RELATED LINKS

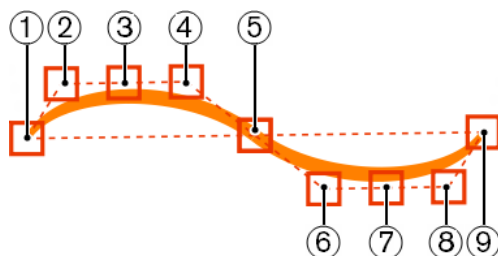
[Slur shoulder offset](#) on page 886

[Slur height](#) on page 884

Multi-segment slurs in Engrave mode

In Engrave mode, each segment in multi-segment slurs, such as S-shaped slurs, has handles just like standard slurs. This allows you to edit each segment of multi-segment slurs independently as if they were separate slurs, but in order to maintain a consistent shape, moving certain handles causes other handles to move simultaneously.

Multi-segment slurs have the following handles in Engrave mode:



- 1 Left endpoint
- 2 Left control point
- 3 Slur height
- 4 Right control point
- 5 Center control point
- 6 Left control point
- 7 Slur height
- 8 Right control point
- 9 Right endpoint

You can select and move each handle in the same ways as for standard slurs; however, handles on multi-segment slurs are connected between adjacent segments. Moving a connected control point causes the control point at the start/end of the next/previous segment to move the same amount in the opposite direction. This avoids tight corners, ensuring that multi-segment slurs are always as smoothly and symmetrically curved as possible.

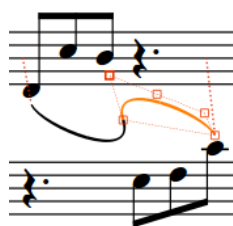
In multi-segment slurs, right control points are connected to the left control point in the adjacent segment. If there is no adjacent segment, the right/left control points next to the right/left endpoints can be moved independently. For example, in the labelled diagram, the control point 4 is connected to control point 6, but control points 2 and 8 are not connected to another control point.

Similarly, moving the slur height handle causes the slur height handle on any adjacent segments to move the same amount in the opposite direction. For example, if you move the slur height handle on the middle segment of a slur with three segments, all three slur height handles are moved.

EXAMPLE



The left control point is selected.



Moving the selected left control point upwards and to the left causes the right control point on the adjacent segment to move downwards and to the right.

Moving slurs and slur handles graphically

You can move whole slurs and individual slur handles graphically, for example, if you want to change the shape of individual slurs or move individual slur endpoints. This only changes the appearance of slurs, and does not change the rhythmic positions to which they are attached.

PROCEDURE

1. In Engrave mode, select the whole slurs or individual slur handles you want to move in any of the following ways:
 - **Ctrl/Cmd**-click multiple slurs.
 - Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.
 - Click the handle you want to move.
 - **Ctrl/Cmd**-click individual handles on multiple slurs.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the slurs or handles in any of the following ways:
 - Press **Alt-Right Arrow** to move handles to the right.
 - Press **Alt-Left Arrow** to move handles to the left.
 - Press **Alt-Up Arrow** to move slurs or handles upwards.
 - Press **Alt-Down Arrow** to move slurs or handles downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag the slurs upwards/downwards.
- Click and drag the handles in any direction.

NOTE

You cannot move whole slurs to the right/left, you can only move them upwards/downwards.

3. Optional: Repeat steps 1 and 2 for any other slurs or slur handles you want to move.
-

RESULT

The selected slurs or slur handles are moved. Depending on the handles you selected, this can change the shape of the corresponding slurs.

TIP

The following properties in the **Slurs** group of the Properties panel are activated automatically when you move the corresponding slur handles:

- **Start offset** moves the left endpoints of slurs. **X** moves them horizontally, **Y** moves them vertically.
- **End offset** moves the right endpoints of slurs. **X** moves them horizontally, **Y** moves them vertically.
- **Start handle offset** moves the left control points of slurs. **X** moves them horizontally, **Y** moves them vertically.
- **End handle offset** moves the right control points of slurs. **X** moves them horizontally, **Y** moves them vertically.

For example, if you move a whole slur upwards and to the right, all of its handles are moved so all properties are activated. You can also use these properties to change the shape of individual slurs by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected slurs to their default positions.

RELATED LINKS

[Slur height](#) on page 884

[Slur shoulder offset](#) on page 886

Changing the angle of slurs

You can change the angle or rotation of individual slurs without affecting their overall shape.

This is useful, for example, if you want one end of a slur to start higher after a system break than its default position, as you can change the rotation of the slur while keeping all slur handles on the slur in the same positions relative to each other.

PROCEDURE

1. In Engrave mode, select an endpoint on the slurs whose angle you want to change.

TIP

- You can select individual handles on multiple slurs by holding down **Ctrl/Cmd** and clicking.
 - You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.
-

2. **Alt**-click and drag the endpoints in any direction.

NOTE

You cannot use the keyboard to change the angles of individual slurs.

RESULT

The angle or rotation of the selected slurs is changed without affecting their shape.

EXAMPLE



Endpoint moved without holding **Alt**



Endpoint moved while holding **Alt**

Changing the thickness of slurs

You can change the thickness of individual slurs, including changing the thickness of the middle of slurs independently of the ends of slurs, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the slurs whose thickness you want to change.
2. In the Properties panel, activate the following properties, individually or together, in the **Slurs** group:
 - **End thickness**
 - **Middle thickness**
3. Change the values in the value fields.

RESULT

Increasing the values makes the corresponding part of the selected slurs thicker, decreasing the values makes the corresponding part of the selected slurs thinner.

TIP

- Deactivating the properties returns the corresponding part of the selected slurs to their default thickness.
 - You can change the default thickness of all slurs project-wide on the **Slurs** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

Short slurs that cover large pitch ranges

When short slurs span large pitch ranges, they are significantly rotated to compensate. This can make the ends of short slurs appear too angular.

You can move the control point handles of slurs to improve their curves.

Of the three examples, the middle slur has the smoothest curve. The handles on the slur on the right have been moved poorly, making the curve far too angular.

In the bottom row, the positions of the handles are shown to indicate how each curve above was created.



Short slur spanning a large pitch range, without adjustment



The same slur with some shape adjustment, making the curve smoother



The same slur again with poor adjustment, making the curve too angular



Default slur handle placement



Slur handle placement to create the corresponding slur



Slur handle placement to create the corresponding slur

TIP

When adjusting slur ends, you can achieve the best results using the following guidelines:

- The control point at the lower end of the slur does not extend outside the width of the slur, as marked by its neighboring endpoint.
- The control point at the higher end of the slur does not form an angle greater than 90 degrees relative to the endpoints. You can use the dashed lines to help you judge this.

You can adjust the shape of short slur ends in different ways:

- Project-wide, by increasing the value for **Offset shoulders by fraction of half length of short slur**, which you can find by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**.
- Individually, by activating **Start handle offset** and **End handle offset** in the Properties panel in Engrave mode, and changing their **X** values.
- Individually, by moving the handles of slurs in Engrave mode.

RELATED LINKS

[Slurs in Engrave mode](#) on page 879

[Project-wide engraving options for slurs](#) on page 872

[Moving slurs and slur handles graphically](#) on page 881

Slur height

The height of slurs determines how far above/below notes slurs extend vertically.

You can change values for the heights of all slurs project-wide on the **Slurs** page in **Engraving Options**. You can also change the height of individual slurs in Engrave mode.

Increasing the height of slurs makes them extend further from the staff. This gives them a rounder shape, which takes up more vertical space. Where vertical space is limited, there should be a balance between how curved slurs are, which can help readability for players, and ensuring staves do not overlap.



A long slur with default height



A long slur with increased height



A long flat slur with default height



A long flat slur with increased height

TIP

You can find options that change project-wide values for the height of short slurs, short flat slurs, long slurs, and long flat slurs by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

Changing the height of slurs

You can change the height of individual slurs independently of your project-wide settings, for example, to reduce the height of a particularly long slur.

PROCEDURE

1. In Engrave mode, select the slur height (middle) handle of the slurs whose height you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.
-

RESULT

The height of the selected slurs is changed.

NOTE

- To maintain a visually pleasing and symmetrical curve when changing the height of slurs manually, you may need to move slur height handles to the right/left by a small amount, as well as upwards/downwards.
 - Moving slur height handles to the right/left affects the shape of the whole slur.
 - You can find options controlling the default height of all slurs project-wide by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**. There are separate settings for short slurs and long slurs.
-

RELATED LINKS

[Moving slurs and slur handles graphically](#) on page 881

Slur shoulder offset

Slur shoulders affect the angles of the curves of slurs as they taper towards an endpoint, because the tapered ends often approach noteheads at a steeper angle than that of a slur's arch.

Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper. The shoulder offset must therefore be balanced with the height of the slur in order to achieve the ideal curved shape.



A long slur with default shoulder offset of 1/5



A long slur with increased shoulder offset of 1.5



A long slur with decreased shoulder offset of 1/2

You can change the project-wide settings for the shoulder offset of slurs and the shoulder offset of flat slurs by changing the values of the following options, which you can find by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engraving Options**.

- **Offset shoulders by fraction of half length of short slur**
- **Offset shoulders by fraction of half length of long slur**
- **Offset shoulders by fraction of half length of flat slur**

You can adjust the shoulders of individual slurs in Engrave mode.

RELATED LINKS

[Slur height](#) on page 884

Changing the shoulder offset of slurs

You can adjust the shoulders of individual slurs, independently of your project-wide settings, by moving their control point handles. You can move each control point independently.

PROCEDURE

1. In Engrave mode, select one of the control point handles on each of the slurs whose shoulders you want to adjust in any of the following ways:
 - Select a whole slur and press **Tab** to cycle through the handles until the one you want to move is selected.
 - Click the handle you want to move.
 - **Ctrl/Cmd**-click individual handles on multiple slurs.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
3. Optional: Repeat steps 1 and 2 for the other control point handle on the slurs whose shoulders you want to adjust.

RESULT

The shoulder offset of the selected slurs is changed.

TIP

- The following properties in the **Slurs** group of the Properties panel are activated automatically when you move the corresponding slur handles:
 - **Start handle offset** moves the left control points of slurs. **X** moves them horizontally, **Y** moves them vertically.
 - **End handle offset** moves the right control points of slurs. **X** moves them horizontally, **Y** moves them vertically.

You can also use these properties to change the shoulder offset of individual slurs by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected slurs to their default positions.

- You can find options controlling the default shoulder offset of all slurs project-wide by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**. There are separate settings for short slurs and long slurs.

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

Slur curvature direction

Slurs can curve upwards, downwards, or have a multi-segment S-shape.

The following options for slur curvature direction are available when you activate **Direction** in the **Slurs** group of the Properties panel:

Up

Forces slurs to curve upwards, and appear above notes.



Down

Forces slurs to curve downwards, and appear below notes.



Up/Down

Forces slurs to comprise two segments: the first curves upwards, the second curves downwards to create a mirrored S-shape. It is typically used when phrases start in the lower staff and end in the upper staff, for example, in piano parts.



Down/Up

Forces slurs to comprise two segments: the first curves downwards, the second curves upwards to create an S-shape. It is typically used when phrases start in the upper staff and end in the lower staff, for example, in piano parts.



TIP

You can adjust the precise shapes of individual slurs, and each slur segment, in Engrave mode using the square handles on each slur.

RELATED LINKS

[Slurs in Engrave mode](#) on page 879

[Moving slurs and slur handles graphically](#) on page 881

Changing the curvature direction of slurs

You can change the curvature direction of individual slurs so that they curve upwards, downwards, or have a multi-segment S-shape, independently of your project-wide settings.

PROCEDURE

1. Select the slurs whose curvature direction you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Direction** in the **Slurs** group.
 3. Choose one of the following options:
 - **Up**
 - **Down**
 - **Up/Down** (mirrored S-shape)
 - **Down/Up** (S-shape)
-

RESULT

The curvature direction of the selected slurs is changed.

TIP

- You can adjust the precise shapes of slurs, and each slur segment, in Engrave mode using the handles on each slur.
 - You can change the default curvature direction behavior of all slurs project-wide on the **Slurs** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Slurs in Engrave mode](#) on page 879

[Moving slurs and slur handles graphically](#) on page 881

Slur styles

There are different styles of slurs available in Dorico Pro, which indicate different meanings and have different use cases.

The following options for slur style are available when you activate **Style** in the **Slurs** group of the Properties panel:

Solid

This is the default style for slurs. Slurs appear as tapered solid lines: thinner at the ends and thicker in the middle.



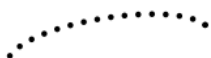
Dashed

Slurs appear as tapered dashed lines. Can be used to indicate an optional slur, for example, to recommend breathing/bowing patterns.



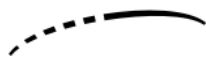
Dotted

Slurs appear as dotted lines. The dots are the same size and the same distance apart over the whole length of the slur.



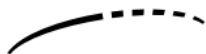
Half-dashed start

The first halves of slurs appear as dashed lines, the second halves as solid lines. Used to denote that a slur was written incompletely in the source in critical editions.



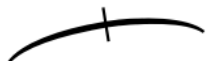
Half-dashed end

The first halves of slurs appear as solid lines, the second halves as dashed lines. Used to denote that a slur was written incompletely in the source in critical editions.



Editorial

Slurs appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length, perpendicular to the curve of the slur. Used to show that a slur was added by the editor and was not present in the original source.



TIP

You can set the precise parameters of each of these options project-wide on the **Slurs** page in **Engrave > Engraving Options**. For example, you can change the length and width of the stroke in **Editorial** slurs, the diameter of dots and length of dashes, and the sizes of the gaps between dots and dashes.

Changing the style of slurs

You can change the style of individual slurs after they have been input.

PROCEDURE

1. Select the slurs whose style you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Style** in the **Slurs** group.
3. Select one of the following options from the menu:

- **Solid**
 - **Dashed**
 - **Dotted**
 - **Half-dashed start**
 - **Half-dashed end**
 - **Editorial**
-

Changing the size of dashes/dots in slurs

You can change the length of dashes and the size of dots in dashed/dotted slurs individually, independently of your project-wide settings.

NOTE

This only applies to dashed/dotted slurs.

PROCEDURE

1. In Engrave mode, select the dashed/dotted slurs whose dash length/dot size you want to change.
 2. In the Properties panel, activate one of the following properties in the **Slurs** group:
 - For dashed slurs, activate **Dash length**.
 - For dotted slurs, activate **Dot size**.
 3. Change the value in the value field.
-

RESULT

Increasing the value makes dashes longer and dots bigger, decreasing the value makes dashes shorter and dots smaller.

TIP

You can find options to set the default size of dashes/dots in all dashed/dotted slurs project-wide by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

Changing the size of gaps in dashed/dotted slurs

You can change the length of gaps in dashed/dotted slurs individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the dashed/dotted slurs whose gap length you want to change.
 2. In the Properties panel, activate one of the following properties in the **Slurs** group:
 - For dashed slurs, activate **Dash gap length**.
 - For dotted slurs, activate **Dot gap length**.
 3. Change the values in the value fields.
-

RESULT

Increasing the values makes the gaps between dashes/dots larger. Decreasing the values makes the gaps between dashes/dots smaller.

TIP

You can find options to set the default length of the gaps between dashes/dots in all dashed/dotted slurs project-wide by clicking **Advanced Options** in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**.

Changing individual slurs to flat slurs

Although they are not often used as standard, some publishers use flat slurs in order to reduce the vertical space occupied by slurs. You can change individual slurs to flat slurs, independently of your project-wide setting.

Short slurs, that is, slurs between only a few notes, can look odd as flat slurs, so it may not be appropriate to select the flat curvature style project-wide. However, it would likewise be unusual only to use flat slurs once or twice in a project.

NOTE

We recommend that you avoid changing the curvature style for only one or two slurs in a project. It can be more effective to modify them rather than changing their curvature style, for example, by making an individual slur thicker/thinner, adjusting the shoulder offset of slurs, or adjusting their height using their slur height handles in Engrave mode.

PROCEDURE

1. Select the slurs whose curvature style you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Curvature style** in the **Slurs** group.
 3. Choose one of the following options:
 - **Normal (curved)**
 - **Flat**
-

RESULT

The curvature style of the selected slurs is changed.

TIP

You can change the curvature style of all slurs project-wide in the **Design** section of the **Slurs** page in **Engrave > Engraving Options**.

RELATED LINKS

- [Changing the thickness of slurs](#) on page 883
- [Changing the height of slurs](#) on page 885
- [Changing the shoulder offset of slurs](#) on page 886
- [Project-wide engraving options for slurs](#) on page 872

Slur collision avoidance

By default, Dorico Pro automatically adjusts the shape and position of slurs to avoid collisions with items under their arc.

This means that if a notehead under a slur is either higher than the others under a slur curving upwards, or lower than the others under a slur curving downwards, the curvature of the slur is adjusted to avoid the collision and keep the notehead under the slur. You can manually disable collision avoidance for individual slurs.

In the **Avoiding Collisions** section of the **Slurs** page in **Engrave > Engraving Options**, you can choose options for how slurs are adjusted to avoid collisions, such as choosing a balance between changing the shape of slurs to compensate or moving the endpoints of a slur, and how asymmetrical slurs are allowed to be.



Slur with collision avoidance activated (default)



Slur with collision avoidance deactivated

Collision avoidance for cross-staff slurs

In the **Avoiding Collisions** section of the **Slurs** page in **Engrave > Engraving Options**, you can activate/deactivate collision avoidance for cross-staff slurs.

This avoids collisions, but due to the increased complexity in positioning slurs across staves, further manual adjustment in Engrave mode might be required.

NOTE

This setting does not apply to S-shaped slurs between staves, which do not have any collision avoidance.

Slurs bisecting flat accidentals

According to conventions in published music, slurs can bisect the stems of flat accidentals, but not sharps or naturals, to save vertical space.



You can choose not to allow slurs to bisect flat signs, or alter the maximum amount of the stems of flat signs that can protrude above slurs, on the **Slurs** page in **Engraving Options**.

RELATED LINKS

[Project-wide engraving options for slurs](#) on page 872

Enabling/Disabling slur collision avoidance

You can allow or prevent individual slurs from automatically adjusting to avoid collisions, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the slurs whose collision avoidance you want to enable/disable.

2. In the Properties panel, activate/deactivate **Disable auto curve adjustment** in the **Slurs** group.

RESULT

The selected slurs do not avoid collisions when the property is activated, and avoid collisions when the property is deactivated.

TIP

You can enable/disable slur collision avoidance for all cross-staff slurs project-wide in the **Avoiding Collisions** section of the **Slurs** page in **Engrave > Engraving Options**.

You can also customize the default settings for the shape and endpoint positions of slurs that are avoiding collisions in this section.

Slurs over system and frame breaks

Slurs automatically cross system breaks and frame breaks.

A system or frame break divides slurs into two parts. The end of the first part of the slur, and the start of the second part of the slur, are both positioned 1 space vertically outside the staff by default.

In Engrave mode, you can move and edit each slur part separately. This allows you to adjust the start/end height of each slur part independently on each system.

If multiple slurs cross the same system break or frame break, such as if a phrase split by a break contains nested slurs, the ends of the slurs are stacked automatically and spaced a minimum of 1/2 space apart vertically.



The end of a system showing the first slur part; the end on the right indicates a continuation to the next system.



The start of the next system showing the second slur part; the end on the left indicates a continuation from the previous system.

RELATED LINKS

[Slurs in Engrave mode](#) on page 879

[Moving slurs and slur handles graphically](#) on page 881

Slurs in playback

Slurs trigger the legato playing technique in playback. By default, this increases the length of the MIDI notes without affecting the notation of the music.

Slurred notes sound for 105% of the length indicated by their notated rhythm, as opposed to non-slurred notes which sound for 85% of their notated rhythm.

The final note of a slur sounds for 85% of its notated rhythm, as there is no slur after it and the legato technique is no longer required.

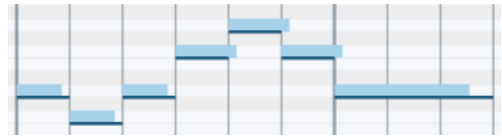
You can change these values on the **Timing** page in **Play > Playback Options**.

The example shows how MIDI note length, indicated by the filled, light-colored rectangles, is increased when slurs are used. The thin, darker rod shows the notated duration of each note. The first three notes are non-slurred, so the MIDI length rectangle is shorter than the line of the notated rhythm. The last four notes are slurred together, so the MIDI length is longer than the

notated length in order to create the legato, slurred sound. However, the last note of the slurred group is not longer, as the last note of a slurred phrase is treated like a normal, non-slurred note.



A phrase in an instrument staff



The same phrase in the piano roll in Play mode

RELATED LINKS

[Playback Options dialog](#) on page 405

[Played vs. notated note durations](#) on page 466

Staff labels

Staff labels are used to identify staves in music containing multiple players, and are positioned to the left of systems, before the initial barline of each system. Staff labels indicate the instrument or instruments currently playing the music on the staff or staves to which they apply.

It is usual to show instrument names in full in the staff labels for the first systems in each flow, and abbreviated instrument names in the staff labels of subsequent systems. Using abbreviated instrument names saves horizontal space, allowing you to include more music in each system.



Examples of staff labels on the first system in a flow

In Dorico Pro, staff labels use the instrument names set for each instrument in the **Edit Instrument Names** dialog. In the dialog, you can specify singular and plural names for each instrument, and singular and plural abbreviations for each instrument.

TIP

You do not need to number instruments in staff labels manually, as Dorico Pro automatically numbers instruments when there are multiple players of the same type playing instruments of the same type.

Part layouts by default do not show staff labels, as most parts only contain a single staff whose identity is clear from the context and the layout name. The layout name is shown at the top left of the first page in part layouts by default.

NOTE

Layout names are different to the instrument names used for staff labels.

For players holding multiple instruments, the staff label shows the instrument they are currently playing. If the player changes instrument partway through a system, the name of the new instrument is shown above the staff at its first note and the staff label is updated at the start of the next system.

NOTE

Staff labels do not show all instruments held by players, for example, in the staff label for the first system. You should include a comprehensive instrumentation list that shows any doubling at the front of your score.

Dorico Pro includes the instrument transposition, or instrument pitch, in staff labels for transposing instruments by default. Transposing instruments are instruments whose sounding pitch is different to the notated pitch.

You can change when instrument transpositions, or instrument pitches, are shown in staff labels. You can also change whether the instrument transposition is shown before or after the instrument name in staff labels.

Staff labels imported from MusicXML files

When exporting MusicXML files from Cubase and importing them into Dorico Pro, you can improve the accuracy of the automatic instrument selection by changing the instrument names in the Cubase **Score Editor** to the same English instrument names that Dorico Pro uses before exporting the file.

RELATED LINKS

[Player, layout, and instrument names](#) on page 96

[Instrument numbering](#) on page 103

[Edit Instrument Names dialog](#) on page 97

[Changing instrument names](#) on page 101

Instrument names in staff labels

Staff labels use the instrument names set for each instrument, and instruments with the same instrument names are automatically numbered. Staff labels can show full or short instrument names.

On the **Staves and Systems** page in **Setup > Layout Options**, you can choose whether you want to show full, short, or no instrument names in staff labels in each layout independently.

- **Full** staff labels use full instrument names.
- **Abbreviated** staff labels use short instrument names.
- **None** shows no staff labels.

You can change the full and short instrument names for each instrument in the **Edit Instrument Names** dialog in Setup mode.

NOTE

Changing instrument names does not change the name shown at the top of each part layout, as that uses the layout name. You can change the layout name in Setup mode.

It is usual to number instruments when there are multiple players holding the same type of instrument. For example, if there are four horn players in an orchestra, they are usually called Horn 1, Horn 2, Horn 3, and Horn 4.

In Dorico Pro, instruments are automatically numbered. This also applies to players holding multiple instruments. For example, if an ensemble contains two flute players and a piccolo player, but the second flute is also holding a piccolo, then the instruments are numbered in the following way:

- Flute 1
- Flute 2 & Piccolo 1

- [Piccolo 2](#)

You can move individual instruments to different players if you want to change which numbered instruments are held by each player. For example, if you want the second flute to double second piccolo rather than first piccolo, you can swap the piccolo instruments between the players.

RELATED LINKS

- [Player, layout, and instrument names](#) on page 96
- [Changing the length of staff labels project-wide](#) on page 899
- [Edit Instrument Names dialog](#) on page 97
- [Instrument numbering](#) on page 103
- [Changing instrument names](#) on page 101
- [Changing layout names](#) on page 100
- [Moving instruments between players](#) on page 107

Staff label paragraph styles

Staff labels use paragraph styles to format their fonts, including their size, spacing, alignment, and other formatting options. When staff labels contain multiple separate parts, such as when the instrument name and instrument number have different vertical positions, you can format each part separately.

Dorico Pro provides the following default paragraph styles for staff labels:

- **Staff Labels**
The default style used for staff labels that have the instrument name and number aligned and next to each other. It is also used for the group labels on divisi staves and for instrument names aligned between multiple identical instruments.
- **Staff Labels (Inner)**
Used for individual staves within divisi groups and for instrument numbers when instrument names are aligned between multiple identical instruments.
- **Staff Labels (Percussion Grid)**
Used for percussion kits in layouts using the grid presentation.

You can edit each paragraph style independently of each other in the **Paragraph Styles** dialog, for example, if you want outer staff labels to be left-aligned but inner staff labels to be right-aligned.

TIP

You can make further changes to the appearance and alignment of staff labels on divisi staves at each individual divisi change.

RELATED LINKS

- [Paragraph Styles dialog](#) on page 366
- [Editing divisi staff labels individually](#) on page 937

Project-wide engraving options for staff labels

You can find options for the project-wide appearance and position of staff labels on the **Staff Labels** page in **Engrave > Engraving Options**.

For example, you can change the distance between staff labels and the systemic barline and whether instruments are numbered using Arabic or Roman numerals. You can also determine whether a single instrument name for adjacent identical solo instruments is grouped and shown

justified between their staves or shown on each staff, and whether vocal staff labels are uppercase or title case. There are also options specifically for ossia staff labels.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

TIP

You can change the length of staff labels shown on systems for each layout independently on the **Staves and Systems** page in **Setup > Layout Options**.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Changing the staff label numbering style](#) on page 899

[Showing vocal staff labels in uppercase/title case](#) on page 899

Grouping the staff labels of adjacent identical instruments

When multiple adjacent solo players hold the same instrument, you can group them so that there is only a single instrument name for all staves with the instrument number shown beside each individual staff.

By default, every staff is shown with its own staff label, including the appropriate instrument name.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Staff Labels** in the page list.
 3. For **Staff labels for identical adjacent solo instruments**, choose **Group between staves**.
 4. Click **Apply**, then **Close**.
-

RESULT

A single instrument name is shown justified between all adjacent identical solo instruments in all layouts project-wide.

EXAMPLE

Allegro



Violin 1

Violin 2

The image shows a musical score for two violins. The top staff is labeled 'Violin 1' and the bottom staff is labeled 'Violin 2'. Both staves are in treble clef with a key signature of one sharp (F#) and a common time signature (C). The tempo is marked 'Allegro'. The music consists of a few measures with various note values and rests.

Each staff shown with a separate staff label

Allegro



Violin

1

2

The image shows a musical score for two violins. The top staff is labeled 'Violin' with a '1' to its left, and the bottom staff is labeled 'Violin' with a '2' to its left. Both staves are in treble clef with a key signature of one sharp (F#) and a common time signature (C). The tempo is marked 'Allegro'. The music consists of a few measures with various note values and rests.

Staff labels grouped between adjacent identical solo instruments

Changing the staff label numbering style

You can change the staff label numbering style of solo and section players independently, for example, if you want solo players to use Arabic numerals, such as “2”, and section players to use Roman numerals, such as “II”.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Staff Labels** in the page list.
3. Choose one of the following options for **Numbering style for solo players**:
 - **Arabic numerals**
 - **Roman numerals**
4. Choose one of the following options for **Numbering style for section players**:
 - **Arabic numerals**
 - **Roman numerals**
5. Click **Apply**, then **Close**.

RESULT

Instruments held by solo and section players use the selected numbering style in all layouts project-wide.

Showing vocal staff labels in uppercase/title case

You can show the staff labels on vocal staves in uppercase letters or in title case. Many European publishers prefer vocal staves to have staff labels with capital letters, but this is not true of all publishers.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Staff Labels** in the page list.
3. For **Labels for vocal staves**, choose one of the following options:
 - **Shown in uppercase**
 - **Shown in title case**
4. Click **Apply**, then **Close**.

RESULT

Staff labels on all vocal staves project-wide use either uppercase letters or title case.

Changing the length of staff labels project-wide

You can show full, abbreviated, or no instrument names in staff labels project-wide depending on their context in each layout independently.

By default, full staff labels are shown on the first system of each flow and abbreviated staff labels are shown on subsequent systems in full score layouts. In part layouts, staff labels are not shown on any systems.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.

2. In the **Layouts** list, select the layouts in which you want to change the length of instrument names in staff labels.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Staff Labels** section, select one of the following options from the **Staff labels on first system** menu:
 - **Full**
 - **Abbreviated**
 - **None**
 5. Select one of the following options from the **Staff labels on subsequent systems** menu:
 - **Full**
 - **Abbreviated**
 - **None**
 6. Click **Apply**, then **Close**.
-

RESULT

The staff labels are changed project-wide in the selected layouts.

TIP

- You can change both full and short instrument names in the **Edit Instrument Names** dialog.
 - Your per-layout settings for staff labels apply to each flow, not the whole project. For example, if you want to show full staff labels on the first system in the first flow in your project, but do not want to show full staff labels on the first system of subsequent flows, you must change the staff labels at the start of each subsequent flow individually.
-

RELATED LINKS

[Instrument names in staff labels](#) on page 896

[Changing instrument names](#) on page 101

[Edit Instrument Names dialog](#) on page 97

[Changing the length of staff labels at specific positions](#) on page 901

Changing the minimum indent for systems with staff labels

You can change the default minimum indent for all systems that show staff labels project-wide to optimize horizontal space. You can have different minimum indents in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose minimum indent for systems with staff labels you want to change.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, change the value for **Minimum indent for systems with staff labels**.

5. Click **Apply**, then **Close**.
-

RESULT

The minimum indent on all systems that show staff labels is changed project-wide in the selected layouts.

RELATED LINKS

[System indents](#) on page 927

[Changing the first system indent](#) on page 927

[Changing the start/end position of systems](#) on page 390

Changing the length of staff labels at specific positions

You can change whether staff labels at specific positions show full, abbreviated, or no instrument names, independently of your per-layout settings. For example, if you want full staff labels at the start of the first flow but abbreviated staff labels at the start of subsequent flows, or if you want to show staff labels in choral music only on systems that contain more complicated parts, solo lines, or divisi lines.

PREREQUISITE

- You have inserted a system or frame break at the position from which you want to change the length of instrument names in staff labels.
 - Signposts are shown for system/frame breaks.
-

PROCEDURE

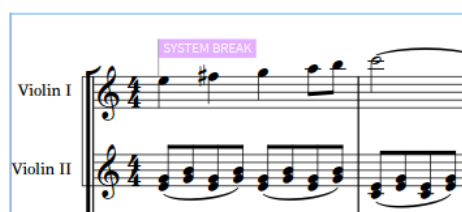
1. In Engrave mode, select the system/frame break signpost at the position where you want to change the staff labels.
 2. In the Properties panel, activate **Staff labels** in the **Format** group.
 3. Select one of the following options from the menu:
 - **Full**
 - **Abbreviated**
 - **None**
-

RESULT

The length of the instrument names shown in the staff labels is changed. This only affects the system on which the system/frame break occurs. Horizontal spacing is automatically adjusted so the system fills the width of the music frame.

Deactivating the property returns any selected system break signposts to your per-layout settings.

EXAMPLE



Violin I

Violin II

Full staff labels shown

The image shows a musical score for Violin I and Violin II. A purple box labeled 'SYSTEM BREAK' is positioned above the first measure of the Violin I staff. The staff labels 'Violin I' and 'Violin II' are shown in full length.



Violin I

Violin II

No staff labels shown

The image shows the same musical score as the previous example. A purple box labeled 'SYSTEM BREAK' is positioned above the first measure of the Violin I staff. The staff labels are not shown, and the horizontal spacing is adjusted to fill the width of the music frame.

RELATED LINKS

[Changing the length of staff labels project-wide](#) on page 899

[Inserting system breaks](#) on page 359

[Inserting frame breaks](#) on page 357

[Hiding/Showing system break signposts](#) on page 360

[Hiding/Showing frame break signposts](#) on page 358

Hiding/Showing instrument change labels at the start of flows

You can hide/show instrument change labels at the start of each flow in each layout independently. These labels can be useful for players holding multiple instruments as a way of clarifying the instrument required in their part layouts, which do not normally show staff labels.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show instrument change labels at the start of flows.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Players** in the page list.
4. In the **Instrument Changes** section, activate/deactivate **Show instrument change label at start of flow**.
5. Click **Apply**, then **Close**.

RESULT

Instrument change labels are shown in the first bar of each flow in the selected layouts when **Show instrument change label at start of flow** is activated, and hidden when it is deactivated.

Instrument transpositions in staff labels

Instrument transpositions indicate the interval between the note an instrument plays and the sounding note produced. Transposing instruments, such as Horn in F and Clarinet in B \flat , are commonly shown with their transposition, also known as their “instrument pitch”, as part of their instrument name or layout name.

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they might show transpositions in staff labels even if you have hidden transpositions in staff labels in their layout.

Dorico Pro sets common transposing instruments, such as Clarinet in B \flat and Trumpet in B \flat , to follow your per-layout settings for hiding/showing instrument transpositions in staff labels.

To reduce the risk of confusion, uncommon transposing instruments, such as Clarinet in A or Trumpet in E, are set to show their transposition in staff labels always, even if you have hidden instrument transpositions in the layout.

You can change the option for **Show transposition** to **Follow Layout Options** in the **Edit Instrument Names** dialog for each instrument.

RELATED LINKS

[Edit Instrument Names dialog](#) on page 97

[Changing instrument names](#) on page 101

[Transposing instruments](#) on page 104

Hiding/Showing instrument transpositions in staff labels

You can hide/show instrument transpositions in staff labels in each layout in your project independently. For example, you can hide instrument transpositions in staff labels in full score layouts but show them in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show instrument transpositions in staff labels.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, activate/deactivate the following options for **Instrument pitch or transposition**:
 - **Show in full staff labels**
 - **Show in abbreviated staff labels**
5. Optional: Repeat steps 2 to 4 for other layouts.
6. Click **Apply**, then **Close**.

RESULT

Instrument transpositions are shown in staff labels of the corresponding length project-wide in the selected layouts when the corresponding checkbox is activated, and hidden when the corresponding checkbox is deactivated.

NOTE

Depending on the options set for **Show transposition** in the **Edit Instrument Names** dialog for each transposing instrument, they might show transpositions in staff labels even if you have hidden transpositions in staff labels in their layout.

RELATED LINKS

[Changing instrument names](#) on page 101

Changing the position of instrument transpositions in full staff labels

You can change the position of instrument transpositions in staff labels. They can be shown before/after instrument names in each layout independently of other layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose instrument transposition position you want to change.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.


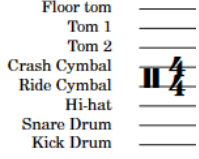
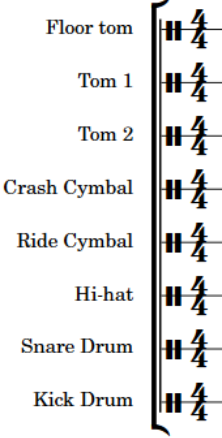
4. In the **Staff Labels** section, choose one of the following options for **Position of instrument pitch in full staff labels**:
 - **Start**
 - **End**
5. Click **Apply**, then **Close**.

RESULT

The position of instrument transpositions relative to instrument names in staff labels is changed project-wide in the selected layouts.

Staff labels for percussion kits

The staff labels shown for percussion kit staves depend on how kits are presented in your project. Kits can be presented as five-line staves, grids, and as single-line instruments.

Percussion kit presentation type	Staff label	Example
5-line staff	Single instrument name using the instrument name of the percussion kit.	Percussion 
Grid	Multiple instrument names: one for each kit instrument, positioned at the staff position of the corresponding instrument. Staff labels for grids use a smaller font and a different paragraph style than used for standard instrument staff labels.	
Single-line instruments	Multiple instrument names: one for each kit instrument, positioned beside the corresponding single-line staff. Staff labels for single-line instruments use the same font and paragraph style as used for standard instrument staff labels.	

You can change the player names, layout names, and instrument names of percussion kits in the same ways as for other players and instruments. However, to change the staff labels for percussion kits, you must change kit instrument names in different ways for percussion kits, depending on your percussion kit presentation type:

- 5-line staff: Open the **Edit Instrument Names** dialog from the **Players** panel in Setup mode, or use the **Name** field in the **Edit Percussion Kit** dialog, to change the name of the kit.
- Grid/Single-line instruments: Open the **Edit Instrument Names** dialog from inside the **Edit Percussion Kit** dialog in Setup mode to change the names of individual instruments.

The same instrument name fields and options are available for kit instruments as for standard pitched instruments.

NOTE

Smaller staff labels for each line in grid presentations use the **Staff Labels (Percussion Grid)** paragraph style. You can edit this paragraph style in the **Paragraph Styles** dialog.

RELATED LINKS

[Edit Instrument Names dialog](#) on page 97

[Player, layout, and instrument names](#) on page 96

[Edit Percussion Kit dialog](#) on page 107

[Unpitched percussion](#) on page 1019

[Changing the presentation type of percussion kits](#) on page 1026

[Paragraph Styles dialog](#) on page 366

Staves

A staff is a line or group of lines on which musical notes are notated to indicate the pitch and rhythm of music. Pitched instruments use the traditional five-line staff and unpitched instruments often use a single-line staff.

Notes are positioned on the lines and in the spaces on five-line staves, and can also use ledger lines above/below the staff to represent pitches that cannot fit on the staff.



A phrase on a five-line staff



The same phrase on a single-line staff

The pitch and register of notes on five-line staves are determined by clefs, which can also be combined with octave lines to indicate what pitches performers play.

On five-line staves for unpitched percussion instruments, the different staff positions correspond to different percussion instruments.



Because it is often necessary to have different staff sizes in different layouts depending on their type, such as having smaller staves in full score layouts than in part layouts, in Dorico Pro you can change various aspects of staves in **Setup > Layout Options**.

RELATED LINKS

[Clefs](#) on page 580

[Octave lines](#) on page 586

[Percussion kit presentation types](#) on page 1025

[Hiding/Showing empty staves](#) on page 351

Per-layout options for staves

You can change settings that affect staves project-wide independently for each layout.

You can change the size of staves in each layout in the **Space Size** section of the **Page Setup** page in **Setup > Layout Options**.

You can change other aspects of staves on the **Staves and Systems** page in **Layout Options**. For example, you can change which staff labels are shown on systems, indent the first system of each flow, and fix the number of bars included in each system. You can also select above which staves system objects appear, according to their instrument families.

NOTE

- If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.
- System objects are only shown above bracketed groups in your project. If you have no brackets, system objects only appear at the top of systems.

You can show system dividers between systems when systems contain a minimum number of players. You can also change the appearance of system dividers.

RELATED LINKS

[Changing the staff size in layouts](#) on page 908

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

[Hiding/Showing empty staves](#) on page 351

[Edit Font Styles dialog](#) on page 364

[Brackets and braces](#) on page 555

Staff size

Staff size refers to the distance between the top and bottom lines of staves, and can be expressed as a point size or in millimeters. For individual staves, you can use a scale size of the default staff size in the layout. The most appropriate staff size depends on the intended purpose of the layout.

For example, full orchestral scores that are quite dense need a much smaller staff size than individual parts, which require large enough notes so that performers can read them easily. Staves can overlap and the music can become illegible if the staff size is too large in dense scores.

In Dorico Pro, you can set the staff size using the rastral size and the space size, depending on which measurement is more appropriate for the selected layouts.

- Rastral size is the size of the full staff, measured from the bottom line to the top line.
- Space size is the distance between two staff lines.

When changing the staff size of each layout in **Layout Options**, we recommend that you use one of the preset rastral sizes, as these are based on traditional and generally accepted staff sizes that are all widely used in music engraving.

NOTE

The size of staves can affect the size of system objects.

RELATED LINKS

[System objects](#) on page 925

Changing the staff size in layouts

You can change the staff size project-wide for each layout in your project. For example, you can have a small staff size in full score layouts but a larger staff size in part layouts.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose staff size you want to change.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Page Setup** in the page list.
4. In the **Space Size** section, select the staff size you want from the **Rastral size** menu.

NOTE

If you select **Custom**, you can set a custom value in the **Space size** field, expressed in millimeters.

You can also set a **Custom** value by changing the value when any **Rastral size** is selected.

5. Optional: Repeat steps 2 to 4 for other layouts.
 6. Click **Apply**, then **Close**.
-

RESULT

The staff size in the selected layouts is changed project-wide.

TIP

You can also change the staff size from specific points in layouts, and change the size of individual staves.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

[Brackets and braces](#) on page 555

[System objects](#) on page 925

[Changing the size of individual staves](#) on page 909

Changing the staff size from specific points

You can change the staff size of all staves from specific points in layouts. For example, you can have smaller staves only on pages with more staves, and larger staves on other pages with fewer staves.

NOTE

If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.

PREREQUISITE

- You have inserted a system/frame break at the position from which you want to change the staff size.
- Signposts are shown for system/frame breaks.

PROCEDURE

1. In Engrave mode, select the signpost of the system/frame break from which you want to change the staff size.
2. In the Properties panel, activate **Space size** in the **Format** group.
3. Change the value in the value field.

RESULT

Increasing **Space size** increases the staff size of all staves in the layout. Decreasing the value decreases the staff size. This changes the staff size until the next change in staff size or the end of the flow, whichever comes first.

By default, the next flow in your project uses your project-wide staff size for the current layout.

RELATED LINKS

[Staff size](#) on page 907

[Inserting system breaks](#) on page 359

[Inserting frame breaks](#) on page 357

[Hiding/Showing system break signposts](#) on page 360

[Hiding/Showing frame break signposts](#) on page 358

[Edit Font Styles dialog](#) on page 364

[Brackets and braces](#) on page 555

[System objects](#) on page 925

Changing the size of individual staves

You can change the size of individual staves independently of other staves and your layout settings. For example, piano accompaniment parts often include the solo line of the instrument the piano is accompanying on a smaller staff.

The image shows a musical score for Viola and Piano. The Viola staff is smaller than the Piano staff. The score is in 3/4 time, key of B-flat major, and marked Adagio. The piano part is marked pp.

A piano part with smaller viola staff above

You can change the size of individual staves to a set scale size, expressed as a percentage of the normal staff size in the layout, or set a custom scale.

TIP

If you want to change the staff size to represent an alternative version of a passage, you can instead add an ossia staff, which you can show for specific regions.

PROCEDURE

1. Select an item on the staff whose size you want to change. You can do this in Write mode and Engrave mode.

NOTE

You can only change the size of a single staff at a time.

2. Choose **Edit > Staff Size > [Staff size]**. You can also choose this option from the context menu.
 3. Optional: If you choose **Custom Staff Size**, you must set the staff size using the **Custom Staff Size** dialog that opens.
-

RESULT

The size of the selected staff is changed. This also works in combination with the other ways of changing the staff size, such as changing the size of all staves in the layout or changing the size of staves from a specific point.

NOTE

- Changing the staff size of individual staves affects the staff size of all instruments held by that player.
 - Changing the staff size of individual staves affects its size for the whole flow.
 - If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.
-

RELATED LINKS

[Changing the staff size in layouts](#) on page 908

[Changing the staff size from specific points](#) on page 908

[Edit Font Styles dialog](#) on page 364

[Brackets and braces](#) on page 555

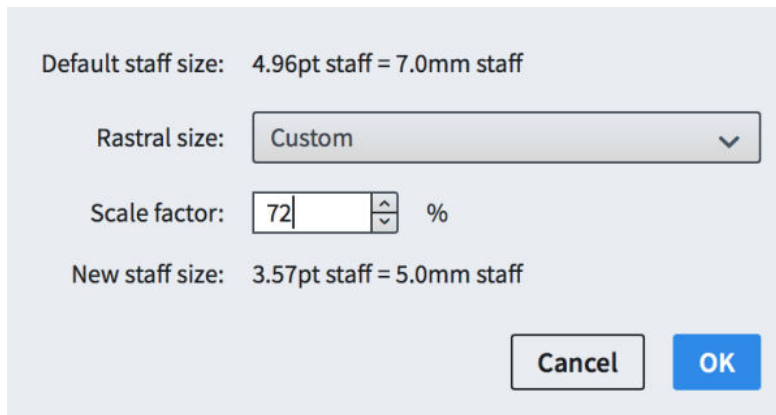
[System objects](#) on page 925

[Adding ossia staves](#) on page 918

Custom Staff Size dialog

The **Custom Staff Size** dialog allows you to change the size of individual staves by a custom scale factor.

- You can open the **Custom Staff Size** dialog by selecting an item in the music area and choosing **Edit > Staff Size > Custom Staff Size**.



Custom Staff Size dialog

The **Custom Staff Size** dialog contains the following options:

Default staff size

Displays the default size of staves in the current layout. This size is set on the **Page Setup** page in **Setup > Layout Options**.

The default staff size is expressed as both a point size and in millimeters.

Rastral size

Allows you to select the rastral size on which you want to base your custom staff size.

Scale factor

Sets the custom staff size, expressed as a percentage of the selected rastral size.

New staff size

Displays the new custom staff size for the selected staff as a result of the changes you have made in the dialog.

The new staff size is expressed as both a point size and in millimeters.

RELATED LINKS

[Changing the size of individual staves](#) on page 909

Changing the thickness of staff lines

You can change the thickness of staff lines project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Staves** in the page list.
 3. In the **Staff Lines** section, change the value for **Staff line thickness**.
 4. Click **Apply**, then **Close**.
-

RESULT

The thickness of staff lines project-wide is changed. Increasing the value for **Staff line thickness** makes staff lines thicker, decreasing the value makes staff lines thinner.

Deleting staves

You can delete staves, including extra staves and ossia staves, so they no longer appear in any layout in which the instrument appears. However, this does not automatically delete any remaining notes on those staves, which will still play back even if the staff does not appear.

PROCEDURE

1. In Write mode, select any of the following:
 - An item on the staff you want to delete, at the rhythmic position from which you want to delete it
 - The signpost of the extra staff you want to delete

NOTE

You can only delete one staff at a time.

2. Choose **Edit > Staff > Remove Staff**. You can also choose this option from the context menu.

RESULT

The selected staff is deleted from the selected rhythmic position and a signpost appears indicating the staff change. The staff is deleted until the next staff change signpost that applies to that staff or the end of the flow, whichever comes first.

NOTE

- If you delete an extra staff without deleting the music on it, that music still exists but is not shown, meaning it is included in playback. If you later recreate an extra staff at the same position, the music reappears.
- You cannot delete all staves of an instrument as at least one must always appear. If you do not want to see any staves for a particular instrument in a layout, you can instead hide empty staves in that layout.

EXAMPLE



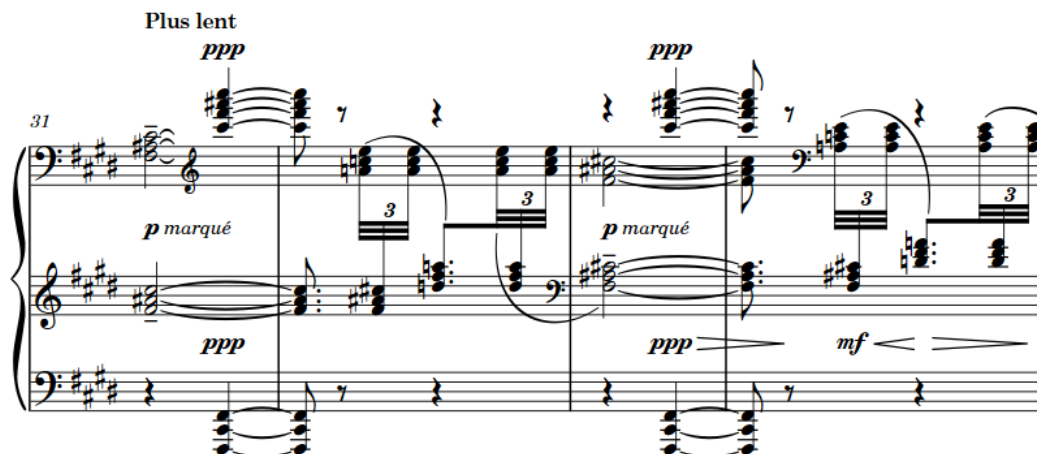
A three-staff piano with the bottom staff deleted in the second bar

RELATED LINKS

[Hiding/Showing empty staves](#) on page 351

Extra staves

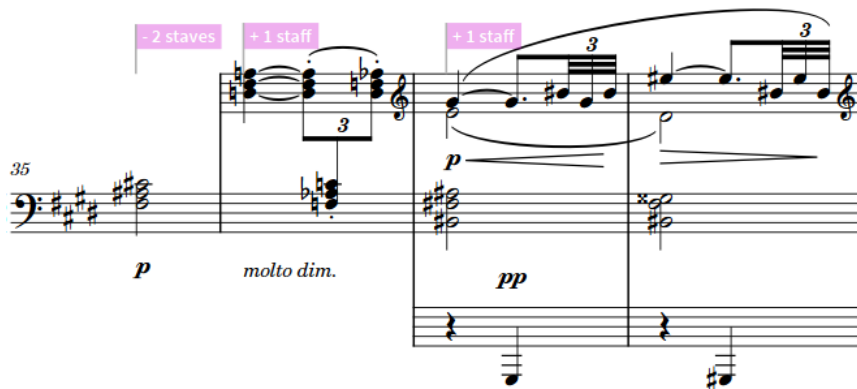
In Dorico Pro, you can add extra staves to any instrument, for example, to make complex contrapuntal music easier to read because it is spread out across more staves than usual for that instrument.



An extract of Debussy's piano prelude "Feuilles mortes" with three staves

When you add extra staves, they exist for the whole flow. However, you can control exactly where they appear, as often extra staves are only needed for short sections. Extra staves can end immediately, and so are followed by white space until the end of the system, or can fill the width of the system, even if they do not contain music for part of the system.

Signposts are automatically added when you add or remove extra staves, indicating the number of staves added or removed at that position. If multiple staff changes happen at the same rhythmic position, they are all shown in the same signpost.



An extract of Debussy's piano prelude "Feuilles mortes" with three staff change signposts

You can use these signposts to change the start/end positions of extra staves, for example, if you want to lengthen or shorten the region where an extra staff is shown. You can also use these signposts to delete extra staves.

Dorico Pro also allows you to change the number of staves in different ways according to the intended purpose of the staves, with dedicated features for each type.

- Extra staves are full-sized staves belonging to a solo player.
- Ossia staves are small staves belonging to any type of player.
- Divisi staves are full-sized staves belonging to a section player.

RELATED LINKS

[Showing extra staves across whole systems](#) on page 916

[Ossia staves](#) on page 917

Adding extra staves

You can add extra staves both above and below instruments that belong to solo players, and show them for both limited sections or for the entire flow. For example, some complex piano music requires three staves rather than two to display the music clearly.

NOTE

- If you want to add extra staves to notate a divisi passage or to show an alternative interpretation, you can use the dedicated divisi and ossia staff features instead.
 - You can add as many staves above/below instruments as you like, but only one at a time. You must also select an item on one of the original staves of the instrument to add additional staves, not on any existing extra staves you have added.
 - You can only add extra staves to instruments held by solo players. You cannot add extra staves to instruments that belong to section players or percussion kits.
-

PROCEDURE

1. In Write mode, select an item on the one of the instrument's original staves and at the rhythmic position where you want to add an extra staff.
2. Add an extra staff in one of the following ways:
 - Choose **Edit > Staff > Add Staff Above**.
 - Choose **Edit > Staff > Add Staff Below**.

TIP

You can also choose these options from the context menu.

3. Optional: Repeat steps 1 and 2 as many times as you like.
-

RESULT

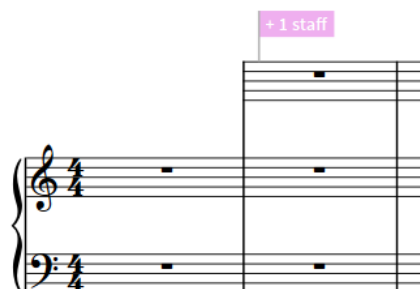
An extra full-sized staff is added either above or below the selected staff, starting at the earliest rhythmic position you selected and lasting until the end of the flow. A signpost appears at its start position, indicating the number of staves that have been added.

TIP

By default, extra staves do not extend to the start/end of systems, meaning they start/stop in the middle of systems.

If you want extra staves to extend to the start/end of systems automatically regardless of their rhythmic start/end positions, you can show extra staves across whole systems in each layout independently.

EXAMPLE



Piano with an extra staff added above the top staff in the second bar

RELATED LINKS

[Ossia staves](#) on page 917

[Adding ossia staves](#) on page 918

[Showing extra staves across whole systems](#) on page 916

Moving the start/end positions of extra staves

You can move the rhythmic start and end positions of extra staves after you have added them. Because you can move the start/end of extra staves independently, you can also lengthen/shorten extra staves.

PROCEDURE

1. In Write mode, select the staff change signposts at the start/end of the extra staves whose start/end position you want to change.

NOTE

When using the mouse, you can only move one staff change signpost rhythmically at a time.

2. Move the selected staff change signposts according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the staff change signpost to the right/left.
 3. Optional: Repeat steps 1 and 2 for the signposts at the other end of the extra staves.
-

RESULT

The rhythmic start/end positions of the selected extra staves are changed.

NOTE

Only one staff change signpost can exist at each rhythmic position. If a staff change signpost passes over another staff change signpost as part of its move, the existing staff change signpost is deleted and replaced by the one being moved. For example, if you move the start signpost of an extra staff over its end signpost, the extra staff now continues up to the next staff change on that staff or the end of the flow, whichever comes first.

You can undo this action, but any staff change signposts deleted in the process are only restored if you moved the staff change signpost using the keyboard.

Showing extra staves across whole systems

By default, extra staves are only shown from where they begin and until where they end. You can change this setting to that extra staves fill the full width of any system on which they appear instead, in each layout independently.

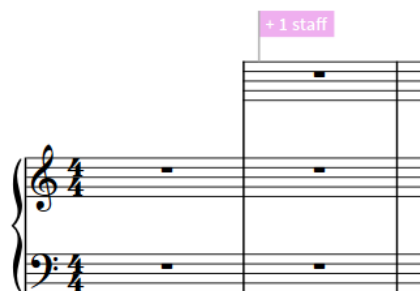
PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to show extra staves across the full width of systems.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Ossias and Extra Staves** section, activate **Show extra staves across full system when starting or stopping**.
 5. Click **Apply**, then **Close**.
-

RESULT

Extra staves in the selected layouts always fill the full width of any system on which they appear. Deactivating the property returns layouts to showing extra staves only for the duration specified by their signposts.

EXAMPLE



Extra staff not shown across the full width of the system



Extra staff shown across the full width of the system

RELATED LINKS

[Extra staves](#) on page 913

Ossia staves

Ossia staves are smaller staves shown above/below the main staff of an instrument. They are used to show alternative phrases that can be played instead of the original phrase, such as suggestions for ornaments, alternative notations from other sources, or an easier version.



The image shows a musical score for Piano and Più facile. The Piano part is in treble clef, 3/8 time, with a dynamic marking of *p*. The Più facile part is in bass clef, 3/8 time. Both parts have ossia staves. The Piano ossia staff is above the main staff, and the Più facile ossia staff is below the main staff. The ossia staves show alternative phrasings for the main staves. The Piano ossia staff has a fermata over the first measure and a repeat sign. The Più facile ossia staff has a fermata over the first measure and a repeat sign. The main staves have fingerings and ornaments. The Più facile main staff has a fermata over the first measure and a repeat sign.

An ossia staff below the left-hand piano staff shows an easier alternative

In Dorico Pro, you can add ossia staves both above and below instrumental staves for specific durations only, and their formatting is handled automatically. Vertical spacing is adjusted around ossia staves automatically.

Signposts are automatically added when you add or remove ossia staves, indicating the number of staves added or removed at that position. If multiple staff changes happen at the same rhythmic position, they are all shown in the same signpost.



The image shows a musical score with two staves. The top staff has a signpost labeled '+ 1 staff' above it, indicating the addition of an ossia staff. The bottom staff has a signpost labeled '- 1 staff' above it, indicating the removal of an ossia staff. The signposts are positioned at the beginning and end of the ossia staff's duration. The music includes triplets and ornaments.

An ossia staff with signposts shown

By default, ossia staves are scaled to two thirds the size of a regular staff. Because this is a scale factor rather than a fixed staff size, ossia staves automatically adjust according to the staff size, which you can set per layout, per section, and per player.

NOTE

Music on ossia staves is not played back.

RELATED LINKS

[Extra staves](#) on page 913

[Changing the size of ossia staves](#) on page 919

[Ossia staff labels](#) on page 922

[Hiding/Showing ossia staves in the preamble](#) on page 920

[Hiding/Showing ossia staves](#) on page 921

[Changing the placement of system objects relative to ossia staves](#) on page 926

Adding ossia staves

You can add ossia staves for solo and section players, both above and below existing staves. For grand-staff instruments, you can add two-staff ossias.

NOTE

- You cannot add ossia staves to percussion kit instruments.
 - Although instruments can show ossias both above and below staves, only one ossia can exist on each side of the staff at a time.
-

PROCEDURE

1. In Write mode, select the range above/below which you want to add an ossia staff.

NOTE

If you want to add a two-staff ossia, you must select both instrumental staves.

2. Add an ossia staff in any of the following ways:
 - Choose **Edit > Staff > Create Ossia Above**.
 - Choose **Edit > Staff > Create Ossia Below**.

TIP

You can also choose these options from the context menu.

RESULT

An ossia is added above/below the selected staff that lasts for the selected range. One signpost appears at the start of the ossia passage, and another appears where the ossia staff ends.

TIP

You can select these signposts and move them to change the start/end positions of ossia staves.

Moving the start/end positions of ossia staves

You can move the rhythmic start and end positions of ossia staves after you have added them. Because you can move the start/end of ossia staves independently, you can also lengthen/shorten ossia staves.

PROCEDURE

1. In Write mode, select the staff change signposts at the start/end of the ossias whose start/end position or length you want to change.

NOTE

When using the mouse, you can only move one staff change signpost rhythmically at a time.

2. Move the selected staff change signposts according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the ossia signpost to the right/left.
 3. Optional: Repeat steps 1 and 2 for the signposts at the other end of the ossia staves.
-

RESULT

The rhythmic start/end positions of the selected ossia staves are changed.

NOTE

Only one ossia signpost can exist at each rhythmic position. If an ossia signpost passes over another ossia signpost as part of its move, the existing ossia signpost is deleted and replaced by the one being moved. For example, if you move the start signpost of an ossia over its end signpost, the ossia now continues up to the next ossia on the staff or the end of the flow, whichever comes first.

You can undo this action, but any ossia signposts deleted in the process are only restored if you moved the ossia signpost using the keyboard.

EXAMPLE

An ossia staff with signposts shown

The same ossia staff after moving the start signpost to the right and end signpost to the left

Changing the size of ossia staves

By default, ossia staves are scaled to two thirds the size of a regular staff. You can change the scale factor of all ossia staves project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Staves** in the page list.
 3. In the **Ossias** section, change the value for **Ossia scale factor**.
 4. Click **Apply**, then **Close**.
-

RESULT

The scale factor of ossia staves relative to the prevailing staff size is changed in all layouts project-wide.

RELATED LINKS

[Staff size](#) on page 907

Changing the padding on ossias that start/end mid-bar

You can change how far staff lines extend beyond the left/right of ossia staves that begin/end in the middle of bars. Padding such ossia staves ensures that notes, accidentals, rhythm dots, and other items are always shown on staff lines.

PROCEDURE

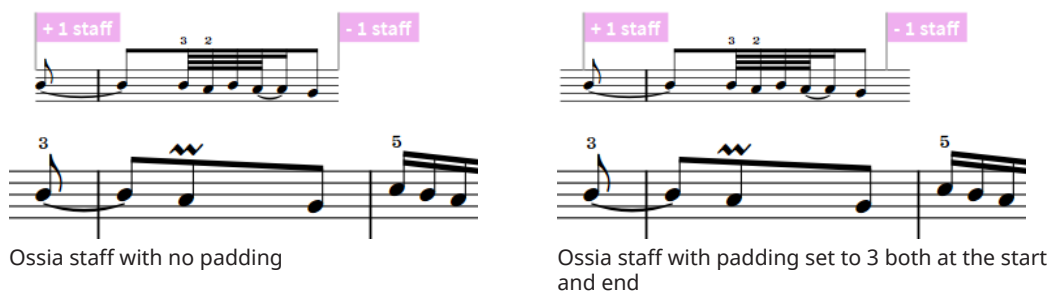
1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.

2. Click **Staves** in the page list.
 3. In the **Ossias** section, change the values for **Extend staff lines at start of ossia** and/or **Extend staff lines at end of ossia**.
 4. Click **Apply**, then **Close**.
-

RESULT

The padding before and/or after ossia staves that start/end mid-bar is changed project-wide.

EXAMPLE



Ossia staff with no padding

Ossia staff with padding set to 3 both at the start and end

Hiding/Showing ossia staves in the preamble

You can include ossia staves in or exclude them from the preamble when they cross system/frame breaks in each layout independently.

Showing ossia staves in the fixed preamble means their clefs and time signatures appear alongside all the regular staves at the start of each system. As this can suggest the ossia staff is an additional instrument, it is common to exclude ossia staves from the fixed preamble.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show ossia staves in the preamble.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Ossias and Extra Staves** section, choose one of the following options for **Ossias crossing a system break**:
 - **Include in preamble**
 - **Exclude from preamble**
 5. Click **Apply**, then **Close**.
-

RESULT

Preamble notations for ossia staves are hidden in the main preamble in the selected layouts when you choose **Exclude from preamble**, and shown when you choose **Include in preamble**.

EXAMPLE

Ossia included in the preamble

Ossia excluded from the preamble

Hiding/Showing ossia staves

By default, ossia staves appear in all layouts. You can change the layouts in which ossia staves are shown, for example, if you want ossia staves to appear in the part layout but not in the full score.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show ossia staves.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Ossias and Extra Staves** section, activate/deactivate **Show ossias**.
 5. Click **Apply**, then **Close**.
-

RESULT

Ossias are shown in the selected layouts when **Show ossias** is activated, and hidden when it is deactivated.

Deleting ossia staves

You can remove ossia staves so they are no longer shown in any layout, but without automatically deleting the music on them.

PROCEDURE

1. In Write mode, select one of the following:
 - The signposts at the start/end of the ossia staves you want to delete
 - An item on each ossia staff you want to delete
 2. Remove the selected ossia staves in one of the following ways:
 - If you selected ossia signposts, press **Backspace** or **Delete**, or choose **Edit > Delete**.
 - If you selected items on ossia staves, choose **Edit > Staff > Remove Staff**. You can also choose this option from the context menu.
-

RESULT

The selected ossia staves are removed and no longer appear in any layouts in which that player appears.

NOTE

If you delete an ossia staff without deleting the music on it, that music still exists but is not shown. If you later recreate an ossia at the same position, the music reappears.

RELATED LINKS

[Hiding/Showing ossia staves](#) on page 921

Barlines on ossia staves

There are different conventions for whether ossias are connected to their corresponding staves with barlines, and if so, which type of barline should be used.

If an ossia both starts and ends at barlines, the following accepted conventions exist amongst different publishers:

- Barlines join the ossia to the main staff at both its start and end
- A barline joins the ossia to the main staff only at its end
- The ossia does not join to the main staff at all

When an ossia is joined to the main staff, some publishers use the same kind of barline as used for the other staves, which is typically a single barline, whereas other publishers use a dashed barline.

Dorico Pro provides options to accommodate all of these conventions in the **Ossias** section of the **Barlines** page in **Engrave > Engraving Options**.

NOTE

When an ossia appears between the main staves of an instrument, for example, below the right-hand staff of a piano, then the ossia is joined with the same barline as the main staves, regardless of your chosen settings on the **Barlines** page in **Engraving Options**.

RELATED LINKS

[Barlines](#) on page 509

[Project-wide engraving options for barlines](#) on page 511

Ossia staff labels

Ossias can show staff labels like normal staves, the only difference being that staff labels on ossia staves are typically drawn within the system to the left of where the ossia starts, even if this is in the middle of a system, rather than behind the initial barline.

Ossia staff labels use the **Ossia Staff Label** font style, which you can edit in the **Edit Font Styles** dialog.



An ossia staff with the default staff label

Ossia staff labels are positioned according to the distances set in the **Ossias** section of the **Staves** page in **Engrave > Engraving Options**. There are separate options for labels before single ossias and braced two-staff ossias.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

Hiding/Showing staff labels on ossia staves

You can hide/show staff labels on ossia staves in each layout independently, and you can show the default staff label or enter a custom ossia label.

The default staff label on ossia staves is "ossia".

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show staff labels on ossia staves.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Ossias and Extra Staves** section, activate/deactivate **Show label before ossia**.
5. Optional: If you activated **Show label before ossia**, choose one of the following staff label options:
 - **Default**
 - **Custom**
6. Optional: If you chose **Custom**, enter the staff label you want into the **Custom ossia label** field.
7. Click **Apply**, then **Close**.

RESULT

Staff labels are hidden/shown in the selected layouts.

RELATED LINKS

[Ossia staff labels](#) on page 922

System dividers

System dividers are used to clarify the separation of different systems when they appear on the same page. They are usually shown as two thick, parallel angled lines positioned to the left of initial barlines.

In Dorico Pro, the outer edges of system dividers are aligned with the corresponding edges of music frames.



A system divider between two systems in a string quartet score

You can show system dividers in different circumstances and change their appearance in each layout independently. You can also change their default insets in all layouts project-wide on the **System Dividers** page in **Engrave > Engraving Options**.

Showing system dividers

You can change the circumstances in which system dividers are shown, including specifying the minimum number of players required to show them, in each layout independently. For example, if you only want to show system dividers between systems that contain different numbers of staves.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to show system dividers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **System Dividers** section, choose one of the following options for **Show system dividers**:
 - **When number of staves differs**
 - **When minimum number of players present**
 5. Optional: If you selected **When minimum number of players present**, change the value for **Minimum number of players**.
 6. Click **Apply**, then **Close**.
-

RESULT

System dividers are shown between systems in all flows in the selected layouts that either contain the minimum number of players you set or contain different numbers of staves.

RELATED LINKS

[Hiding/Showing empty staves](#) on page 351

Changing the length of system dividers

You can change the length of system dividers in each layout independently, for example, if you want to show longer system dividers in layouts that show full staff labels.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to show system dividers.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **System Dividers** section, choose one of the following options for **Appearance**:
 - **Default**
 - **Long**
 - **Extra long**
 5. Click **Apply**, then **Close**.
-

System objects

System objects are items that apply to all staves in the system, but are not necessary to show on every staff. For example, tempo marks and rehearsal marks are important for all players to see, but would cause an orchestral full score to appear very cluttered and hard to read if they were shown on every staff.

In Dorico Pro, the following items are considered system objects:

- Rehearsal marks
- Repeat endings
- Repeat markers
- System text
- Tempo marks
- Time signatures shown above the staff

You can show system objects at multiple positions in each system by showing them above multiple instrument families. For example, you might show them above the woodwind, brass, percussion, and string families. In an orchestral full score, this would ensure system objects are spread out evenly across the page, meaning no staff is very far from these important markings.

NOTE

- System objects are only shown above instrument families that are bracketed or braced together. You can change the bracket grouping on the **Brackets and Braces** page in **Engrave > Engraving Options**.
 - If the size of system object font styles is set to **Staff-relative**, the staff size of the top staff in each instrument family group affects the size of system objects if they are shown above that bracketed group. Font styles that are set to **Absolute** are unaffected by staff size.
-

RELATED LINKS

- [Changing bracket grouping according to ensemble type](#) on page 559
- [Brackets according to ensemble type](#) on page 558
- [Edit Font Styles dialog](#) on page 364

[Brackets and braces](#) on page 555
[Rehearsal marks](#) on page 805
[Tempo marks](#) on page 950
[Repeat endings](#) on page 823
[Large time signatures](#) on page 986
[Inputting text](#) on page 265

Changing the positions of system objects

You can change the positions of system objects in each layout independently by changing the instrument families above which system objects are shown. Multiple items are categorized as system objects, including, rehearsal marks, tempo marks, repeat markers, and repeat endings.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the instrument families above which system objects appear.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **System Objects** section, activate the checkboxes for the instrument families above which you want system objects to appear.
5. Optional: Activate **Additionally show repeat endings below bottom staff**.
6. Click **Apply**, then **Close**.

RESULT

System objects appear above the top staff in each bracketed group you select if a bracketed group for that instrument family is included in the selected layouts. If you activate **Additionally show repeat endings below bottom staff**, repeat endings additionally appear below the bottom staff.

NOTE

System objects are only shown above instrument families that are bracketed or braced together. You can change the bracket grouping on the **Brackets and Braces** page in **Engrave > Engraving Options**.

RELATED LINKS

[System objects](#) on page 925
[Changing bracket grouping according to ensemble type](#) on page 559
[Brackets according to project template categories](#) on page 60

Changing the placement of system objects relative to ossia staves

You can change whether system objects are placed between main staves and their ossia staves or above ossia staves in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the placement of system objects relative to ossia staves.

By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.

3. Click **Staves and Systems** in the page list.
 4. In the **Ossia and Extra Staves** section, choose one of the following options for **Position of system objects relative to ossia above staff**:
 - **Inside ossia**
 - **Outside ossia**
 5. Click **Apply**, then **Close**.
-

System indents

System indents control the distance between the left page margin and the start of systems of music. According to tradition, the first system in part layouts is indented, but in modern use this is not always necessary.



A violin part with the first system indented

In Dorico Pro, system indents automatically adjust to accommodate staff labels. For example, if a system contains a staff label that is significantly longer than the minimum system indent, Dorico Pro increases the indent on that system to ensure the staff label remains legible and is not cut off on the left edge or collides with the music.

You can change both the minimum indent on systems with staff labels and the first system indent in each layout independently. You can also adjust the system indent at both the start and end of individual systems, independently of your per-layout settings.

RELATED LINKS

[Changing the minimum indent for systems with staff labels](#) on page 900

[Changing the start/end position of systems](#) on page 390

Changing the first system indent

By default in Dorico Pro, the first system in part layouts is indented. You can change the indent for the first system in each layout independently.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts whose first system indent you want to change.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, change the value for **Indent first system of flow by**.

5. Click **Apply**, then **Close**.

RESULT

The indent of the first system is changed project-wide in the selected layouts. This applies to all flows.

RELATED LINKS

[System indents](#) on page 927

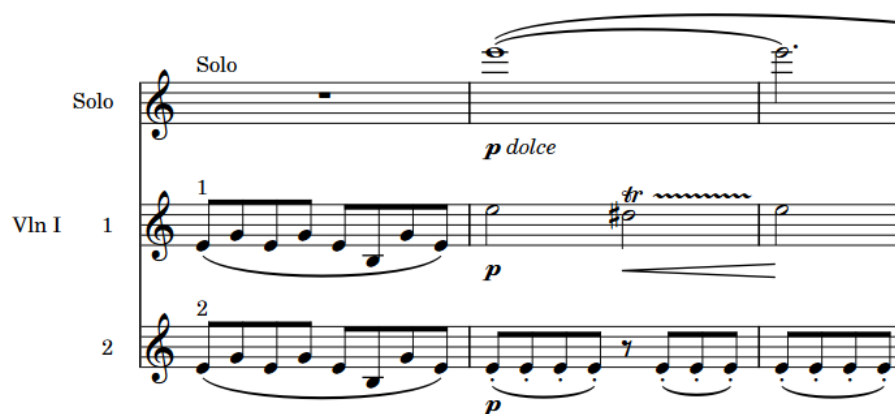
[Changing the minimum indent for systems with staff labels](#) on page 900

[Changing the start/end position of systems](#) on page 390

Divisi

Divisi is when players split, or “divide”, in order to play multiple lines of music, commonly for a limited passage, before returning to play together, or “tutti”. Divisi passages can be notated with all lines on a single staff or across multiple staves.

Divisi is a technique most commonly used in orchestral string writing, as the string section typically contains a large number of players compared to the number of staves. For example, large orchestras commonly have twelve first violins all playing the same part most of the time. Dividing those players into multiple parts allows composers to write more complex contrapuntal music.



An example divisi change in a Violin I part, splitting it into two sections and a solo line

If the division is relatively simple, it is possible to write all parts on the same staff and label the section, with an indication of how many players are required for each line if necessary.

However, when a section is divided into multiple parts that are too different to be clearly written on a single staff, it is necessary to divide them onto multiple staves. In Dorico Pro, you can create divisi changes for specific regions. This allows you not only to divide sections into any number of parts with any number of staves, but also to include solo lines and group staves as required. You can input divisi changes on any staff belonging to a section player.

NOTE

You cannot input divisi changes on staves belonging to solo players. If you want to notate music for a solo player across multiple staves, you can add extra staves instead.

If divisi changes occur partway through a system, Dorico Pro automatically extends the extra staves to the start or end of the system, and duplicates the regions where the section is tutti automatically using unison ranges.

Divisi changes apply to both full score and part layouts.

RELATED LINKS

[Unison ranges](#) on page 934

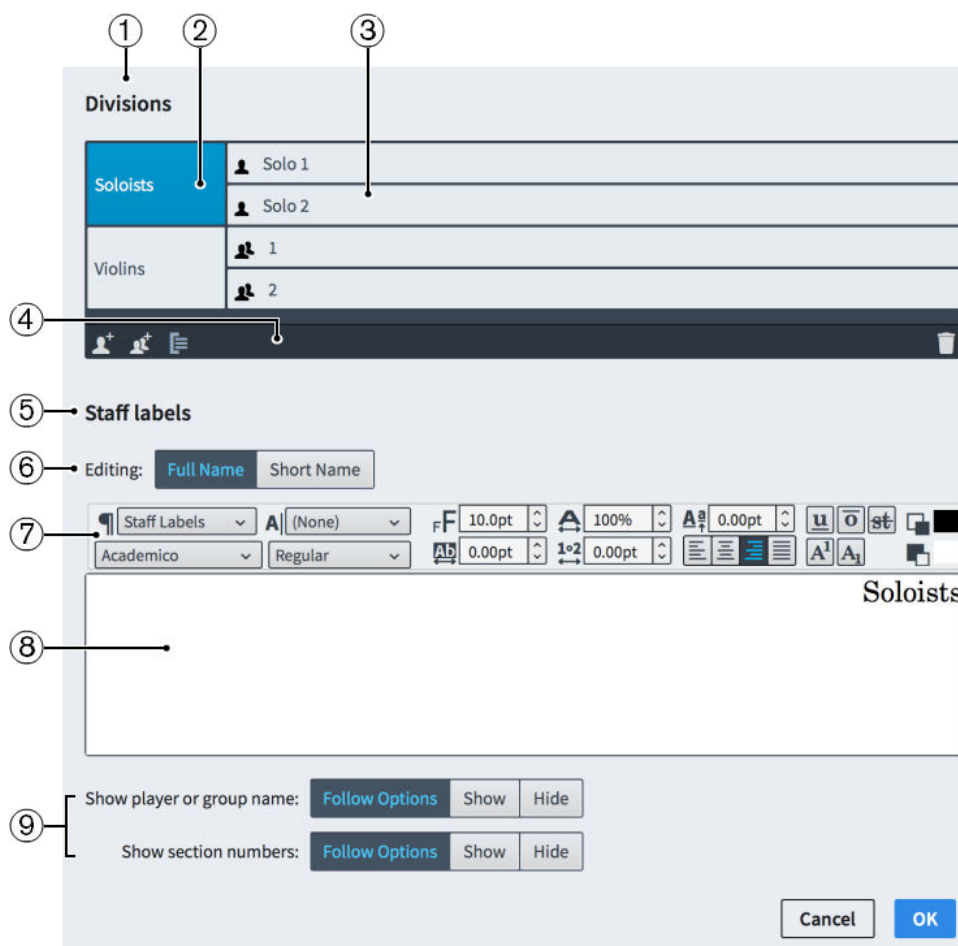
[Extra staves](#) on page 913

Change Divisi dialog

The **Change Divisi** dialog allows you to change how section players are divided and change the appearance and grouping of staff labels.

- You can open the **Change Divisi** dialog by selecting an item on a section player's staff and choosing **Edit > Staff > Change Divisi**.

The **Change Divisi** dialog contains the following sections and options:



1 Divisions section

Shows the current divisions and groups for the selected section player at the selected rhythmic position.

2 Groups

Shows any groups of divisions you have created. Grouping sections together gives you more flexibility in how the staves are labelled.

3 Divisions

Shows each current individual division. Each division corresponds to a separate staff.

4 Action bar

Contains options that allow you to change the number and arrangement of divisions.

- Add Solo Division**



Adds a solo staff to the section. Dorico Pro automatically adds solo staves above section staves.

- **Add Section Division**



Adds a section division to the section. Dorico Pro automatically adds new section divisions below existing sections.

- **Add Group**



Groups the selected solo or section divisions together.

- **Delete Division or Group**



Deletes the selected section divisions or groups.

NOTE

If you delete a divisi without deleting any music on it, that music is no longer shown but still exists. If you later recreate a division of the same type at the same position, the music reappears.

5 **Staff labels section**

Displays the current staff label for the selected division or group and allows you to edit it, independently of your default staff label paragraph style settings.

6 **Editing**

For groups only, this option allows you to switch between editing the **Full Name** and **Short Name** of the selected group.

Full Name is used for **Full** staff labels, **Short Name** is used for **Abbreviated** staff labels.

7 **Text editor options**

Allows you to customize the font, size, and formatting of the staff label of the selected division or group.

8 **Text editing area**

Shows the current staff label for the selected division or group. You can select any part of the staff label and edit it independently of other parts, for example, if you want the numbers to use a different font to the instrument name.

Divisi staff labels are right-aligned by default, so appear at the right edge of the text editing area.

9 **Staff label visibility options**

Allow you to customize when the different parts of divisi staff labels are shown, independently of your per-layout settings.

RELATED LINKS

[Staff label paragraph styles](#) on page 897

[Divisi staff labels](#) on page 937

[Inputting divisi changes](#) on page 932

Inputting divisi changes

You can input divisi changes on any section player staff. Divisi changes can last for any duration and include any number of staves.

NOTE

- You cannot input divisi changes on staves belonging to solo players. If you want to notate music for a solo player across multiple staves, you can add extra staves instead.
 - Divisi changes are shown in both full score and part layouts automatically.
-

PROCEDURE

1. In Write mode, do one of the following:
 - Start note input.
 - Select an item on the staff you want to divide, at the rhythmic position from which you want the divisi to apply.
 2. Choose **Edit > Staff > Change Divisi** to open the **Change Divisi** dialog. You can also choose this option from the context menu.
 3. In the **Change Divisi** dialog, create the divisi you want.
For example, if you want to divide the player into two sections, click **Add Section Division**.
 4. Optional: Edit the staff labels.
 5. Click **OK**.
-

RESULT

The selected staff is divided into the number and types of staves specified in the **Change Divisi** dialog, either from the caret position during note input or from the selected item outside of note input. A signpost is shown at the position of the divisi change.

The divisi change applies from the selected item until the next existing divisi change or the end of the flow, whichever comes first. It is shown in both full score and part layouts.

If the divisi change occurs partway through a system, any extra staves are automatically shown across the whole system. A unison range is created automatically to replicate any tutti material onto all staves added by the divisi change.

NOTE

The number of staves in a system is defined by the first divisi change in the system. If you input a divisi change on a system with an existing divisi change, the number of staves is not changed to reflect the new divisi change until the next system.

AFTER COMPLETING THIS TASK

You can input further divisi changes at any position or end the divisi passage.

RELATED LINKS

[Change Divisi dialog](#) on page 930

[Divisi staff labels](#) on page 937

[Ending divisi passages](#) on page 934

Editing existing divisi changes

You can edit divisi changes after you have input them, for example, if you want to add a solo line in addition to an existing section division.

PROCEDURE

1. Double-click the signpost of the existing divisi change you want to edit to open the **Change Divisi** dialog. You can do this in Setup, Write, and Engrave modes.
2. In the **Change Divisi** dialog, edit the divisi change.
3. Optional: Edit the staff labels.
4. Click **OK**.

RESULT

The selected divisi change is updated.

If you added extra divisions to the divisi change, those staves are added to the region to which the divisi change applies.

If you removed divisions from the divisi change, those staves are removed from the region to which the divisi change applies.

NOTE

Removing divisi sections does not automatically delete music previously on the staff. Even though removed staves no longer appear, any notes left on them still play back. If you later restore the staff, the notes are also restored.

If you do not want to hear notes on divisi staves you have removed, we recommend deleting all music from the staves first.

RELATED LINKS

[Change Divisi dialog](#) on page 930

[Divisi staff labels](#) on page 937

[Large selections](#) on page 274

Moving divisi changes

You can move divisi changes to new rhythmic positions after you have input them. Because the start and end of divisi passages have separate signposts that you can move independently, you can also lengthen/shorten divisi passages.

PROCEDURE

1. In Write mode, select the divisi change signposts you want to move.

NOTE

When using the mouse, you can only move one divisi change signpost at a time.

2. Move the divisi changes according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the divisi change signpost to the right/left.
 3. Optional: Repeat steps 1 and 2 for the signposts at the other end of the divisi passages.
-

RESULT

The selected divisi change signposts are moved to new rhythmic positions. Any music on divisi staves now outside divisi passages is automatically hidden, and any unison ranges before/after divisi passages are automatically updated according to the new start/end positions of the divisi passages.

NOTE

Only one divisi change signpost can exist at each rhythmic position. If a divisi change signpost passes over another divisi change signpost as part of its move, the existing divisi change signpost is deleted and replaced by the divisi change signpost being moved. For example, if you move the start signpost of a divisi change over its tutti restoration, the divisi passage now continues up to the next divisi change on the staff or the end of the flow, whichever comes first.

You can undo this action, but any divisi change signposts deleted in the process are only restored if you moved the divisi change signpost using the keyboard.

Ending divisi passages

You can end divisi passages and return to a unison section on a single staff at any position, including partway through systems.

PROCEDURE

1. In Write mode, select an item on a divisi staff at the rhythmic position where you want the divisi passage to end.
 2. Choose **Edit > Staff > Restore Unison**. You can also choose this option from the context menu.
-

RESULT

A default divisi change with a single unison section is input at the selected position, which ends the previous divisi passage. A signpost is shown at the position of the unison restoration.

The unison restoration applies from the selected item until the next existing divisi change or the end of the flow, whichever comes first. It is shown in both full score and part layouts.

If the unison restoration occurs partway through a system, all staves from the previous divisi change automatically continue until the end of the system. A unison range is created automatically to replicate any unison material onto all staves from the divisi change.

NOTE

The number of staves in a system is defined by the first divisi change in the system. If you input a divisi change on a system with an existing divisi change, the number of staves is not changed to reflect the new divisi change until the next system.

RELATED LINKS

[Unison ranges](#) on page 934

Unison ranges

Unison ranges are passages of tutti music that are replicated automatically onto all staves when divisi passages start/end partway through systems. This ensures there is no ambiguity about what players are expected to play at any point.

To replicate music, Dorico Pro uses the top staff in the section as a source staff, and replicates all notes and notations on that staff onto all staves in the section.

You cannot edit notes in unison ranges independently on each staff. When you select a note or item on a unison range staff, that note or item is selected on all staves in the section. Therefore, editing notes or items in unison ranges simultaneously edits those notes or items on all staves in the section. Similarly, when you input notes onto a staff in a unison range, Dorico Pro also inputs them on all staves in the section.



A note and slur selected simultaneously on all staves in the unison range, with unison range colors shown

NOTE

Replicating music from the source staff to other staves in the section is complex, and there are limitations to what Dorico Pro can calculate, particularly notations that start before divisi changes or end after divisi changes. For example, slurs that start before a divisi change and continue into the divisi change are not replicated in unison ranges. In such cases, we recommend that you move the divisi change to before/after the slur and manually copy unison material if required.

If staves in divisions use different clefs to the main staff at the position of the tutti restoration, Dorico Pro automatically inputs the appropriate clefs.

NOTE

The default spacing of clef changes at the end of divisions can be small, positioning the clef tightly beside the previous notes. In such cases, we recommend that you adjust note spacing at that position.

RELATED LINKS

[Adjusting note spacing at individual rhythmic positions](#) on page 388

Showing unison range colors

You can show unison ranges in a different color so you can identify those passages more easily.

PROCEDURE

- Choose **View > Note and Rest Colors > Divisi Unison Ranges**.

RESULT

Unison range colors are shown when a tick appears beside **Divisi Unison Ranges** in the menu, and hidden when no tick appears.

When unison range colors are shown, notes in unison ranges appear gray. Notes on the top staff remain black, as Dorico Pro notates real notes in tutti sections on the top staff in the section by default.

EXAMPLE



A tutti passage with unison range colors not shown



The same tutti passage with unison range colors shown

RELATED LINKS

[Unison ranges](#) on page 934

Divisi on vocal staves

When vocal staves divide to show different lines on separate staves, it is common to show arrows at the end of the system to emphasize the change, and again at the end of the division to show the staves are rejoining.



ons ses faits glo - ri -



ne - lle, soit é - ter -



ne - lle, soit é - ter -

Divide arrows indicating the staff splits into two on the next system

Divide arrows indicating two staves rejoin into one on the next system

Arrows at the start and end of divisi passages on vocal staves are known in Dorico Pro as divide arrows. Dorico Pro shows these arrows on vocal staves by default, but you can also hide them on all staves project-wide.

Hiding/Showing divide arrows on vocal staves

You can hide/show divide arrows on all vocal staves project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Divisi** in the page list.
 3. Choose one of the following options for **Indicate divisi at end of system on vocal staves**:
 - **Show divide arrows**
 - **Do not show divide arrows**
 4. Click **Apply**, then **Close**.
-

RELATED LINKS

[Divisi on vocal staves](#) on page 936

Divisi staff labels

Staff labels on divisi staves often require further detail than normal staff labels. Therefore, Dorico Pro allows you extra control over the appearance and formatting of staff labels on divisi staves.

By default, staff labels on divisi staves use the same paragraph styles for the formatting of their text as normal staves, and options for staff labels also apply to divisi staves. However, you can also edit each individual staff in divisi changes independently of these settings in the **Change Divisi** dialog, including changing the font, style, and alignment.

Creating custom groups of staves in divisi changes allows you to edit the group staff label independently of each staff. You can edit both the full and abbreviated group staff labels.

Additionally, the **Change Divisi** dialog allows you to hide and show player/group names and section numbers on the staves belonging to that specific divisi change independently of your settings on the **Staves and Systems** page in **Setup > Layout Options**.

NOTE

Editing individual divisi staff labels overrides your paragraph style settings. If you later change the staff label paragraph styles, the edited divisi staff label is not updated.

You can show additional divisi change labels above divisi staves project-wide in each layout independently. By default, divisi change labels display the same information as divisi staff labels, are positioned above each staff, and are aligned with the position of the divisi change. Such labels can be particularly useful when divisi changes occur partway through systems and the precise division of the section would otherwise be ambiguous.

RELATED LINKS

[Change Divisi dialog](#) on page 930

[Staff labels](#) on page 895

[Staff label paragraph styles](#) on page 897

[Editing divisi staff labels individually](#) on page 937

[Changing the text shown in divisi change labels](#) on page 939

Editing divisi staff labels individually

You can edit the staff labels shown at each divisi change individually, for example, if a single division in your project is significantly different to others and needs further clarification. When editing divisi staff labels individually, you can also customize the font of each label in the divisi change.

NOTE

Changes made to staff labels in the **Change Divisi** dialog apply to all layouts. They also affect the text shown in any corresponding divisi change labels above staves, even if you had already changed the text shown in those labels.

PROCEDURE

1. Open the **Change Divisi** dialog in any of the following ways:
 - Double-click the signpost of an existing divisi change whose staff labels you want to change.
 - Input a new divisi change.

2. In the **Divisions** section, select the group or section whose staff label you want to edit.
 3. Optional: If you selected a group, choose one of the following staff labels to edit:
 - **Full Name**
 - **Short Name**
 4. In the **Staff labels** section, edit the selected staff label.
 5. Choose one of the following options for **Show player or group name** and **Show section numbers**:
 - **Follow Options**
 - **Show**
 - **Hide**
 6. Optional: Repeat steps 2 to 5 for other sections or groups in the divisi change.
 7. Click **OK**.
-

RESULT

The appearance, length, and behavior of the staff labels in the divisi change are changed in all applicable layouts.

RELATED LINKS

[Change Divisi dialog](#) on page 930

[Editing existing divisi changes](#) on page 933

Hiding/Showing divisi staff labels

You can hide/show section staff labels before the initial barline on each system in each layout independently, for example, you can show divisi section names in staff labels in part layouts but hide them in full score layouts. This is independent your per-layout settings for showing staff labels on non-divisi staves.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to hide/show divisi staff labels. By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Staves and Systems** in the page list.
4. In the **Staff Labels** section, activate/deactivate the following options:
 - **Show section names on first system**
 - **Show section names on subsequent systems**
5. Optional: Change the length of staff labels using the following options:
 - **Staff labels on first system**
 - **Staff labels on subsequent systems**

NOTE

These options affect the length of instrument and divisi group names on all staves in the selected layouts, not just divisi staves.

-
6. Click **Apply**, then **Close**.
-

RESULT

Section names are shown before the initial barline in the first system of each divisi passage when **Show section names on first system** is activated, and hidden when it is deactivated.

Section names are shown before the initial barlines on all subsequent systems in divisi passages when **Show section names on subsequent systems** is activated, and hidden when it is deactivated.

NOTE

This is independent of either the group name or the instrument name when it is justified between multiple identical instruments.

EXAMPLE

The image shows a musical score with four staves. The top two staves are for Violin I (Vln I) and Violin II (Vln II), both with treble clefs and a whole rest. The bottom two staves are for Viola (Vla), with bass clefs. The first staff of the Viola part contains a triplet of eighth notes, followed by a quarter note and an eighth note. The second staff of the Viola part contains a whole note. Section names are shown above the first staff of the Viola divisi.

Viola divisi staves with section names shown in addition to abbreviated staff labels

The image shows a musical score with four staves. The top two staves are for Violin I (Vln I) and Violin II (Vln II), both with treble clefs and a whole rest. The bottom two staves are for Viola (Vla), with bass clefs. The first staff of the Viola part contains a triplet of eighth notes, followed by a quarter note and an eighth note. The second staff of the Viola part contains a whole note. Section names are shown above the first staff of the Viola divisi, but staff labels are not shown.

Viola divisi section names shown but staff labels not shown

RELATED LINKS

[Divisi staff labels](#) on page 937

[Hiding/Showing divisi change labels above staves](#) on page 940

[Changing the length of staff labels project-wide](#) on page 899

Changing the text shown in divisi change labels

You can show custom text in individual divisi change labels shown above staves. This does not affect the content of staff labels on divisi staves.

PROCEDURE

1. In Engrave mode, select the divisi change labels whose text you want to change.
 2. In the Properties panel, activate **Custom text** in the **Divisi** group.
 3. Enter the text you want into the value field.
 4. Press **Return**.
-

RESULT

The text shown in the selected divisi change labels is changed.

Hiding/Showing divisi change labels above staves

You can hide/show section names above staves in divisi sections project-wide in each layout independently, for example, to clarify which staves correspond to sections in the divisi when divisi changes occur partway through systems, or to show a change in weighting between staves.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to hide/show divisi change labels above staves.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Staves and Systems** in the page list.
 4. In the **Staff Labels** section, activate/deactivate **Show divisi change labels above staves**.
 5. Click **Apply**, then **Close**.
-

RESULT

Section names are shown above staves in the division when **Show divisi change labels above staves** is activated, and hidden when it is deactivated.

NOTE

This does not affect whether divisi section names are shown in staff labels before the initial barline on each system.

EXAMPLE



Divisi section names shown above each staff



Divisi section names hidden above each staff

RELATED LINKS

[Divisi staff labels](#) on page 937

[Hiding/Showing divisi staff labels](#) on page 938

Divisi in playback

All notes on divisi staves play back, regardless of the number of staves. However, because divisi staves belong to a single section player, all staves are played back through the same channel.

This means only a limited differentiation between the different sections in the divisi is possible. It is not currently possible to play a single section player divided into sections through multiple channels; however, this is planned for future versions.

RELATED LINKS

[Play mode](#) on page 400

[Endpoint Setup dialog](#) on page 448

Stems

Stems are vertical lines that extend from noteheads that are a half note or shorter in duration. In combination with notehead design, they allow the duration of each note to be clearly identified.

For example, quarter notes (crotchets) and eighth notes (quavers) both have solid black noteheads and stems, but eighth notes also have flags on their stems. 16th notes have two flags, 32nd notes have three flags, and so on. The length of stems is determined by default in Dorico Pro, so stems automatically adjust their length to accommodate more/fewer flags.



Notes with stems, ranging from a half note (minim) on the left to a 128th note on the right

The stems of notes and chords can point upwards/downwards, depending on the conventions of music engraving and the context of the music. For example, in choral music on two staves, stems in the soprano and tenor lines point up, and stems in the alto and bass lines point down.

RELATED LINKS

[Stem length](#) on page 947

[Changing the default stem direction behavior of notes on the middle line of staves](#) on page 945

Project-wide engraving options for stems

You can find options for the project-wide appearance of stems on the **Notes** page in **Engrave > Engraving Options**.

The options on the **Notes** page allow you to change the design, collision avoidance, length, and thickness of stems. You can also set when stems are stem up or stem down, when stems are shortened in various contexts, and change their default stem direction when on the middle line of the staff.



Default flag design



Straight flag design

There are musical examples for many options to demonstrate how they affect the appearance of your music.

NOTE

Stems with tremolo strokes have specific options, which you can find on the **Tremolos** page in **Engraving Options**. For example, you can change the default distance between tremolo strokes and the tips of stems/different stem flags.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Project-wide engraving options for tremolos](#) on page 1004

Stem direction

In Dorico Pro, the stem direction of notes and chords follows rules that are based on the conventions of music engraving.

Stem direction is determined automatically, but you can manually change the stem direction of individual notes, chords, or of an entire voice. The rules that are applied depend on the following:

- How many voices are active on the staff.
- Whether notes, chords, or beamed groups of notes are affected.
- Whether notes in the same chord or notes in the same beamed group are split between staves.

Single notes in single voices

On a five-line staff with only a single voice active, the default stem direction of a single note is determined by its staff position.

- If the note is above the middle line, its stem points downwards.
- If the note is below the middle line, its stem points upwards.
- If the note is on the middle line of the staff, its stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the note matches them. If the adjacent notes, beam groups, or chords have different stem directions, or if there are no adjacent notes, beam groups, or chords, the note follows the default stem direction.

The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

TIP

You can change the default stem direction for notes and beam groups on the middle lines of staves, and equally balanced chords, in the **Stems** section of the **Notes** page in **Engraving Options**. You can also choose whether they follow your default stem direction or change according to the musical context.



Notes on the middle line are stem up because the fourth note is stem up



Notes on the middle line are stem down because the fourth note is stem down

By default, notes are first input into an up-stem voice, and Dorico Pro treats notes as the only voice on the staff until you input more voices.

Single notes in multiple voices

When there are multiple voices on a staff and all voices contain notes, the stem direction of notes is determined by the stem direction of their voice. Notes in up-stem voices have up stems, and notes in down-stem voices have down stems. This applies even when the stems of notes would normally point in the other direction, based on their position on the staff.

NOTE

The order in which notes appear between different up-stem voices and different down-stem voices depends on their pitch and your settings on the **Voices** page in **Write > Notation Options**. You can also change the voice column index of notes individually.

When there are only notes in one voice for at least a whole bar, Dorico Pro automatically changes the directions of stems so they point in the default direction for their pitch. For example, if a staff contains a single up-stem voice and a single down-stem voice but only the down-stem voice contains notes or rests, then the stems of notes in the down-stem voice may point upwards, depending on the position of the notes on the staff. However, showing rests or implicit rests in empty voices forces the stem direction of notes to follow the stem direction of their voice.



Notes in an up-stem voice shown in blue.



Notes in a down-stem voice shown in purple. The stems point upwards despite being in a down-stem voice because there are no other voices.



When notes in up-stem and down-stem voices are in the same bar, the stem direction is automatically changed.

Chords in single voices

The stem direction for a chord in a single voice is determined by the balance of notes above/below the middle line of the staff.

- If the note furthest from the middle line is above the middle line, the stem of the chord points downwards.
- If the note furthest from the middle line is below the middle line, the stem of the chord points upwards.
- If the chord is equally balanced on either side of the middle line of the staff, the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the chord matches them. If the adjacent notes, beam groups, or chords have different stem directions, equally balanced chords follow the default stem direction.

The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

TIP

You can change the default stem direction for notes and beam groups on the middle lines of staves, and equally balanced chords, in the **Stems** section of the **Notes** page in **Engraving Options**. You can also choose whether they follow your default stem direction or change according to the musical context.

Beam groups in single voices

The stem direction within beam groups is determined by the balance of notes within the beam group that are above/below the middle line of the staff.

- If the majority of notes in the beam group are above the middle line, stems in the beam group point downwards.
- If the majority of notes in the beam group are below the middle line, stems in the beam group point upwards.

- If the beam group contains an equal number of notes either side of the middle line of the staff, the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords. If they both have the same stem direction, the beam group matches them. If the adjacent notes, beam groups, or chords have different stem directions, equally balanced beam groups follow the default stem direction.

The default stem direction depends on the instrument type. By default, the stems of notes on the middle lines of staves point downwards on instrumental staves and upwards on vocal staves, to avoid lyrics.

TIP

You can change the default stem direction for notes and beam groups on the middle lines of staves, and equally balanced chords, in the **Stems** section of the **Notes** page in **Engraving Options**. You can also choose whether they follow your default stem direction or change according to the musical context.

RELATED LINKS

- [Project-wide engraving options for stems](#) on page 942
- [Per-flow notation options for voices](#) on page 1040
- [Voice column index](#) on page 1042
- [Implicit rests in multiple-voice contexts](#) on page 861
- [Note positions in multiple-voice contexts](#) on page 1039
- [Changing the default stem direction of voices](#) on page 946
- [Removing stem direction changes](#) on page 947
- [Notation Options dialog](#) on page 139

Changing the default stem direction behavior of notes on the middle line of staves

The stems of notes on the middle lines of staves can point upwards/downwards. You can change their default direction, and choose whether the stem direction is determined by the stem directions of any adjacent notes, beam groups, or chords, or always uses the default direction.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Notes** in the page list.
 3. In the **Stems** section, choose one of the following options for **Stem direction for notes on the middle line of the staff** in the **Stem Directions** subsection:
 - **Determine by context**
 - **Use default direction**
 4. Optional: Choose one of the following options for **Default stem direction for notes on the middle line of the staff**:
 - **Up**
 - **Down**
 5. Click **Apply**, then **Close**.
-

Changing the stem direction of notes

You can manually change the stem direction of any note.

PROCEDURE

1. Select the notes whose stem direction you want to change. You can do this in Write mode and Engrave mode.
2. Change the stem direction in one of the following ways:
 - Choose **Edit > Stem > Force Stem Up**.
 - Choose **Edit > Stem > Force Stem Down**.

TIP

You can also choose these options from the context menu.

RESULT

The stem direction of the selected notes is changed. The selected notes follow this stem direction, even if you later change their pitch to one that usually requires a different stem direction.

NOTE

This does not change the voice to which notes belong.

EXAMPLE



Stems pointing in the same direction but in different voices



Stems in the same direction and in the same voice

RELATED LINKS

[Changing the voice of existing notes](#) on page 287

Changing the default stem direction of voices

You can change the default stem direction of voices after they have been input, including slash voices.

NOTE

This changes the implicit stem direction of the voice, but may not change the stem direction of all notes in single-voice contexts. Stem directions are automatically changed in Dorico Pro when only one voice contains notes.

PROCEDURE

1. Select a note or chord in the voice whose stem direction you want to change. You can do this in Write mode and Engrave mode.
2. Change the default stem direction of the selected voice in one of the following ways:

- Choose **Edit > Voices > Default Stems Down**.
- Choose **Edit > Voices > Default Stems Up**.

TIP

You can also choose these options from the context menu.

RELATED LINKS

[Stem direction](#) on page 943

Removing stem direction changes

You can remove changes to the directions of stems and revert stems to their default directions.

PROCEDURE

1. Select the notes whose stem direction changes you want to remove. You can do this in Write mode and Engrave mode.
 2. Choose **Edit > Stem > Remove Forced Stem**. You can also choose this option from the context menu.
-

RESULT

All stem direction changes are removed from the selected notes. The stems of the selected notes revert to their default directions.

NOTE

Alternatively, you can change the stem direction to the opposite direction. However, notes with forced stems do not change automatically if, for example, you later change their pitch.

RELATED LINKS

[Changing the stem direction of notes](#) on page 946

Stem length

The length of stems is determined by default in Dorico Pro, according to accepted standards for the appearance of stems of notes at different positions on staves.

You can change the default settings for the length of all stems project-wide and you can lengthen/shorten individual stems in Engrave mode.

RELATED LINKS

[Project-wide engraving options for stems](#) on page 942

Lengthening/Shortening stems

You can lengthen/shorten the stems of individual notes, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the stems you want to lengthen/shorten.
2. Lengthen/Shorten the stems in any of the following ways:
 - Press **Alt-Up Arrow** to make stems longer.
 - Press **Alt-Down Arrow** to make stems shorter.

NOTE

If you want to lengthen/shorten stems by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag the square handles at the end of the stems upwards/downwards.
-

RESULT

The selected stems are lengthened/shortened, regardless of their stem direction. For example, selecting a down-stem note and pressing **Alt-Up Arrow** lengthens it by moving the end of the stem downwards, away from the notehead.

TIP

- **Stem adj.** in the **Notes and Rests** group of the Properties panel is activated when you lengthen/shorten stems.

You can also use this property to lengthen/shorten stems by changing the value in the value field. However, the **Notes and Rests** group is only available when the notehead is selected rather than the stem.

Deactivating the property resets the selected stems to their default length.
 - You can change the default length of all stems project-wide in the **Stems** section of the **Notes** page in **Engrave > Engraving Options**. There are different options for stems in different contexts.
-

Hiding stems

You can hide the stems on notes with any notehead design.

Dorico Pro allows you to hide stems rather than using a stemless notehead design as this allows you to hide the stem of any notehead design.

PROCEDURE

1. In Engrave mode, select the notes whose stems you want to hide.
 2. In the Properties panel, activate **Hide stem** in the **Notes and Rests** group.
-

RESULT

The stems and any applicable flags of the selected notes are hidden. The stems remain completely hidden even if you later change the pitch of the notes.

If the selected notes are part of beamed groups, the beams continue to be shown as normal, unless you have hidden the stems of all notes in the beamed group, which also hides the beam.

RELATED LINKS

[Lengthening/Shortening stems](#) on page 947

Split stems for altered unisons

Split stems can be used in chords containing altered unisons. They show the main body of the chord as usual, but with a stem branch coming off the main stem that connects noteheads in altered unisons to the chord.



Split stem chord

Split stems are also known as “cherry stalks” or “trees”. This is the default presentation of altered unisons in Dorico Pro.

You can choose to show altered unisons with split stems or with single stems in each flow independently on the **Accidentals** page in **Write > Notation Options**.

NOTE

If a chord contains notes a second interval apart and one of those notes has an altered unison, it is always shown with a split stem, regardless of your setting. This is to ensure clarity in clusters.

RELATED LINKS

[Altered unisons](#) on page 491

[Changing how altered unisons appear](#) on page 492

Tempo marks

Tempo marks indicate how fast music is played, often with a combination of text instructions and metronome marks. They are also known as “tempo changes”, “tempo indications”, and “tempo markings”.

A tempo mark can show text instructions, a metronome mark, or a combination of the two.

The image shows three examples of tempo marks in musical notation. The first example is a single staff with a treble clef and a 3/4 time signature, containing a whole rest. Above the staff is the text "Assez animé" followed by a quarter note symbol and "= 144". The second example is a single staff with a treble clef and a 3/4 time signature, containing a series of chords. Above the staff is the text "Assez animé" followed by a quarter note symbol and "= 144". The third example is a single staff with a treble clef and a 3/4 time signature, containing a series of chords. Below the staff is the text "pp très rythmé, léger".

Tempo mark containing text instruction in French and metronome mark

Text instructions are traditionally expressed in Italian, such as *largo* or *allegretto*, but other languages, such as English, French, and German, have become widely accepted. The text instruction can express simply how fast the music is played, but can also suggest its character. For example, *grave* means slow but also solemn and sad, and *vivo* means fast but also lively and sprightly.

Metronome marks show the speed of the music, indicated in beats per minute, or “bpm”. Metronome marks can show a fixed bpm or indicate a range of possible or acceptable values.

Gradual tempo changes indicate a change in tempo over a defined period of time. They can appear differently, for example, with/without a continuation line or with the text split into syllables and spread across their duration.

Tempo marks use a bold font with a large point size, so they are clearly noticeable on the page. They do not usually use an italic font.

In Dorico Pro, tempo marks are categorized as system objects. Therefore, tempo marks follow your per-layout settings for the visibility and positioning of system objects, which you can change on the **Staves and Systems** page in **Setup > Layout Options**.

If you do not input any tempo marks into your project, the default playback tempo is 120 bpm.

RELATED LINKS

[Metronome marks](#) on page 960

[Gradual tempo changes](#) on page 962

[Tempo mark components](#) on page 958

[Input methods for tempo marks](#) on page 196

[Positions of tempo marks](#) on page 953

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

Types of tempo marks

Dorico Pro groups tempo marks into different types according to their function and effect on the music.

The following tempo changes are available in the Tempo panel in Write mode, but you can also input all types of tempo changes using the tempo popover.

Absolute Tempo Change

Indicates a defined change in tempo, and is often shown with a metronome mark.

Gradual Tempo Change

Indicates a change in tempo over a defined period of time, such as *rallentando* (slowing down) or *accelerando* (speeding up).

Relative Tempo Change

Indicates a change in tempo that is relative to the previous tempo, such as *mosso* (movement).

Relative tempo changes often include modifiers that qualify the change, such as *poco meno mosso* (a little less movement), and are not defined by a metronome mark. You can, however, set a relative metronome mark change as a percentage of the previous metronome mark.

Reset Tempo

Returns the tempo to the previous tempo, such as *A tempo*, or a previously defined tempo, such as *Tempo primo* (return to the first tempo of the piece).

Tempo Equation

Indicates a change in the beat unit on which metronome marks are based. For example, if the time signature changes from 3/4 to 6/8, a tempo equation of ♩=♩ indicates the same metronome mark value that applied to the quarter note beat unit in 3/4 now applies to the dotted quarter note beat unit in 6/8.

RELATED LINKS

[Tempo panel](#) on page 198

[Gradual tempo changes](#) on page 962

[Input methods for tempo marks](#) on page 196

[Tempo popover](#) on page 196

Text in tempo marks

All types of tempo marks use text, but gradual tempo changes use a different font style to absolute, relative, and reset tempo changes. Tempo marks can have both full and abbreviated text, allowing you to show the one most appropriate in each layout.

This allows you to customize the same tempo mark depending on the requirements of the different types of layouts in your project. For example, if a tempo mark extends off the page in a part layout, you can show the abbreviated text for that tempo mark instead without affecting the length of the tempo mark in the full score layout.

You can change the appearance of fonts used for items in Dorico Pro that use text, but are not text objects or text frames, in the **Edit Font Styles** dialog.

The following fonts are used for tempo marks:

- **Gradual Tempo Text Font:** Used for gradual tempo changes, such as *rallentando*.

- **Immediate Tempo Text Font:** Used for absolute tempo changes, such as “Adagio”.
- **Metronome Music Text Font:** Used for the note value glyphs in metronome marks, such as ♩.
- **Metronome Text Font:** Used for the equation and numbers in metronome marks, such as “=76”.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

Changing tempo text

You can change the text of existing tempo marks individually.

PROCEDURE

1. Select the tempo marks whose tempo text you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, enter the tempo text you want into the **Text** field in the **Tempo** group.
3. Press **Return**.

RESULT

The tempo text for the selected tempo marks is changed.

TIP

You can also change the tempo text by opening the tempo popover and changing the entry.

RELATED LINKS

[Tempo popover](#) on page 196

[Changing existing items](#) on page 280

Showing abbreviated tempo text

You can show individual tempo marks with custom abbreviated text, for example, if a long tempo mark extends beyond the page boundary in some part layouts but the abbreviated version fits within the boundary.

PROCEDURE

1. In the music area, open the layout in which you want to show abbreviated tempo text. You can do this in Write mode and Engrave mode.
2. Select the tempo marks you want to show with abbreviated text.
3. In the Properties panel, activate **Abbreviation** in the **Tempo** group.
4. Enter the text you want into the value field.
5. Activate **Abbreviate** in the **Tempo** group.
6. Activate the corresponding checkbox.

RESULT

The selected tempo marks appear with abbreviated text. This does not affect the appearance of the same tempo mark in layouts that show full tempo text as properties in Dorico Pro are layout-specific.

Abbreviated tempo text is shown when **Abbreviation** is activated and **Abbreviate** is deactivated, or when **Abbreviation** and both **Abbreviate** and its corresponding checkbox are all activated.

This allows you to switch between showing abbreviated/full text in different layouts without deleting your abbreviated text from the **Abbreviation** value field.

RELATED LINKS

[Tempo mark components](#) on page 958

Adding poco a poco text to gradual tempo changes

You can add *poco a poco* text immediately after individual gradual tempo changes.

NOTE

You can also enter **poco a poco** directly into the tempo popover. However, this means the entry is treated as a tempo mark rather than a gradual tempo change, which changes the properties you can use on it.

PROCEDURE

1. Select the gradual tempo changes to which you want to add *poco a poco* text. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Poco a poco** in the **Tempo** group.
-

RESULT

Poco a poco text is shown immediately after the text in the selected gradual tempo changes.

Deactivating **Poco a poco (little by little)** removes *poco a poco* text from the selected gradual tempo changes.

EXAMPLE



Rallentando with poco a poco text

Positions of tempo marks

Tempo marks are placed above the staff and at the same positions as other system objects, because they usually apply to all staves. They are placed above notations such as slurs, ties, and octave lines, and are often aligned with rehearsal marks to ensure clear readability.

Tempo marks should be aligned with either a time signature or the notehead/rest at the rhythmic position to which they apply. For example, if there is a notehead with an accidental at the rhythmic position of a tempo mark, it is convention to align the tempo mark with the accidental.

If a repeat mark occurs mid-system and is not treated as a barline, tempo marks are aligned with the repeat mark.

When a tempo mark includes both text and a metronome mark, the text appears first, followed by the metronome mark. When horizontal space is tight, the metronome mark can be positioned below the tempo mark text.

You can move tempo marks to different rhythmic positions in Write mode. They are positioned by default according to your settings in **Engraving Options**.

You can move tempo marks graphically in Engrave mode, but this does not change the rhythmic positions to which they are attached.

You can change the default positions and appearance of tempo marks project-wide on the **Tempo** page in **Engrave > Engraving Options**.

Tempo marks are categorized as system objects in Dorico Pro, which you can show above the first bracket of selected instrument families. You can change the instrument families above which system objects appear in each layout independently, for example, if you want tempo marks to appear at multiple vertical positions in each system in the full score only.

RELATED LINKS

[Project-wide engraving options for tempo marks](#) on page 958

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

Moving tempo marks rhythmically

You can move tempo marks to new rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the tempo marks you want to move.

NOTE

When using the mouse, you can only move one tempo mark at a time.

2. Move the tempo marks according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Click and drag the tempo mark to the right/left.

RESULT

The selected tempo marks are moved according to the current rhythmic grid value.

NOTE

Only one tempo mark can exist at each rhythmic position. If a tempo mark in your selection passes over another tempo mark as part of its move, the existing tempo mark is deleted.

You can undo this action, but any tempo marks deleted in the process are only restored if you moved the tempo mark using the keyboard.

RELATED LINKS

[Lengthening/Shortening gradual tempo changes](#) on page 956

Moving tempo marks graphically

You can move tempo marks graphically without changing the rhythmic positions to which they apply. You can move the start/end of gradual tempo changes independently, meaning you can also lengthen/shorten individual gradual tempo changes graphically.

NOTE

You cannot change the angle of gradual tempo changes.

PROCEDURE

1. In Engrave mode, select one of the following that you want to move:
 - Tempo marks
 - Individual start/end handles of gradual tempo changes

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the tempo marks or handles in any of the following ways:
 - Press **Alt-Right Arrow** to move tempo marks or handles to the right.
 - Press **Alt-Left Arrow** to move tempo marks or handles to the left.
 - Press **Alt-Up Arrow** to move tempo marks or whole gradual tempo changes upwards.
 - Press **Alt-Down Arrow** to move tempo marks or whole gradual tempo changes downwards.

NOTE

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected tempo marks, gradual tempo changes, or handles are moved to new graphical positions.

TIP

The following properties in the **Tempo** group of the Properties panel are activated automatically when you move tempo marks in the corresponding directions:

- **Start offset** moves tempo marks and the start of gradual tempo changes. **X** moves them horizontally, **Y** moves them vertically.
- **End X** moves the end of gradual tempo changes horizontally.

For example, if you move a whole gradual tempo change, both handles are moved so both properties are activated. You can also use these properties to move tempo marks and lengthen/shorten gradual tempo changes graphically by changing the values in the value fields. However, you cannot move absolute tempo marks and gradual tempo changes graphically at the same time when using these properties.

Deactivating the properties resets the selected tempo marks and gradual tempo changes to their default positions.

RELATED LINKS

[Lengthening/Shortening gradual tempo changes](#) on page 956

Changing the end position of gradual tempo changes relative to barlines

You can change how the ends of individual gradual tempo change continuations are positioned relative to barlines, independently of your project-wide setting.

NOTE

This does not affect the appearance of gradual tempo changes with the text-only style.

PROCEDURE

1. In Engrave mode, select the gradual tempo changes whose end position relative to barlines you want to change.
 2. In the Properties panel, activate **Barline interaction** in the **Tempo** group.
 3. Choose one of the following options:
 - **Stop before**
 - **Continue**
-

RESULT

The end position of the selected gradual tempo changes is changed.

NOTE

You can change the default position of all gradual tempo change ends project-wide in the **Horizontal Position** section of the **Tempo** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for tempo marks](#) on page 958
[Changing the style of gradual tempo changes](#) on page 963

Lengthening/Shortening gradual tempo changes

You can lengthen/shorten gradual tempo changes rhythmically after they have been input.

PROCEDURE

1. In Write mode, select the gradual tempo changes you want to lengthen/shorten.

NOTE

When using the mouse, you can only lengthen/shorten one gradual tempo change at a time.

2. Lengthen/Shorten the gradual tempo changes in any of the following ways:
 - To lengthen them by the current rhythmic grid value, press **Shift-Alt-Right Arrow**.
 - To shorten them by the current rhythmic grid value, press **Shift-Alt-Left Arrow**.

NOTE

Key commands lengthen/shorten items by moving their end only.

- Click and drag the circular handle at the start/end to the right/left.
-

RESULT

The selected gradual tempo changes are lengthened/shortened according to the current rhythmic grid value.

TIP

You can adjust the graphical positions of gradual tempo changes in Engrave mode.

RELATED LINKS

[Moving tempo marks graphically](#) on page 954

Hiding/Showing tempo marks

You can hide/show the different components in individual tempo marks without changing the speed of playback. This affects their appearance in all layouts.

PROCEDURE

1. In Write mode or Engrave mode, select one of the following:
 - The tempo marks you want to hide
 - The signposts of tempo mark you want to show
 2. In the Properties panel, activate/deactivate the following properties in the **Tempo** group:
 - **Text shown**
 - **Metronome mark shown**
-

RESULT

When at least one of the properties is activated, the selected tempo marks are shown. They display components according to the properties that are activated.

When neither property is activated, the selected tempo marks are hidden. Signposts are shown at their positions as they still affect the speed of playback.

RELATED LINKS

[Tempo mark components](#) on page 958

[Changing the type and appearance of absolute tempo changes](#) on page 959

Deleting tempo marks

You can delete tempo marks, which resets the tempo for playback to the previous tempo mark or the default tempo if there is no previous tempo mark.

PROCEDURE

1. In Write mode, select the tempo marks or the signposts of tempo marks you want to delete.
 2. Press **Backspace** or **Delete**.
-

RESULT

The selected tempo marks are deleted and no longer appear in the music area or in the **Time** track in Play mode. The tempo in playback follows the previous tempo mark, or the default tempo of 120 bpm if there is no previous tempo mark.

If you delete a tempo mark that truncated the line of a gradual tempo change, the line of the gradual tempo change automatically extends to its full length or until the next existing tempo mark.

Project-wide engraving options for tempo marks

You can find options for the project-wide appearance of tempo marks on the **Tempo** page in **Engrave > Engraving Options**.

The options on the **Tempo** page allow you to change the appearance of tempo marks, and their position relative to the staff, time signature changes, and other items. You can also change the appearance, thickness, and position of continuation lines relative to barlines for gradual tempo changes.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Tempo mark components

Tempo mark components include text, metronome marks, parentheses, and approximate indications. Tempo marks can include different components in different combinations, depending on your preference or the requirements for different projects.

You can change which components are shown in different types of tempo marks project-wide, and you can change which components are shown in individual tempo marks.

You can activate properties that correspond to the different components in the **Tempo** group of the Properties panel. You can activate one or more of the following tempo mark properties in any combination for individual absolute tempo changes:

Text shown

Shows text when activated, and no text when deactivated.

Metronome mark shown

Shows metronome marks when activated, and no metronome marks when deactivated.

Parenthesized

Shows metronome marks in parentheses when activated, and without parentheses when deactivated. This also applies to approximate metronome marks.

Is approximate

Shows metronome marks as approximate when activated, and absolute when deactivated.

Approximate appearance

Allows you to choose how approximate metronome marks appear, for example, **c.** or **circa**.

NOTE

This property applies specifically to approximate tempo marks, and is only available when **Is approximate** is activated.

Show equals sign

An equals sign is shown when the property and its corresponding checkbox are both activated. No equals sign is shown when the checkbox is deactivated.

NOTE

This property applies specifically to approximate tempo marks, and is only available when **Is approximate** is activated.

Components for gradual tempo changes

The following components only apply to gradual tempo changes, such as *rallentando*:

Poco a poco

Poco a poco text is shown immediately after gradual tempo change text when the checkbox beside the property is activated.

RELATED LINKS

[Project-wide engraving options for tempo marks](#) on page 958

[Adding poco a poco text to gradual tempo changes](#) on page 953

Changing the type and appearance of absolute tempo changes

You can change which components are included in individual absolute tempo changes, and how they appear.

PROCEDURE

1. Select the absolute tempo marks whose components you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate any of the following properties in the **Tempo** group:
 - **Text shown**
 - **Metronome mark shown**
 - **Parenthesized**
 - **Is approximate**
 - **Approximate appearance** (only available if **Is approximate** is activated)
 - **Show equals sign** (only available if **Is approximate** is activated)
-

RESULT

The selected tempo marks are changed to include the corresponding components.

NOTE

If you have activated none of these properties, no tempo mark is shown in the music. Instead, a signpost indicates the position of the tempo mark.

RELATED LINKS

[Tempo mark components](#) on page 958

Metronome marks

Tempo marks often include a metronome mark value. Metronome marks show the speed of the music, indicated in beats per minute, or “bpm”. For example, a bpm of 60 means one beat per second. The more beats per minute, the faster the music.

♩ = 176–184

A metronome mark shown as a range

Metronome marks can be precise, such as ♩ = 176, or can indicate an acceptable range, such as ♩ = 152-176. They can also be shown in parentheses, which is useful if the metronome mark is intended as a guide rather than a fixed value.

The beat unit used in metronome marks commonly relates to the meter, for example, the metronome mark beat unit is often a quarter note in 4/4 but a dotted quarter note in 6/8.

In Dorico Pro, metronome marks can appear as an individual value or as a range. Depending on the type and appearance of metronome marks, the bpm value can indicate a fixed tempo or an approximate tempo.

RELATED LINKS

[Input methods for tempo marks](#) on page 196

[Changing the type and appearance of absolute tempo changes](#) on page 959

Changing the metronome mark value

You can change the metronome mark value of individual absolute tempo marks after they have been input, including changing the beat unit.

NOTE

These steps do not apply to gradual tempo changes or reset/relative tempo marks.

PROCEDURE

1. Select the absolute tempo marks whose metronome mark values you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, change the value for **Tempo (bpm)** in the **Tempo** group.
 3. Press **Return**.
 4. Choose the appropriate note duration and rhythm dot, if applicable, for **Beat unit**.
-

RESULT

The metronome mark value and beat unit is changed for the selected absolute tempo marks. This affects the tempo of playback, even if no metronome mark component is shown for those tempo marks.

NOTE

- If you enter decimals, Dorico Pro automatically rounds them up/down to the nearest whole number for the metronome mark. However, your specified value still affects the tempo in playback.
 - You can also change the metronome mark value by opening the tempo popover and changing the entry.
-

RELATED LINKS

[Tempo popover](#) on page 196

[Changing existing items](#) on page 280

Showing the metronome mark value as a range

You can show the metronome mark value of individual absolute tempo marks as a range. For example, you can use this to indicate that any speed within the given range is musically appropriate for the piece.

NOTE

These steps do not apply to gradual tempo changes or reset/relative tempo marks.

PROCEDURE

1. Select the absolute tempo marks whose metronome mark values you want to show as a range. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Tempo range (bpm)** in the **Tempo** group.
 3. Change the value in the value field.
-

RESULT

The tempo range, expressed as beats per minute, is changed for the selected tempo marks. By default, metronome mark ranges use a dash separator.

NOTE

- Depending on the values set for each property, both **Tempo (bpm)** and **Tempo range (bpm)** can be the minimum/maximum tempo in the range, as Dorico Pro automatically arranges metronome mark ranges with the lower value first. However, the metronome mark used for playback is always **Tempo (bpm)**, regardless of whether that is the higher/lower value in the range.
 - You can change the default separator used for metronome mark ranges in the **Absolute Changes** section of the **Tempo** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Changing the metronome mark value](#) on page 960

Changing the relative tempo mark value

You can change the tempo of individual relative tempo marks, expressed as a percentage of the previous tempo mark.

PROCEDURE

1. Select the relative tempo marks whose value you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, change the value for **Relative %** in the **Tempo** group.
 3. Press **Return**.
-

RESULT

The tempo at the relative tempo mark is changed. For example, if the previous tempo was 100 bpm, and you change a relative tempo mark to 90, the new tempo is 90% of 100 bpm, which is 90 bpm.

Changing the final tempo at the end of gradual tempo changes

You can change how significantly gradual tempo changes affect the tempo in playback, expressed as a percentage of the tempo at the start of the gradual tempo change.

PROCEDURE

1. Select the gradual tempo changes whose final tempo you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, change the value for **Final tempo %** in the **Tempo** group.
 3. Press **Return**.
-

RESULT

The final tempo at the end of the selected gradual tempo changes is changed.

For example, if you change the value to 20 on a gradual tempo change that started at 100 bpm, the final tempo is 20% of 100 bpm, which is 20 bpm. If you change the value to 120 on a gradual tempo change that started at 100 bpm, the final tempo is 120% of 100 bpm, which is 120 bpm.

Gradual tempo changes

Gradual tempo changes indicate a change in tempo over a defined period of time, such as *rallentando*, which indicates slowing down, and *accelerando*, which indicates speeding up.

rallentando.....

Rallentando with dashed line

Gradual tempo changes are considered a type of tempo mark in Dorico Pro, meaning you can input them in the same ways as for tempo marks.

Because gradual tempo changes have a different metronome mark value at the start/end, you can change the final tempo at the end of individual gradual tempo changes.

In Dorico Pro, you can show gradual tempo changes with different styles.

- **rit.:** Shows gradual tempo changes with text only.
- **rit...:** Shows gradual tempo changes with text and a continuation line.
- **rit-e-nu-to:** Shows gradual tempo changes with the text hyphenated and separated into syllables.

You can also show gradual tempo changes with different line styles.

You can change both the style and line style of all gradual tempo changes project-wide on the **Tempo** page in **Engrave > Engraving Options**, and change the style and line style of individual gradual tempo changes independently of your project-wide settings.

RELATED LINKS

[Input methods for tempo marks](#) on page 196

[Changing the line style of gradual tempo changes](#) on page 963

[Project-wide engraving options for tempo marks](#) on page 958

[Changing the final tempo at the end of gradual tempo changes](#) on page 962

Changing the style of gradual tempo changes

You can change the style of individual gradual tempo changes, independently of your project-wide setting. Gradual tempo changes can appear as text only with no continuation line, text with a continuation line, or with the word spread across their duration.

PROCEDURE

1. Select the gradual tempo changes whose style you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Gradual style** in the **Tempo** group.
3. Select one of the following options from the menu:
 - **rit.**
 - **rit...**
 - **rit-e-nu-to**

RESULT

The style of the selected gradual tempo changes is changed.

TIP

You can change the style of all gradual tempo changes project-wide on the **Tempo** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for tempo marks](#) on page 958

Changing the line style of gradual tempo changes

You can change the line style of individual gradual tempo changes whose style includes a continuation line, independently of your project-wide settings.

NOTE

This does not affect the appearance of gradual tempo changes with the text-only style.

PROCEDURE

1. Select the gradual tempo changes whose line style you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Line style** in the **Tempo** group.
3. Select one of the following options from the menu:
 - **Solid**
 - **Dotted**
 - **Dashed**

RESULT

The line style of the selected gradual tempo changes is changed.

TIP

You can change the default line style of all gradual tempo changes project-wide on the **Tempo** page in **Engrave > Engraving Options**.

Lengthening/Shortening gaps and dashes in gradual tempo changes

You can change the length of dashes and the gaps between dashes in individual gradual tempo changes, independently of your project-wide settings.

NOTE

This only applies to gradual tempo changes with dashed lines.

PROCEDURE

1. In Engrave mode, select the gradual tempo changes with dashed lines whose dash length you want to change.
 2. In the Properties panel, activate the following properties, individually or together, in the **Tempo** group:
 - **Line dash length**
 - **Line dash gap**
 3. Change the values in the value fields.
-

RESULT

Increasing **Line dash length** makes dashes in gradual tempo changes longer, decreasing the value makes dashes shorter.

Increasing **Line dash gap** makes gaps between dashes in gradual tempo change lines longer, decreasing the value makes gaps shorter.

TIP

You can find options that change the default dash length for all dashed gradual tempo changes project-wide by clicking **Advanced Options** in the **Gradual Changes** section of the **Tempo** page in **Engrave > Engraving Options**.

For example, you can change the default dash length for dashed lines following text and dashed lines between hyphenated text separately.

RELATED LINKS

[Project-wide engraving options for tempo marks](#) on page 958

Changing the line thickness of gradual tempo changes

You can change the thickness of dashed and solid lines in gradual tempo changes individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the gradual tempo changes whose thickness you want to change.
 2. In the Properties panel, activate **Line thickness** in the **Tempo** group.
 3. Change the value in the value field.
-

RESULT

Increasing the value makes dashed and solid lines thicker, decreasing the value makes dashed and solid lines thinner.

TIP

You can change the thickness of all dashed and solid gradual tempo change lines project-wide on the **Tempo** page in **Engrave > Engraving Options**.

Tempo equations

Tempo equations indicate a change in the beat unit on which metronome marks are based. They are often used to maintain a consistent pulse across multiple different meters.

For example, if the time signature changes from 6/8 to 3/4, a tempo equation of $\text{♩} = \text{♩}$ indicates the same metronome mark value that applied to the dotted quarter note beat unit in 6/8 now applies to the quarter note beat unit in 3/4.



RELATED LINKS

[Input methods for tempo marks](#) on page 196

Ties

A tie is a curved line that joins two notes of the same pitch. When multiple, adjacent notes are joined with a sequence of ties, that is known as a tie chain.

Each sequence of tie chains, whether they join two notes together or ten notes together, represents a single note with the duration of all the tied notes combined. A performer plays the notes as one note, without re-striking, re-blowing, or re-bowing the note at any point within the rhythmic duration of the tie chain.



A tie chain across several bars on the bottom piano staff

In Dorico Pro, most ties are created automatically. Rhythms are notated according to the prevailing beat grouping, which is normally set by the time signature. Therefore, notes that cannot be notated using a single duration are automatically drawn as separate tied notes.

RELATED LINKS

[Tie chains](#) on page 968

[Inputting notes](#) on page 149

[Forcing the duration of notes/rests](#) on page 158

[Inputting ties](#) on page 166

[Splitting tie chains](#) on page 972

[Time signatures](#) on page 981

[Input methods for time signatures](#) on page 190

[Beams according to time signatures](#) on page 539

General placement conventions for ties

Ties join two noteheads together, meaning the ends of ties are positioned close to the noteheads to which they are attached.

Ties are curved lines, and the direction of the curve usually follows the stem direction of the notes. If notes are stem-up, ties curve downwards, and if notes are stem-down, ties curve upwards.

NOTE

If there are multiple voices on the staff, all ties in up-stem voices curve upwards and all ties in down-stem voices curve downwards.

There are two main conventions for the placement of the ends of ties relative to noteheads. One convention is to place the ends of ties outside noteheads, meaning above or below them, ideally

positioned at the horizontal center of noteheads. The other convention is to place the ends of ties between noteheads, ideally positioned at the vertical center of noteheads.



A tie outside noteheads



A tie between noteheads

For both conventions, Dorico Pro automatically positions the ends of ties as close as possible to the notes that they join while avoiding collisions with other notations.

The vertical placement of ties is also automatically adjusted in Dorico Pro so that neither of the end points of ties, nor the apex of tie curves, starts or ends on a staff line. If this happens, it can cause the shape of ties to appear distorted, which makes the music harder to read.

To avoid this, Dorico Pro changes the vertical position of ties slightly, and makes small changes to the curvature of ties. These changes are small, but the placement of ties is subtly different depending on the position of notes relative to staff lines.



A tie outside noteheads



When transposed one note down, the tie appears with a steeper curve to avoid reaching its apex on the staff line.



A tie between noteheads, with the ends slightly above the vertical center of the noteheads to avoid the tie appearing too close to the staff line at its ends or apex.



When transposed up, the ends of the tie are now positioned at the vertical center of the notehead, as there is no staff line with which it could collide.

Wherever possible, clef changes should not be positioned in the middle of tie chains. Changing the clef changes the position of the tied note on the staff, which could easily cause a performer to misread the tie as a slur and play two different notes.

Ties can look distorted when they are very short, and can be overlooked. You can change the minimum length of ties when they are within a single system on the **Ties** page in **Engrave > Engraving Options**.

NOTE

Slurs must not be confused with ties, which look superficially similar, but instead join notes of the same pitch to indicate that they are played as a single note. In that sense, ties are part of rhythmic notation, while slurs are considered articulation.

RELATED LINKS

[Ties vs. slurs](#) on page 968

[Inputting ties](#) on page 166

[Project-wide engraving options for ties](#) on page 968

[General placement conventions for clefs](#) on page 581

Project-wide engraving options for ties

You can find options for the project-wide appearance, position, and placement of ties on the **Ties** page in **Engrave > Engraving Options**.

The options on the **Ties** page allow you to change the default curvature direction, shape, and appearance of ties, and the position of ties relative to noteheads and other ties in tie chains.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Tie chains

When notes are longer than the maximum duration of a bar in the prevailing time signature, ties can extend over multiple bars. In Dorico Pro, such ties are known as tie chains.

For example, if you input a note that is longer than a whole note in a 4/4 time signature, it becomes two or more notes tied together in a chain across multiple bars.

In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains. Any changes you make to tie chains in Write mode only affect the first tie in the chain.

NOTE

Dorico Pro automatically adjusts tied notes in the following circumstances:

- If you change the pitch of a tied note, which includes adding or removing an accidental, the change is applied to all the notes that are tied together.
- If you add or remove an articulation, the articulation is added only to the start or the end of the tie chain as appropriate, for example, to the last note for an articulation of duration or to the first note for an articulation of force.

Articulations relative to tie chains

The positions of articulations relative to tie chains depend on the type of articulation. You can change the positions of articulations relative to tie chains project-wide and for individual tie chains.

RELATED LINKS

[Positions of articulations](#) on page 499

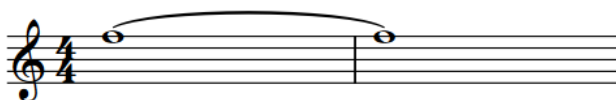
[Changing the positions of articulations on tied notes](#) on page 500

Ties vs. slurs

Ties and slurs look superficially similar but differ in meaning.

Ties indicate that a note should not be re-struck. They are used to join notes of the same pitch together. For example, ties can be used to extend notes across multiple bars. Although multiple notes can be included in a single tie chain, each tie in the chain only joins one notehead to the next notehead on the staff.

Ties can be used in conjunction with articulation, but articulation on tied notes only affects the attack at the start of the tie chain and the release at the end of the tie chain.



Two long notes tied together

Slurs indicate articulation, such as bowing or breathing, and normally group notes of different pitches together. Slurs can join two noteheads together with any number of pitches in between. They often indicate the shaping of phrases.

Slurs can also be used in conjunction with articulation. Unlike ties, articulation within slurs can affect the sound throughout the phrase. For example, staccato articulations on repeated notes of the same pitch within a slur indicate that notes should be played on a stringed instrument using the same bow direction, but stopping the bow between each note.



A phrase with notes grouped together by slurs

Non-standard ties

Usually, ties join two notes of the same pitch in the same staff. However, ties can also cross system breaks and frame breaks, clef changes, or time signature changes. These types of ties are all positioned automatically in Dorico Pro.

Ties can also join non-adjacent notes, notes in different voices, or notes in different staves together. In Dorico Pro, you must input these types of ties manually.

Ties across system breaks and page breaks

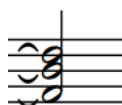
The ends of ties that cross system breaks are automatically positioned in Dorico Pro.

Their vertical position remains the same, as both ends are centered on the noteheads to which they are attached. Their behavior also remains the same, as selecting one note in a tie chain that crosses a system or frame break in Write mode selects all notes in the tie chain.

The horizontal space for the parts of ties shown to the left of notes at the start of new systems/frames may not be sufficient to show an ideal tie curve. In such cases, you can use **Note Spacing** in Engrave mode to adjust the spacing of individual notes at the start of systems/frames to give ties more space.



The start of a tie chain before a system break



The end of the same tie chain after a system break

Tied notes with accidentals across system breaks and page breaks

The ends of ties for tied notes with accidentals across system breaks and page breaks are also automatically positioned.

As tied notes in Dorico Pro are treated as one note notated to fit in time signatures, cautionary accidentals at the start of new systems/frames are not shown by default. If you choose to show accidentals beside notes in tie chains at the start of new systems/frames, the position of the notes is changed to accommodate accidentals. However, this automatic position might not leave sufficient room for the part of the tie to the left of the notes to be shown with an ideal curve.



The start of a tie chain before a system break



The end of the same tie chain, with a cautionary accidental in parentheses



The end of the same tie chain after adjusting note spacing to give the tie beside the accidental more space

Ties across time signature changes

Ties are automatically positioned between notes that span a time signature change. If ties crossing a time signature change are joining notes in the middle of a staff, the top or bottom of time signature changes are partially obscured by the ties. However, as ties are curved, the time signature is unlikely to be completely obscured.

Ties across clef changes

Ties are automatically positioned between notes that span a change of clef. Ties across clef changes are not horizontal, as the same pitch is positioned differently in each clef.

The result of cross-clef ties is likely to be visually and musically confusing, as they can be misread as slurs. In this case, consider moving the change of clef to before/after the tied note.

Ties between non-adjacent notes

You can input ties between notes of the same pitch that are not directly beside each other. This can be useful when inputting ties between multiple notes before a chord, for example.



Notes leading into a chord notated as a series of tied chords



Notes leading into a chord notated as tied non-adjacent notes



Multiple grace notes before a chord with ties between non-adjacent notes

Ties between different voices

You can input ties between notes of the same pitch in different voices.

Ties between notes on different staves

You can input ties between notes of the same pitch in different staves.

Laissez vibrer ties

Laissez vibrer ties are short ties that indicate a note should be left to ring, and should not be stopped. They extend a small amount to the right of the note to which they apply, but do not connect to another note.

You can add *laissez vibrer* ties to any note. You can edit *laissez vibrer* ties in Engrave mode like any other tie.

RELATED LINKS

[Hiding/Showing *laissez vibrer* ties](#) on page 971

[Hiding/Showing or parenthesizing accidentals](#) on page 489

[Note spacing](#) on page 381

[Adjusting note spacing at individual rhythmic positions](#) on page 388

Inputting ties between non-adjacent notes

You can manually input ties between notes of the same pitch that are not rhythmically adjacent. You can also input ties between notes of the same pitch in different voices and different staves.

For example, you might have input a melody across multiple voices in order to accommodate passing notes, but want to tie two notes together even though they are in different voices. Similarly, you might have written multiple notes before a chord that are all held down and want to reduce the number of tied notes.

PROCEDURE

1. In Write mode, select the two notes that you want to tie together.

NOTE

The second note must be the same pitch as the first note. If the second note is a different pitch to the first note, no tie is input.

2. Press T.

RESULT

A tie is input between the two selected notes.

EXAMPLE



Spread chord with ties between all adjacent notes



Spread chord with ties between non-adjacent notes

RELATED LINKS

[Inputting ties](#) on page 166

Hiding/Showing *laissez vibrer* ties

You can add *laissez vibrer* ties to any note.

PROCEDURE

1. Select the notes on which you want to add a *laissez vibrer* tie. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Laissez vibrer tie** in the **Notes and Rests** group.

RESULT

Laissez vibrer ties are added to the selected notes when the property is activated, and are removed when the property is deactivated. *Laissez vibrer* ties are positioned automatically.

TIP

- You can edit the length and shape of *laissez vibrer* ties individually like any other tie in Engrave mode.

- You can assign a key command for **Toggle Laissez Vibrer Tie** on the **Key Commands** page in **Preferences**.
-

RELATED LINKS

[Changing the position/shape of ties](#) on page 973

Deleting ties

You can delete ties without deleting the notes to which they are attached.

NOTE

Deleting ties from tie chains removes all ties in the tie chain. If you want to remove single ties from longer tie chains, you can split the tie chain.

PROCEDURE

1. In Write mode, select the tie chains from which you want to delete all ties.
 2. Press **U**.
-

RESULT

All ties in the selected tie chains are deleted. Notes previously in the tie chain remain at their rhythmic positions.

RELATED LINKS

[Changing the duration of notes](#) on page 157

Splitting tie chains

You can split tie chains at specified positions, for example, if you want to change the pitch halfway through a tie chain or delete individual ties within tie chains. This does not remove any other ties in the tie chain.

PROCEDURE

1. In Write mode, select the tie chain you want to split.
 2. Press **Shift-N** or **Return** to start note input.
 3. Move the caret to where you want to split the tie chain.
 - Press **Right Arrow/Left Arrow** to move the caret to the right/left, according to the current rhythmic grid value.
 - Press **Space** to advance the caret to the next rhythmic position, according to the note value currently selected.
 4. Press **U** to split the tie chain.
 5. Optional: If you want to split the same tie chain in multiple places, move the caret to the next rhythmic position where you want to split the tie chain.
 6. Press **Esc** or **Return** to stop note input.
-

RESULT

The tie chain is split at the caret position.

RELATED LINKS

[Moving the caret manually](#) on page 148

Changing the position/shape of ties

Each tie has five square handles that you can move separately to change the appearance and shape of individual ties.



A tie in Engrave mode

NOTE

Moving one handle can also affect the positions of other handles.

For example, moving the left endpoint moves the start of a tie, but the rest of the handles stay in their existing positions. However, moving the left control point also causes the tie height handle to move. This gives you fine control over the shape of ties while ensuring that the end result remains curved and smooth.

PROCEDURE

1. In Engrave mode, select the tie handles you want to move in any of the following ways:
 - Select a whole tie and press **Tab** to cycle through its handles until the one you want to move is selected.
 - Click the handle you want to move.
 - **Ctrl/Cmd**-click individual handles on multiple ties.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.

RESULT

The positions of the selected tie handles are changed, which changes the shape of the corresponding ties.

TIP

The following properties in the **Ties** group of the Properties panel are activated automatically when you move the corresponding tie handles:

- **Start offset** moves the left endpoints of ties. **X** moves them horizontally, **Y** moves them vertically.

- **End offset** moves the right endpoints of ties. **X** moves them horizontally, **Y** moves them vertically.
- **Start handle offset** moves the left control points of ties. **X** moves them horizontally, **Y** moves them vertically.
- **End handle offset** moves the right control points of ties. **X** moves them horizontally, **Y** moves them vertically.

You can also use these properties to change the shape of individual ties by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected ties to their default positions.

Tie shoulder offset

Tie shoulders affect the angles of the curves of ties as they taper towards an endpoint, as the tapered ends often approach noteheads at a steeper angle than that of a tie's arch.

Increasing the shoulder offset makes the onset of the curve shallower, whereas decreasing the shoulder offset makes the onset steeper.

You can change the project-wide settings for the offset of tie shoulders by changing the values for the following options, which you can find by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave > Engraving Options**:

- **Offset shoulders by fraction of half length of short tie**
- **Offset shoulders by fraction of half length of long tie**



A long tie with default shoulder offset (**1/10**)



A long tie with increased shoulder offset (**7/8**)

You can also change the shoulder offset of ties individually by moving their control point handles in Engrave mode.

RELATED LINKS

[Project-wide engraving options for ties](#) on page 968

Changing the shoulder offset of ties

You can change the shoulder offset of individual ties, independently of your project-wide settings. For example, you might want to change the shoulder offset of a few very short or very long ties in your project to improve their shape.

PROCEDURE

1. In Engrave mode, select one of the control point handles on each of the ties whose shoulders you want to adjust in any of the following ways:
 - Select a whole tie and press **Tab** to cycle through the handles until the one you want to move is selected.
 - Click the handle you want to move.
 - **Ctrl/Cmd**-click individual handles on multiple ties.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
3. Optional: Repeat steps 1 and 2 for the other control point handle on the ties whose shoulders you want to adjust.
-

RESULT

Moving tie offset handles further apart reduces the shoulder offset, while moving them closer together increases the shoulder offset.

TIP

The following properties in the **Ties** group of the Properties panel are activated automatically when you move the corresponding tie handles:

- **Start handle offset** moves the left control points of ties. **X** moves them horizontally, **Y** moves them vertically.
- **End handle offset** moves the right control points of ties. **X** moves them horizontally, **Y** moves them vertically.

You can also use these properties to change the shoulder offset of individual ties by changing the values in the value fields.

Deactivating the properties resets the corresponding handles on the selected ties to their default positions.

TIP

You can find options controlling the default shoulder offset of all ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave > Engraving Options**. There are separate settings for short ties and long ties.

RELATED LINKS

[Project-wide engraving options for ties](#) on page 968

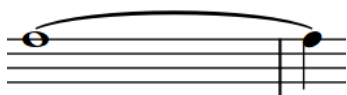
Tie height

You can change values for the heights of all short ties and long ties project-wide. You can also change the height of individual ties in Engrave mode.

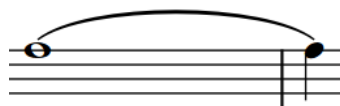
You can find options that change the project-wide heights of ties by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave > Engraving Options**. There are separate settings for short ties and long ties.

Increasing the height of ties makes them extend further from the staff, which gives them a rounder shape and means they take up more vertical space. Ties generally do not need to be as curved as slurs, as they join notes of the same pitch instead of arching over or above a range of pitches.

Where vertical space is tight, a balance must be found between how curved ties are and ensuring staves do not overlap.



A long tie with default height



A long tie with increased height

Changing the height of ties

You can change the height of individual ties, independently of your project-wide settings, for example, to save vertical space.

PROCEDURE

1. In Engrave mode, select the tie height (middle) handle of the ties whose height you want to change.

TIP

You can show handles on all items, not just selected items, by choosing **Engrave > Show Handles > Always**. This can make it easier to select individual handles on multiple items.

2. Move the handles in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.

RESULT

The height of the selected ties is changed.

NOTE

- To maintain a visually pleasing and symmetrical curve when changing the height of ties manually, you may need to move tie height handles to the right/left by a small amount, as well as upwards/downwards.
- Moving tie height handles to the right/left affects the shape of the whole tie.
- You can find options controlling the default height of all ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave > Engraving Options**. There are separate settings for short ties and long ties.

RELATED LINKS

[Project-wide engraving options for ties](#) on page 968

Tie styles

There are different styles of ties available in Dorico Pro, which you can use to indicate different meanings.

Solid

This is the default style for ties. Ties appear as tapered solid lines: thinner at the ends and thicker in the middle.



Dashed

Ties appear as tapered dashed lines. Can be used to denote optional or suggested ties, for example, in vocal music where some verses have more syllables than others and therefore require more notes.



Dotted

Ties appear as dotted lines. The dots are the same size and the same distance apart over the whole length of the tie. Can also be used to denote optional or suggested ties.



Half-dashed start

The first halves of ties appear as dashed lines, the second halves as solid lines. Used to denote that a tie was written incompletely in the source in critical editions.



Half-dashed end

The first halves of ties appear as solid lines, the second halves as dashed lines. Used to denote that a tie was written incompletely in the source in critical editions.



Editorial

Ties appear as solid black lines, but with a smaller vertical line intersecting them exactly halfway along their length. Used to show that ties were added by the editor and were not present in the source.



Changing the style of ties

You can change the style of individual ties. By default, all ties are solid.

NOTE

You can only select whole tie chains in Write mode. Any changes to tie chains in Write mode only affect the first tie in the tie chain.

PROCEDURE

1. Select the ties whose style you want to change. You can do this in Write mode and Engrave mode.

NOTE

- In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.
- Any changes to tie chains in Write mode only affect the first tie in the chain.

2. In the Properties panel, activate **Style** in the **Ties** group.
3. Select one of the following options from the menu:
 - **Solid**
 - **Dashed**
 - **Dotted**
 - **Half-dashed start**
 - **Half-dashed end**
 - **Editorial**

RESULT

The style of the selected ties is changed.

TIP

You can set the precise parameters of each of these options project-wide on the **Ties** page in **Engrave > Engraving Options**. For example, you can change the length and width of the stroke in **Editorial** ties, the diameter of dots and length of dashes, and the sizes of the gaps between dots and dashes.

Changing the size of dashes/dots in ties

You can change the size of the dashes/dots in dashed/dotted ties individually, independently of your project-wide settings.

NOTE

This only applies to dashed/dotted ties.

PROCEDURE

1. Select the dashed/dotted ties whose dash/dot size you want to change. You can do this in Write mode and Engrave mode.

NOTE

- In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.
- Any changes to tie chains in Write mode only affect the first tie in the chain.

2. In the Properties panel, activate **Dash/dot** in the **Ties** group.
 3. Change the value in the value field.
-

RESULT

Increasing the value makes dashes/dots bigger, decreasing the value makes dashes/dots smaller.

TIP

You can find options to set the default size of dashes/dots in all dashed/dotted ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave > Engraving Options**.

You can also change the thickness of all tie styles on this page. However, you cannot change the thickness of ties individually.

RELATED LINKS

[Project-wide engraving options for ties](#) on page 968

Changing the size of gaps in dashed/dotted ties

You can change the size of the gaps in dashed/dotted ties individually, independently of your project-wide settings.

PROCEDURE

1. In Engrave mode, select the individual dashed/dotted ties whose gap size you want to change.
 2. In the Properties panel, activate **Gap** in the **Ties** group.
 3. Change the value in the value field.
-

RESULT

Increasing the value makes the gaps between dashes/dots larger. Decreasing the value makes the gaps between dashes/dots smaller.

TIP

You can find options to set the default size of the gaps between dashes/dots in all dashed/dotted ties project-wide by clicking **Advanced Options** in the **Design** section of the **Ties** page in **Engrave > Engraving Options**.

Tie curvature direction

The direction of tie curvatures is determined by the stem direction of the notes/chords at each end of the tie, the number of notes in chords at each end, and the number of voices on the staff.

Tied single notes in single-voice contexts

If a single voice is active and a tie joins two single notes, tie curvature direction is determined by the stem directions of the notes at either end of the tie.

- If the stem directions match, the tie curves away from the notes and is positioned on the notehead side.
- If the stem directions differ, the tie curves upwards by default.

Tied chords in single-voice contexts

If a tie joins two chords, the direction of the ties is determined by the number of tied notes in the chords.

- For an even number, the ties are equally split between curving towards the notehead end and curving towards the stem end.
- For an uneven number, the majority of ties curve towards the notehead end.

Tied notes in multiple-voice contexts

Ties are positioned on the stem side and are curved as follows:

- For up-stem voices, ties curve upwards.
- For down-stem voices, ties curve downwards.
- For overlapping/interlocking pitches in multiple voices, the rules for tied chords in single-voice contexts apply. All notes in all voices are treated as if they belong to a single voice.

TIP

You can change the default tie curvature direction of ties between notes with different stem directions on the **Ties** page in **Engrave > Engraving Options**.

You can also change the curvature direction of ties individually.

Changing the curvature direction of ties

You can change the curvature direction of ties individually, including individual ties within tie chains.

PROCEDURE

1. Select the ties whose curvature direction you want to change. You can do this in Write mode and Engrave mode.

NOTE

- In Write mode, you can only select whole tie chains. In Engrave mode, you can select individual ties within tie chains.
 - Any changes to tie chains in Write mode only affect the first tie in the chain.
-

2. In the Properties panel, activate **Direction** in the **Ties** group.
3. Choose one of the following options:

- **Up**



- **Down**



RESULT

The curvature direction of the selected ties is changed.

TIP

You can adjust the precise shapes of tie chains, and of each tie within tie chains, in Engrave mode using the square handles on each tie.

RELATED LINKS

[Changing the position/shape of ties](#) on page 973

Time signatures

Time signatures indicate the meter of music, and apply to all bars from where they first appear until a subsequent change of time signature. Meter describes the rhythmic pulse of music, and its division into beats and bars.

A time signature is made up of two parts, and can be described using the same mathematical terms used for fractions: numerator on top, and denominator underneath.

The numerator specifies the number of multiples of the duration specified by the denominator. The denominator doubles for every halving of the beat duration: 1 is a whole note (breve), 2 is a half note (minim), 4 is a quarter note (crotchet) and so on. Depending on your settings for time signature style, numerators and denominators can have different appearances.

For example, a 4/4 time signature tells you the bar is made up of four beats, and each of those beats is a quarter note in length. A time signature of 4/2 contains four half notes in each bar, and 4/8 contains four eighth notes (quavers) in each bar. Both 3/4 and 6/8 contain six eighth notes, but it is understood that a 3/4 bar contains three quarter note beats, whereas a 6/8 bar contains two dotted quarter note beats.

Bars are rhythmic groups, divided according to the time signature, and they make following the music much more practical. Notes are beamed differently in different time signatures, again to make the meter clear and easily readable.

By default, time signatures apply to all staves. However, there are some situations, such as in polymetric music, that require some parts to have their own time signature, independently of the rest of the ensemble. You can input time signatures that apply to all staves or only apply to single staves in Dorico Pro.

NOTE

Beat lengths are fixed across all staves in your project, regardless of the time signature. For example, if you have a 2/4 time signature on one staff and a 6/8 time signature on another staff, then one quarter note in the 2/4 time signature equals one quarter note in the 6/8 time signature, meaning their barlines do not match.

RELATED LINKS

[Time signature styles](#) on page 988

[Input methods for time signatures](#) on page 190

[Conventions for beam grouping according to meter](#) on page 553

[Time Signatures \(Meter\) panel](#) on page 192

[Creating custom beat groupings for meters](#) on page 554

General conventions for time signatures

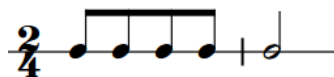
Over time, the placement and appearance of time signatures has developed conventions to ensure that their notation is always understood. Dorico Pro follows these conventions automatically.

Appearance conventions

Time signatures should fill the height of the staff. There is a risk they may not be noticed if they are smaller. The size of time signatures on staves with fewer than five lines should be the same as that of a time signature on an equivalent five-line staff.



Time signature on a five-line staff



Time signature on a single-line staff

Time signatures use a unique, heavy font that ensures they stand out against staff lines, and are instantly recognizable.

For some types of music, particularly film music, it is typical to use large time signatures that span several staves.

Placement conventions

Time signatures should be shown at the start of a piece and at the start of subsequent movements, if applicable, even if the music carries straight on. They should be placed after clefs and key signatures.

If time signature changes occur during a piece or movement, it should be placed immediately after a barline. Dorico Pro automatically inserts a barline before a time signature change if it occurs in the middle of an existing bar. However, Dorico Pro does not override your existing music by inserting extra beats, unless Insert mode is activated.



A 4/4 time signature interrupting a 5/8 time signature, input without Insert mode activated, leaving only three eighth note beats in the second 5/8 bar.

A time signature applies until the next time signature change, the end of the movement, or the end of a piece, whichever comes first.

RELATED LINKS

[Inputting notes in Insert mode](#) on page 153

[Large time signatures](#) on page 986

[Changing the size and position of time signatures](#) on page 988

[Time signature font styles](#) on page 997

Project-wide engraving options for time signatures

You can find options for the project-wide appearance of time signatures, including large time signatures, on the **Time Signatures** page in **Engrave > Engraving Options**.

The options on this page allow you to change the appearance of all numerators and denominators project-wide, the appearance of meterless time signatures, and how

interchangeable time signatures are separated. You can also change the default gaps in time signatures, for example, the gap between interchangeable time signatures and their separator. Separate sections control the appearance and position of large time signatures when shown once per bracketed group and when shown at system object positions, including how collisions with other items at the same position as time signatures shown at system object positions are avoided.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Time signatures](#) on page 981

[Large time signatures](#) on page 986

Project-wide spacing gaps for time signatures

You can change the minimum gaps between objects, including time signatures, on the **Spacing Gaps** page in **Engrave > Engraving Options**.

The following minimum values relate to time signatures:

- **Gap after barline before clef, key or time signature**
- **Gap after key signature**
- **Gap after mid-system time signature**

Other values may have an effect on the position of time signatures; however, they also affect other objects.

Types of time signatures

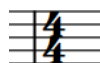
There are different types of time signatures, which can indicate various and complex meters.

NOTE

Dorico Pro uses the definitions for meters commonly used in American English. These definitions, such as which meters are considered simple and compound, might be different in other languages.

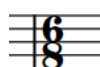
Simple

In simple time signatures, each beat is divided by two into equal groups of notes. Simple time signatures can be simple duple, such as 2/4, simple triple, such as 3/4, or simple quadruple, such as 4/4.



Compound

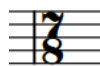
In compound time signatures, each beat is divided by three into equal groups of dotted notes, such as 6/8, which contains two dotted quarter note beats, or 9/4, which contains three dotted half note beats.



Irregular

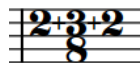
Irregular time signatures, such as 5/4 or 7/8, cannot be subdivided into equal beat groups. Because the numerator is odd, these time signatures must be divided into

unequal beat groups. For example, 5/4 usually contains a half note beat and a dotted half note beat.



Additive

Additive time signatures show how bars are subdivided into beat groups. You can show beat group numerators for any type of time signature. For example, instead of 7/8, you could show an additive time signature of 2+3+2/8.



Alternating

An alternating time signature indicates a regular pattern that switches every bar between two or more time signatures, in the indicated order. For example, for a phrase with twelve eighth notes that needs to be emphasized 3+3+2+2+2, an alternating time signature of 6/8+3/4 might allow the two meters to be read more clearly.



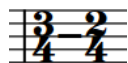
Interchangeable

An interchangeable time signature indicates a set of time signatures at the start of the piece that can be used during the piece, such as 3/4-2/4. Unlike alternating time signatures, interchangeable time signatures do not require a fixed pattern; any bar in the piece can follow any of the time signatures in the set without having to restate the time signature.

NOTE

You must manually input the appropriate time signatures where you want them, as unlike alternating time signatures, there is no fixed pattern for them. Any time signatures you input that are specified in the interchangeable time signature are hidden automatically.

They can have different separator styles in Dorico Pro, which you can set project-wide and also change individually.



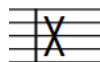
Aggregate

An aggregate time signature shows two or more meters within the same bar, such as 2/4+3/8+5/4. Dorico Pro automatically inputs dashed barlines to show the divisions between each meter.



Open

An open time signature has no restrictions on meter, beaming, or beats. Any number of notes can be added, with any beaming. In Dorico Pro, an open time signature can be shown with an X or N, or without any signature.



Non-power of two

A non-power of two time signature is one such as 5/6, which indicates five sextuplet notes lasting for a whole note (semibreve). Examples of time signatures like this can be found in the music of Adès.



Some composers, such as Boulez, have written fractional time signatures. Dorico Pro does not currently support these.

RELATED LINKS

[Time signature styles](#) on page 988

[Large time signatures](#) on page 986

[Input methods for time signatures](#) on page 190

[Time signatures popover](#) on page 191

Pick-up bars

Pick-up bars allow you to include music before the first full bar. They are also known as “upbeats” or “anacrusis”. Often, pick-up bars only comprise a few beats whose main purpose is to lead in to the start of the piece.

Pick-up bar of a single quarter note beat at the start of Chopin's Mazurka Op. 30 No. 2

Pieces that start with a pick-up bar have time signatures that are positioned at the start of the system as normal. However, the first full bar of the time signature occurs after the first barline and not before. Therefore, pick-up bars do not contribute to the bar number count. Bar numbers are counted from the first full bar in the flow.

Because pick-up bars are linked to the number of notes/rests in the music, in Dorico Pro they are linked to time signatures and so you must input pick-up bars alongside a time signature. However, you can hide time signatures you do not want to show in the music.

RELATED LINKS

[Input methods for time signatures](#) on page 190

[Hiding/Showing time signatures](#) on page 996

Defining partial bars as pick-up bars or irregular bars

You can change whether explicit irregular bars at the start of time signatures are defined as pick-up bars. This affects how notes in the bars are beamed and grouped.

Notes in irregular bars defined as pick-up bars are beamed/grouped backwards from the end of the bar, while notes in irregular bars not defined as pick-up bars are beamed/grouped forwards from the start of the bar.

NOTE

You must input explicit irregular bars and pick-up bars as part of a time signature, such as by entering 4/4,1.5 into the time signatures popover to input a 4/4 time signature with a pick-up bar containing 1.5 quarter note beats, or three eighth notes.

PROCEDURE

1. Select the time signatures or the signposts of time signatures starting with an explicit irregular bar whose pick-up definition you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Group first bar as pick-up** in the **Time Signatures** group.
 3. Activate/Deactivate the corresponding checkbox.
-

RESULT

Irregular bars at the start of the selected time signatures are defined as pick-up bars when **Group first bar as pick-up** and its corresponding checkbox are both activated, and defined as normal irregular bars when the corresponding checkbox is deactivated.

When the property is deactivated, Dorico Pro uses internal heuristics to define them as either pick-up bars or normal irregular bars automatically.

EXAMPLE



Irregular bar defined as pick-up into common time



Irregular bar defined as normal irregular bar, not a pick-up

Large time signatures

Large time signatures are scaled-up time signatures that appear much larger than normal relative to the staff size. They can be helpful in orchestral scores, as the smaller staff size in such scores means standard time signatures are small and harder for conductors to read.

Large time signatures are also very commonly used in film scores, as conductors rarely have much time to prepare the scores before recording sessions. Having large time signatures makes changes in meter more visually clear on the page, especially when music contains multiple changes in meter.

In Dorico Pro, you can show large time signatures at the following positions:

- Once per bracketed group
- Above the staff and at system object positions

Time signatures shown once per bracketed group

Instead of showing a time signature on every staff that is the same height as the staff, you can instead show a single large time signature on each bracketed group of staves. When shown once per bracketed group, time signatures are scaled up in size according to the number of staves in the bracketed group. The largest time signatures are shown on bracketed groups containing four or more staves. When shown on single staves, they extend a small amount above and below the staff, which is commonly used for parts for film music recording sessions.



Narrow, serif time signatures shown once per bracketed group

You can change the size of time signatures on different sizes of bracketed groups on the **Time Signatures** page in **Engrave > Engraving Options**. You can also change whether all the staves between the brass and string brackets, which often include percussion, harp, and piano, are treated as a single bracket or separately for the purposes of showing large time signatures.

Large time signatures shown on bracketed groups occupy horizontal space, which can be a significant amount when they are especially large and use the standard time signature design. Therefore, we recommend that you use one of the narrow designs in layouts that show large time signatures on bracketed groups.

Time signatures shown at system object positions

Similar to showing large time signatures once per bracketed group, you can also show time signatures only at system object positions and above the staff. Therefore, its positions in each system are controlled by the same options that control the positions of other system objects, such as rehearsal marks and tempo marks.



Normal time signatures shown at system object positions

Time signatures shown at system object positions do not occupy horizontal space, meaning it is less important to use a narrow font style. This also reduces the horizontal distance between notes either side of time signatures. Because of this reduced disruption to note spacing, this placement of time signatures has become popular in contemporary art music since the 20th Century.

When using the note denominator style for time signatures shown at system object positions, the note is shown to the right of the numerator rather than below.

By default, time signatures at system object positions are twice the size of normal time signatures and force other items at the same position to appear to the right. You can change their scale factor and the default position of other items at the same position on the **Time Signatures** page in **Engraving Options**. You can also change their alignment relative to barlines.

RELATED LINKS

- [Time signature font styles](#) on page 997
- [Changing the design of time signatures](#) on page 997
- [Changing the position of time signatures on bracketed groups](#) on page 995
- [System objects](#) on page 925
- [Changing the positions of system objects](#) on page 926
- [Hiding bar numbers at time signatures shown at system object positions](#) on page 529

Changing the size and position of time signatures

You can change the size of time signatures in each layout independently, including changing their vertical position. For example, you can show large time signatures centered on each bracket in full score layouts but standard-sized time signatures on each staff in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
2. In the **Layouts** list, select the layouts in which you want to change the size of time signatures.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
3. Click **Time Signatures** in the page list.
4. Choose one of the following options for **Time signature position and size**:
 - **Show on every staff**
 - **Show once per bracket**
 - **Show at system object positions**
5. Click **Apply**, then **Close**.

RESULT

The size and position of time signatures in the selected layouts is changed.

Showing large time signatures above the staff at system object positions means they do not occupy any rhythmic or horizontal space, whereas the other options do cause time signatures to occupy horizontal space.

AFTER COMPLETING THIS TASK

You can change whether large time signatures are placed vertically in the middle or on the top of bracketed groups on the **Time Signatures** page in **Engrave > Engraving Options**.

RELATED LINKS

- [Large time signatures](#) on page 986
- [Positions of time signatures](#) on page 992
- [Hiding bar numbers at time signatures shown at system object positions](#) on page 529
- [Project-wide engraving options for time signatures](#) on page 982

Time signature styles

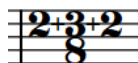
Dorico Pro allows you to show time signatures in a variety of styles. For example, you can show denominators as a number or as a note value.

You can change the style of all time signatures project-wide according to their type on the **Time Signatures** page in **Engrave > Engraving Options**, and you can change the style of individual time signatures independently of your project-wide settings.

The numerator is always one or more numbers, and can either show the total number of beats in the bar, or show how the total duration of the bar is subdivided.



Numerator in a 7/8 time signature shown as a single number



Numerator in a 7/8 time signature showing subdivisions

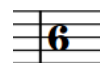
The denominator can appear as a number, as a note indicating the equivalent duration, or not appear at all.



Denominator shown as number



Denominator shown as notehead (beat length)



No denominator shown

If shown as a notehead, the denominator can either show the length of each beat in the bar, or the note duration for the bar. When showing the beat length, the numerator can also be changed. In the example, the numerator 6 in the 6/8 time signature becomes a 2 to reflect the two dotted quarter note beats that make up a 6/8 bar.



Denominator notehead showing the beat length of a 6/8 time signature



Denominator showing the note duration of a 6/8 time signature

RELATED LINKS

[Project-wide engraving options for time signatures](#) on page 982

[Changing the design of time signatures](#) on page 997

[Changing the separator style of interchangeable time signatures](#) on page 991

[Changing the open meter style of time signatures](#) on page 990

Changing the numerator style of time signatures

You can choose whether the numerators of individual time signatures show the total number of beats in each bar, or the subdivision of beats in each bar, independently of your project-wide setting.

PROCEDURE

1. Select the time signatures whose numerator style you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Numerator style** in the **Time Signatures** group.
3. Choose one of the following options:
 - **Number**
 - **Beat group**

RESULT

The numerator style of the selected time signatures is changed.

TIP

You can change the numerator style of all time signatures project-wide on the **Time Signatures** page in **Engrave > Engraving Options**.

RELATED LINKS

[Time signature styles](#) on page 988

[Project-wide engraving options for time signatures](#) on page 982

Changing the denominator style of time signatures

You can change the denominator style of individual time signatures independently of your project-wide settings, for example, if you want to show the denominator as a note instead of a number.

PROCEDURE

1. Select the time signatures whose denominator style you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Denominator style** in the **Time Signatures** group.
 3. Choose one of the following options:
 - **Number**
 - **Note**
 - **None**
-

RESULT

The denominator style of the selected time signatures is changed.

TIP

You can change the denominator style of all time signatures project-wide on the **Time Signatures** page in **Engrave > Engraving Options**.

RELATED LINKS

[Time signature styles](#) on page 988

[Project-wide engraving options for time signatures](#) on page 982

Changing the open meter style of time signatures

You can change the open meter style of individual time signatures, independently of your project-wide setting.




PROCEDURE

1. Select the open meter time signatures whose style you want to change. You can do this in Write mode and Engrave mode.

NOTE

In the Properties panel, **Open style** in the **Time Signatures** group is automatically activated for open meter time signatures.

2. In the Properties panel, choose one of the following options for **Open style** in the **Time Signatures** group:
 - **No symbol**

- 
- **X**

- **Penderecki's symbol**


RESULT

The open meter style of the selected time signatures is changed.

TIP

You can change the style of all open meter time signatures project-wide on the **Time Signatures** page in **Engrave > Engraving Options**.

RELATED LINKS

[Time signature styles](#) on page 988

[Project-wide engraving options for time signatures](#) on page 982

Changing the separator style of interchangeable time signatures

You can change the separator shown in interchangeable time signatures individually, independently of your project-wide setting.

PROCEDURE

1. Select the interchangeable time signatures whose separator you want to change. You can do this in Write mode and Engrave mode.

NOTE

In the Properties panel, **Separator** in the **Time Signatures** group is automatically activated for interchangeable time signatures.

2. Select one of the following options from the **Separator** menu:

- **Parentheses**



- **Brackets**



- **Equals sign**



- **Slash**



- **Space**



- **Hyphen**



RESULT

The separator style of the selected interchangeable time signatures is changed.

NOTE

- You can change the default separator of all interchangeable time signatures project-wide on the **Time Signatures** page in **Engrave > Engraving Options**.
- Although they might look similar to interchangeable time signatures, aggregate time signatures behave differently. Aggregate time signatures are separated by a + sign, whereas interchangeable time signatures can be shown with six different separators but not a + sign.

Therefore, although you can activate **Separator** and choose from the available options for aggregate time signatures, the property only affects the appearance of interchangeable time signature separators.

RELATED LINKS

[Time signature styles](#) on page 988

[Project-wide engraving options for time signatures](#) on page 982

Positions of time signatures

Standard time signatures are positioned on staves with the middle staff line, or only staff line for single-line staves, passing through their center. Large time signatures can be positioned in the middle or at the top of bracket groups, or above staves at system object positions.

You can move time signatures to different rhythmic positions in Write mode. They move according to the current rhythmic grid value and are positioned by default according to your settings in **Engraving Options**.

You can move individual time signatures graphically in Engrave mode; however, this does not change the rhythmic positions to which they are attached.

You can change the default positions of all time signatures project-wide, including both their horizontal and vertical positions, on the **Spacing Gaps** and **Time Signatures** pages in **Engrave > Engraving Options**.

You can also change the position of time signatures in each layout independently, for example, if you want to show time signatures above the staff and at system object positions in some layouts but only once per bracket in other layouts.

RELATED LINKS

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

[Changing the size and position of time signatures](#) on page 988

[Moving tempo marks graphically](#) on page 954

[Moving time signatures shown at system object positions graphically](#) on page 994

[Changing the position of time signatures on bracketed groups](#) on page 995

[Project-wide engraving options for time signatures](#) on page 982

[Project-wide spacing gaps for time signatures](#) on page 983

Moving time signatures rhythmically

You can move time signatures to new rhythmic positions after they have been input.

NOTE

- You can only move time signatures rhythmically using the keyboard.

- Time signatures can only be moved along staves. If you want to move a time signature across staves, you must delete the time signature and input a new time signature on the other staff.
 - If you want to adjust the default position of time signatures relative to notes or barlines, you must change the project-wide values for spacing gaps on the **Spacing Gaps** page in **Engrave > Engraving Options**.
-

PROCEDURE

1. In Write mode, select the time signatures you want to move.
 2. Move the time signatures according to the current rhythmic grid value in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
-

RESULT

The time signature takes effect from its new position until the next existing time signature, or the end of the flow. Barlines are automatically updated either side of the time signature up to the previous/next existing time signature, or the start/end of the flow.

NOTE

Only one time signature can exist at each rhythmic position, except for time signatures that only apply to single staves. If a time signature moves to the exact rhythmic position of another time signature as part of its move, the existing time signature is deleted.

You can undo this action which restores any time signatures deleted in the process.

Moving time signatures graphically

You can move individual time signatures to new graphical positions without affecting the positions of any other items.

NOTE

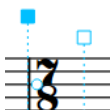
- These steps do not apply to time signatures shown at system object positions.
 - You cannot move time signatures shown at the start of systems. You can only move time signature changes that occur partway through systems or at the end of systems.
-

PROCEDURE

1. In the Engrave toolbox, activate **Note Spacing**.



2. Select a square note spacing handle at the rhythmic position of the time signature you want to move.



A circular handle appears beside the time signature.

3. Press **Tab** to select the circular handle.



4. Move the handle in any of the following ways:
 - Press **Alt-Right Arrow** to move it to the right.
 - Press **Alt-Left Arrow** to move it to the left.

NOTE

- If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.
 - You cannot move note spacing handles with the mouse, you can only move them using the keyboard.
-

RESULT

The time signature is moved graphically to the right/left.

TIP

You can also change the value for **Spacing offset** in the **Time Signatures** group of the Properties panel to move time signatures horizontally. However, this also affects global note spacing around the rhythmic position of the time signature.

The **Spacing offset** value is independent of note spacing changes.

RELATED LINKS

[Note spacing](#) on page 381

Moving time signatures shown at system object positions graphically

You can move time signatures shown at system object positions graphically, in different ways to moving other time signatures graphically.

NOTE

- These steps do not apply to time signatures shown on staves.
 - If you want to move time signatures because you want to change their alignment with barlines, you can change the default alignment of all time signatures shown at system object positions in the **Time Signatures at System Object Positions** section of the **Time Signatures** page in **Engrave > Engraving Options**.
-

PROCEDURE

1. In Engrave mode, select the time signatures at system object positions that you want to move graphically.
2. Move the time signatures in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move items by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
-

RESULT

The selected time signatures shown at system object positions are moved to new graphical positions.

TIP

Offset in the **Time Signatures** group of the Properties panel is activated automatically when you move time signatures shown at system object positions graphically.

- **Offset X** moves time signatures horizontally.
- **Offset Y** moves time signatures vertically.

You can also use this property to move time signatures shown at system object positions graphically by changing the values in the value fields.

Deactivating the property resets the selected time signatures to their default positions.

RELATED LINKS

[Changing the size and position of time signatures](#) on page 988

[Hiding bar numbers at time signatures shown at system object positions](#) on page 529

[System objects](#) on page 925

[Changing the positions of system objects](#) on page 926

[Moving time signatures graphically](#) on page 993

[Project-wide engraving options for time signatures](#) on page 982

Changing the position of time signatures on bracketed groups

By default, time signatures shown once per bracket are centered on each bracketed group. You can change their vertical position on bracketed groups for all layouts project-wide, for example, it is common in film scores to show the top of large time signatures aligned with the top of each bracketed group.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Time Signatures** in the page list.
 3. In the **Time Signatures Centered on Brackets** section, choose one of the following options for **Vertical alignment relative to bracket**:
 - **Top**
 - **Middle**
 4. Click **Apply**, then **Close**.
-

RESULT

The vertical alignment of large time signatures relative to bracketed groups is changed in all layouts project-wide.

RELATED LINKS

[Positions of time signatures](#) on page 992

[Large time signatures](#) on page 986

[Changing the size and position of time signatures](#) on page 988

Hiding/Showing time signatures

You can hide/show time signatures without deleting them from your project. This hides/shows them in all layouts, not just the one currently open in the music area.

PROCEDURE

1. Select the time signatures you want to hide/show. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate/deactivate **Hide time signature** in the **Time Signatures** group.

RESULT

The selected time signatures are hidden in all layouts when **Hide time signature** is activated, and shown when it is deactivated.

Signposts are shown at the positions of each time signature so you can always find them again. However, signposts are not printed by default.

NOTE

- Hidden time signatures do not take up any horizontal space, so hiding/showing time signatures affects note spacing.
- You can hide/show time signature signposts by choosing **View > Signposts > Time Signatures**. Time signature signposts are shown when a tick appears beside **Time Signatures** in the menu, and hidden when no tick appears.
You can choose to print time signature signposts if you activate **View options** in the **Annotations** section of the Print Options panel on the right of the window in Print mode.
- You can assign a key command for **Hide/Show Item** on the **Key Commands** page in **Preferences**, which applies to chord symbols, playing techniques, and time signatures.

RELATED LINKS

[Note spacing](#) on page 381

Deleting time signatures

You can delete time signatures without affecting the relative rhythmic positions of notes.

PROCEDURE

1. In Write mode, select one of the following:
 - The time signatures you want to delete.
 - The signposts of hidden time signatures you want to delete.
2. Press **Backspace** or **Delete**.

RESULT

The time signatures are deleted from the score. Bars after their previous positions are re-bared according to the previous time signature in the score, up until the next time signature or the end of the flow.

If you delete the only time signature in the flow, your music appears in an open meter, but with all the same rhythmic values.

RELATED LINKS

[Types of time signatures](#) on page 983

Time signature font styles

Different time signature designs use different font styles. You can edit the formatting of fonts used for time signatures in the **Edit Font Styles** dialog.

- You can open the **Edit Font Styles** dialog in Engrave mode by choosing **Engrave > Font Styles**.

The following fonts are used for time signatures:

- **Time Signature Font**
Used for standard time signatures and large time signatures that use the **Normal**, **Narrow, serif**, or **Narrow, sans serif** design types. Must use a SMuFL-compliant font family.
- **Time Signature Plain Font**
Used for time signatures using the **Plain font** design type. Can use any font family, but we recommend that you use narrow fonts for large time signatures.

NOTE

Changes made to font styles apply to the entire project, including part layouts.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

[Large time signatures](#) on page 986

Changing the design of time signatures

You can change the design of time signatures in each layout independently, including changing the font style used for them, for example, if you want to use a plain font for time signatures in full score layouts but the standard time signature font in part layouts.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the design of time signatures.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Time Signatures** in the page list.
 4. Choose one of the following options for **Time signature design**:
 - **Normal**
 - **Narrow, serif**
 - **Narrow, sans serif**
 - **Plain font**
 5. Click **Apply**, then **Close**.
-

RESULT

The design of time signatures in the selected layouts is changed. If you choose **Plain font**, time signatures use a different font style than the one used for the other options.

RELATED LINKS

[Time signature styles](#) on page 988

Tremolos

Tremolos are thick, slanted lines that cross individual stems or are positioned between multiple stems. They are used to indicate that notes are repeated, either individually or in sequences of multiple notes.

Using tremolo strokes instead of notating each notehead can save horizontal space and make fast passages easier to read.

The number of tremolo strokes indicates both how many times notes are repeated and how fast they are. In measured tremolos, for example, one tremolo stroke on the stem of a quarter note (crotchet) indicates two eighth notes (quavers) are played, whereas three tremolo strokes on the stem of a quarter note indicates eight 32nd notes are played.



Quarter note with a one-stroke single-note tremolo and its equivalent notation



Quarter note with a three-stroke single-note tremolo and its equivalent notation

There are different types of tremolos:

Single-note tremolos

Individual notes are repeated.



Multi-note tremolos

Multiple notes, usually two, are played in sequence, similar to a trill. However, trills usually indicate a fast alternation between two adjacent notes, such as G and A, whereas multi-note tremolos can be between any notes, limited only by the capabilities of the instrument.



Tuplet tremolos

Multiple notes in triplets are repeated in the notated sequence.



Depending on the musical context, tremolos can be either measured or unmeasured. There is no visual difference between measured/unmeasured tremolos, so composers/arrangers often specify how they want tremolos to be played, such as an indication in the front matter of the score or as a text instruction in the score.

Measured tremolos

The number of tremolo strokes corresponds to a precise rhythm in the prevailing tempo and meter.

Unmeasured tremolos

There is no link between the number of strokes and rhythm. Instead, unmeasured tremolos are played as fast as possible, whatever the tempo.

Unmeasured tremolos often use three or more tremolo strokes, and can also be accompanied by a "trem." text indication.

RELATED LINKS

[Input methods for repeats and tremolos](#) on page 253

Tremolos in tie chains

By default, all notes in tie chains are shown with tremolo strokes when single-note tremolos are added to tie chains. Deleting tremolo strokes from tied notes removes tremolo strokes from all notes in tie chains.

In Dorico Pro, tremolos are considered measured by default, so the number of tremolo strokes shown is automatically adjusted on subsequent notes in tie chains as required. For example, if an eighth note with two tremolo strokes is tied to a quarter note, the quarter note has three tremolo strokes. This is because tremolo strokes function like beams, so two tremolo strokes and an eighth note stem flag is the equivalent of three tremolo strokes.

However, there might be circumstances in which you want all notes to have the same number of tremolo strokes, whatever their duration. You can also start tremolos partway through tie chains, or stop tremolos partway through tie chains.

You can change the number of tremolo strokes shown on individual notes independently in Engrave mode.

Changing the number of tremolo strokes on individual notes in tie chains

Dorico Pro automatically changes the number of tremolo strokes on subsequent notes in tie chains according to their duration, but you can manually change the number of single-note tremolo strokes shown on each note in tie chains individually to represent your intended rhythm.

PROCEDURE

1. In Engrave mode, select the noteheads of the notes whose number of tremolo strokes you want to change.
2. In the Properties panel, activate **Single stem tremolo** in the **Notes and Rests** group.
3. Select one of the following options from the menu:
 - **None**
 - **One stroke**
 - **Two strokes**
 - **Three strokes**
 - **Four strokes**
 - **Buzz roll**

RESULT

The number of tremolo strokes shown on the selected notes is changed.

EXAMPLE



The default number of tremolo strokes in a tie chain where the second note is longer than the first.



The number of tremolo strokes on the second note has been changed to match the first.

RELATED LINKS

[Changing the speed of tremolos](#) on page 1001

General placement conventions for tremolos

Single-note tremolos are positioned on note stems, whereas multi-note tremolos are positioned between the stems of two or more notes. When multi-note tremolos cross three or more notes, the tremolo strokes are positioned between all the notes.

Tremolo strokes are slightly thinner than beams, so that the gaps between strokes are large enough and the number of strokes can be instantly recognized.

Tremolo strokes should not collide with ledger lines or stem flags. Dorico Pro automatically positions tremolo strokes to ensure such collisions are avoided.

Tremolo strokes within the staff are positioned so that they are at least one staff space clear of noteheads, and at valid positions relative to staff lines and staff spaces. This means that tremolo strokes might not move every time you change the pitch of notes.



The positions of the tremolo strokes on the first two notes and the last two notes are the same, although the pitches are all different.

In Dorico Pro, the angle of single-note tremolo strokes is always the same, no matter the direction of the phrase. The angles of multi-note tremolo strokes are determined by the height of the stems to which the multi-note tremolos apply. You can change the angles of multi-note tremolo strokes individually by lengthening/shortening the stems at the start/end of the tremolo.

You can change the default positions of all tremolo strokes project-wide on the **Tremolos** page in **Engrave > Engraving Options**.

RELATED LINKS

[Moving tremolo strokes](#) on page 1003

[Project-wide engraving options for tremolos](#) on page 1004

Changing the speed of tremolos

You can change the speed of tremolos after they have been input by changing the number of strokes.

PROCEDURE

1. In Write mode, select the notes with tremolos whose speed you want to change. The buttons with the number of tremolo strokes corresponding to your selection are highlighted in the **Tremolos** section of the Repeat Structures panel.

NOTE

Select single-note tremolos and multi-note tremolos separately.

2. Click the button with the number of tremolo strokes you want in the **Tremolos** section of the Repeat Structures panel.
For example, click **Two Strokes Single-note Tremolo** to input single-note tremolos with two strokes, or click **Three Strokes Multi-note Tremolo** to input multi-note tremolos with three strokes.



Two Strokes Single-note Tremolo



Three Strokes Multi-note Tremolo

RESULT

The number of tremolo strokes on the selected notes is changed, which changes the speed of the tremolos.

RELATED LINKS

[Tremolos in playback](#) on page 1005

[Changing the number of tremolo strokes on individual notes in tie chains](#) on page 1000

Deleting tremolos

You can remove single-note tremolos and multi-note tremolos from notes separately without affecting the notes to which they applied.

PROCEDURE

1. In Write mode, select the notes whose tremolo strokes you want to delete.
2. Click the appropriate buttons in the **Tremolos** section of the Repeat Structures panel for the types of tremolos selected:

- **Remove Single-note tremolo**



- **Remove Multi-note tremolo**



RESULT

The corresponding types of tremolo strokes are deleted.

EXAMPLE



Notes with single-note tremolos and multi-note tremolo



Notes with multi-note tremolo deleted but single-note tremolos remain



Notes with both multi-note tremolo and single-note tremolos deleted

Rhythmic positions of notes with tremolos

You can move notes with single-note tremolos and multi-note tremolos to new rhythmic positions in the same ways as normal notes. However, if you move multi-note tremolos across barlines, the tremolo strokes are deleted automatically.

NOTE

You can undo moving tremolos immediately, which restores any multi-note tremolo strokes deleted in the process.

You can move single-note tremolos to new rhythmic positions and across barlines without affecting their tremolo strokes. The notes are automatically respelled as tie chains if required by their new rhythmic positions and time signature, in the same ways as normal notes.

NOTE

If tie chains with single-note tremolos contain notes of different durations, the number of tremolo strokes on each note in the tie chain is different. You can change the number of tremolo strokes shown on each note in tie chains individually.

RELATED LINKS

[Moving notes rhythmically](#) on page 724

[Changing the number of tremolo strokes on individual notes in tie chains](#) on page 1000

Moving tremolo strokes

You can move tremolo strokes upwards/downwards graphically.

NOTE

- You cannot move tremolo strokes to the right/left.
 - You cannot move tremolo strokes rhythmically, as they apply to specific notes, but you can move notes with tremolos to different rhythmic positions. Notes with single-note tremolos can cross barlines; however, multi-note tremolo strokes are deleted automatically when their notes cross barlines.
-

PROCEDURE

1. In Engrave mode, select the tremolo strokes you want to move.
2. Move the tremolo strokes in any of the following ways:
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Up Arrow**.

- Click and drag them upwards/downwards.
-

RESULT

The selected tremolo strokes are moved upwards/downwards.

NOTE

- Moving multi-note tremolo strokes also changes the length of the stems to which they are attached.
- When you first move tremolo strokes graphically, they may appear to move in the wrong direction or by a larger increment than you expected. This is because their positions are reset when you override those positions by moving them.
- The following properties in the **Beaming** group of the Properties panel are activated automatically when you move the start/end of multi-note tremolo strokes:
 - **Start Y offset** moves the start of multi-note tremolo strokes vertically by moving the end of the corresponding stem.
 - **End Y offset** moves the end of multi-note tremolo strokes vertically by moving the end of the corresponding stem.

Tremolo Y in the **Notes and Rests** group of the Properties panel is activated automatically when you move single-note tremolo strokes. It moves single-note tremolo strokes vertically.

For example, if you move a whole multi-note tremolo stroke upwards, both stem handles are moved so both properties are activated. You can also use these properties to move tremolo strokes by changing the values in the value fields. However, you must select the noteheads rather than the tremolo strokes in order to see the relevant groups in the Properties panel.

Deactivating the properties resets the selected stem handles, and therefore tremolo strokes, to their default positions.

Project-wide engraving options for tremolos

You can find options for the project-wide appearance and position of tremolos on the **Tremolos** page in **Engrave > Engraving Options**.

The options on the **Tremolos** page allow you to change the appearance of tremolo strokes, and their positions relative to the ends of stems, stem flags, noteheads, and beams.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

[Project-wide engraving options for stems](#) on page 942

Changing the appearance of multi-note half note tremolos project-wide

There are multiple accepted ways of notating multi-note half note tremolos. You can change how multi-note half note tremolos are notated project-wide.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
2. Click **Tremolos** in the page list.
3. In the **Multi-note Tremolos** section, choose one of the following options for **Appearance of half note (minim) tremolos**:
 - **All lines join stems**
 - **Outermost line joins stems**

- **No lines join stems** (default)
4. Click **Apply**, then **Close**.
-

RESULT

The appearance of all multi-note half note tremolos project-wide is changed, according to your preference.

Tremolos in playback

You can control the playback of unmeasured tremolos by specifying the minimum number of tremolo strokes that are interpreted as unmeasured tremolos. This considers both the number of tremolo strokes and the number of beam lines that would be used for the note.

You can do this on the **Timing** page in **Play > Playback Options**.

For example, if the option is set to require three tremolo strokes, an eighth note with two tremolo strokes is played as unmeasured, because the single beam of the eighth note is included in the calculation.

You can also specify the default length of notes in unmeasured tremolos. You express the duration of notes as a fraction of the length of a quarter note played at 120 quarters per minute in the **Tremolos** section.

The number of tremolo strokes determines the note value of the repeated notes. For example, one stroke indicates an eighth note, two strokes indicate a 16th note, and so on.

RELATED LINKS

[Playback Options dialog](#) on page 405

Changing the duration of tremolos in playback

You can change both the default length of each note in unmeasured tremolos in playback, and the minimum number of tremolo strokes required to indicate tremolos should be unmeasured in playback.

For example, to change the value in the value field to set the default length to 0.5 seconds, enter 1 into the value field for **Default unmeasured tremolo length** in the **Tremolos** section on the **Timing** page in **Play > Playback Options**.

TIP

If you hover over either of the arrows beside the **Default unmeasured tremolo length** value field, a small box appears that displays the current fraction as a decimal.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-P** to open **Playback Options**.
2. Click **Timing** in the page list.
3. Optional: In the **Tremolos** section, change the value for **Minimum number of strokes for playback of unmeasured tremolos**.
4. Change the value for **Default unmeasured tremolo length**.
For example, to set the default length of unmeasured tremolo notes to 0.5 seconds, change the value to 1.

TIP

If you hover over either of the arrows beside the value field, a small box appears that displays the current fraction as a decimal.

5. Click **Apply**, then **Close**.
-

RESULT

The sounding duration of each note in unmeasured tremolos in playback is changed project-wide.

Changing the value for **Minimum number of strokes for playback of unmeasured tremolos** changes the minimum number of tremolo strokes required for tremolos to be unmeasured in playback.

Tuplets

Tuplets indicate where a beat is divided into a different number of subdivisions than is usually expected according to the current meter. They can be used to fit more notes or fewer notes in a beat than usually exist in a beat, according to the usual pattern of subdivision.



A 4/4 bar with the standard subdivision of four quarter notes



A 4/4 bar with a subdivision of six triplet quarter notes in the space of four regular quarter notes



A 6/8 bar with the standard subdivision of six eighth notes



A 6/8 bar with a subdivision of four duplet eighth notes in the space of six regular eighth notes

Because these subdivisions are not standard but tuplet notes use the same rhythmic notation as normal notes, tuplets must be clearly marked to show that their rhythmic duration is different.

In the examples, the triplet quarter notes are shown under a bracket with the number 3. The duplet eighth notes do not need a bracket as they are joined by a beam, which has a number 2 above it.

Tuplets in Dorico Pro can be shown with just a tuplet bracket, with a tuplet bracket and a tuplet number/ratio, or with a tuplet bracket, a tuplet number/ratio, and a note indicating the note value of the tuplet.

RELATED LINKS

[Inputting tuplets](#) on page 169

[Tuplet numbers/ratios](#) on page 1016

General placement conventions for tuplets

Tuplet brackets and tuplet numbers/ratios are generally placed on the stem side of notes. When tuplets are shown with a tuplet beam, a tuplet bracket is not always necessary but can be shown in addition to a tuplet number/ratio.

According to convention, tuplet brackets and tuplet numbers/ratios are always placed above the staff for vocal staves, so they do not come between notes and lyrics.

Tuplet brackets should be placed as close to notes as possible without colliding with other notation, such as slurs or articulation. Slurs are usually placed inside tuplet brackets if the slur is shorter than the tuplet bracket. If a slur is longer than a tuplet bracket, the slur can be placed outside the tuplet bracket.

The horizontal position of tuplet brackets should allow it to be immediately obvious which notes are included in the bracket. They should not extend so far that notes following the tuplet appear to be included.



A tuplet clearly showing the three quarter notes included in the triplet.



With an extended tuplet bracket, the duration of the triplet is now unclear.

Project-wide engraving options for tuplets

You can find options for the project-wide appearance of tuplets, tuplet brackets, and tuplet numbers/ratios on the **Tuplets** page in **Engrave > Engraving Options**.

The options on the **Tuplets** page allow you to change the appearance and angles of tuplet brackets, and the position of tuplet brackets, tuplet numbers/ratios relative to the staff and noteheads.

There are musical examples for many options to demonstrate how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Nested tuplets

Nested tuplets are tuplets within larger tuplets that are often used to create complex rhythms. In Dorico Pro, there is no limit to the number of levels you can have in nested tuplets.

EXAMPLE



Nested tuplets

Inputting nested tuplets

You can input nested tuplets in new, empty staves and you can select existing tuplets and input nested tuplets within them.

PROCEDURE

1. In Write mode, start note input.
2. Press ; to open the tuplets popover.
3. Optional: If inputting nested tuplets in an empty staff, enter the ratio for the outer tuplet into the popover. For example, enter 3:2.
4. Optional: Press **Return** to close the popover and enter the outer tuplet.

NOTE

You can skip steps 3 and 4 if you are inputting nested tuplets into existing tuplets.

5. Press ; to open the tuplets popover again.

6. Enter the ratio for the inner tuplet into the popover. For example, enter 5:4.
 7. Press **Return** to close the popover and enter the inner tuplet.
 8. Enter or play in the pitches you want.
 9. Stop inputting nested tuplets in one of the following ways:
 - Press **Shift-;** once to stop the inner tuplet and continue inputting the outer tuplet.
 - Press **Shift-;** twice to stop both tuplets and return to inputting normal notes.
 - Press **Esc** to stop note input completely.
 - Move the caret with the arrow keys to return to inputting normal notes.
-

RESULT

The pitches you enter or play in are input as nested tuplets, starting from the caret position.

If multiples of the inner tuplet fit exactly inside the outer tuplet, you can continue inputting notes as the specified nested tuplet until you stop the tuplets manually.

If multiples of the inner tuplet do not fit exactly inside the outer tuplet, the inner tuplet stops automatically at the end of the last tuplet that fits in the outer tuplet. After that, the outer tuplet continues until you stop it manually.

NOTE

You can also input nested triplets by clicking **Tuplets** in the Notes toolbox when the caret is within an existing tuplet. However, you can only input one nested triplet at a time this way.

Notations on tuplet notes

You can add notations such as accidentals, articulations, and slurs to tuplets in the same ways as they can be added to normal notes.

Articulations are positioned between noteheads or stems and tuplet brackets, so they are closer to the notes than tuplet brackets or tuplet numbers/ratios.

RELATED LINKS

[Inputting accidentals](#) on page 162

[Inputting articulations](#) on page 182

[Inputting slurs](#) on page 265

Turning existing notes into tuplets

You can turn any existing notes into tuplets, for example, if you need to fit extra notes into an existing duration.

PROCEDURE

1. In Write mode, select the notes you want to turn into tuplets.
 2. Press **;** to open the tuplets popover.
The popover is automatically populated with a suggested ratio based on your selection.
 3. Optional: Change the ratio in the popover. For example, enter 3:2 to input triplets.
 4. Press **Return** to close the popover.
-

RESULT

The selected notes are turned into tuplets according to the ratio in the popover. For example, if you select five eighth notes and enter 5:4 into the popover, the selected notes become quintuplet eighth notes.

If the selected notes fit into a single tuplet of the specified ratio, only a single tuplet is created. If the selected notes do not fit into a single tuplet, as many tuplets as required are created automatically.

RELATED LINKS

[Tuplets popover](#) on page 169

Turning tuplets into normal notes

You can turn any existing tuplets notes into normal notes, for example, if you want to turn tuplet eighth notes into standard eighth notes.

PROCEDURE

1. In Write mode, select just the tuplet brackets or tuplet numbers/ratios of the tuplets you want to turn into normal notes.

NOTE

You must not select any of the noteheads in the tuplets.

2. Optional: If you want to retain all notes in the selected tuplets, press **I** to activate Insert mode.
3. Press **Backspace** or **Delete**.

RESULT

All notes in the selected tuplets are unscaled and appear as normal notes with the same notated duration, for example, a tuplet quarter note becomes a standard quarter note.

When Insert mode is activated, all notes in the tuplets are retained and any subsequent existing notes are pushed to later rhythmic positions to accommodate the extra rhythmic durations required. When Insert mode is deactivated, the earliest selected tuplets expand and overwrite subsequent notes and tuplets.

Moving tuplets rhythmically

You can move tuplets to different rhythmic positions after they have been input.

PROCEDURE

1. In Write mode, select the tuplets you want to move.

NOTE

A tuplet number/ratio or bracket must be included in the selection if you want the notes to stay a tuplet. If a tuplet number/ratio or tuplet bracket is not selected, the notes become normal notes of their rhythmic value when you move them beyond the position of the tuplet.

2. Move the selected tuplets in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.

NOTE

You cannot move tuplets rhythmically using the mouse.

RESULT

The selected tuplets move to the right/left along the staff according to the current rhythmic grid value.

If a tuplet number/ratio or tuplet bracket is included in the selection, the whole tuplet is moved along the staff. If it crosses a barline, the tuplet is automatically adjusted to compensate.

NOTE

- If any of your selected notes collide with other notes in the same staff and at the same rhythmic position that are in the same voice as your selected notes, the existing notes are deleted and replaced with your selected notes.

You can undo moving notes immediately afterward, which restores any notes deleted in the process.

- Tuplets are not automatically adjusted at the mid-point of bars, where it is convention to split tuplets to show the beat division. You must enter two tuplets manually to show the beat division at the mid-point of bars.
-

EXAMPLE



Deleting tuplets

You can delete tuplets, including all the tuplet notes, but you can also delete tuplet brackets and numbers/ratios without deleting the corresponding notes.

PROCEDURE

1. In Write mode, select the tuplets you want to delete.

TIP

To delete an entire tuplet and all the notes within it, select all the noteheads and the corresponding tuplet bracket or tuplet number/ratio.

2. Press **Backspace** or **Delete**.
-

RESULT

The selected tuplets are deleted.

- Selecting just the notes deletes the notes, but does not delete the tuplet.
- Selecting just the tuplet bracket or tuplet number/ratio deletes the tuplet, and the notes that were previously within the tuplet are retained with the same notated duration. For example, deleting the bracket from triplet quarter notes leaves the notes previously in the triplet as three quarter notes.

NOTE

This overrides existing notes immediately after the tuplet. However, if Insert mode is activated, any subsequent existing notes are pushed to later rhythmic positions to accommodate the extra rhythmic durations required.

RELATED LINKS

[Turning tuplets into normal notes](#) on page 1010

Tuplet beams

Tuplet beams join notes in tuplets that can be joined with beams just like non-tuplet beams. You can make the same changes to tuplet beams that you can make to any other beam.

RELATED LINKS

[Beaming](#) on page 537

[Tuplets within beams](#) on page 549

[Beaming notes together manually](#) on page 537

[Unbeaming notes](#) on page 538

[Splitting beam groups](#) on page 540

[Changing the direction of partial beams](#) on page 538

[Changing beam slants](#) on page 542

Tuplet brackets

Tuplet brackets show the duration of tuplets that are not joined by beams, such as triplet quarter notes, by showing the notes within the tuplet under a bracket.

You can change the precise positions and shapes of tuplet brackets individually in Engrave mode.

Each tuplet bracket has four handles that can be moved graphically.



The two upper handles set the position of the start/end of the tuplet bracket. These handles can be moved independently of each other to create angled tuplet brackets, even if you have set tuplet brackets to be **Always horizontal** on the **Tuplets** page in **Engrave > Engraving Options**.

The two lower handles set the length of the tuplet bracket hooks. Moving either of these handles changes the length of both hooks.

RELATED LINKS

[Changing the angles of tuplet brackets](#) on page 1014

Moving tuplet numbers/ratios and brackets graphically

You can move tuplet numbers/ratios and tuplet brackets graphically without changing the rhythmic positions to which they apply. You can also move the start/end handles of tuplet brackets independently of each other, meaning you can lengthen/shorten tuplet brackets graphically.

PROCEDURE

1. In Engrave mode, select any of the following that you want to move:
 - Tuplet numbers/ratios

- Whole tuplet brackets
 - Individual handles on tuplet brackets
2. Move the tuplet brackets, tuplet numbers/ratios, or handles in any of the following ways:
- Press **Alt-Right Arrow** to move handles to the right.
 - Press **Alt-Left Arrow** to move handles to the left.
 - Press **Alt-Up Arrow** to move handles, whole brackets, and tuplet numbers/ratios upwards.
 - Press **Alt-Down Arrow** to move handles, whole brackets, and tuplet numbers/ratios downwards.

TIP

If you want to move tuplet brackets, tuplet numbers/ratios, or handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag whole tuplet brackets or tuplet numbers/ratios upwards/downwards.
- Click and drag handles on tuplet brackets in any direction.

RESULT

The selected tuplet brackets or tuplet numbers/ratios are moved to new graphical positions, without changing the rhythmic positions to which they apply.

TIP

- The following properties in the **Tuplets** group of the Properties panel are activated automatically when you move the corresponding part of tuplet brackets:
 - **Start offset** moves the start of tuplet brackets. **X** moves them horizontally, **Y** moves them vertically.
 - **End offset** moves the end of tuplet brackets. **X** moves them horizontally, **Y** moves them vertically.
 - **Hook length** changes the length of tuplet bracket hooks.

For example, if you move a whole tuplet bracket, both handles are moved, so **Start offset** and **End offset** are both activated. You can also use these properties to move tuplet brackets and tuplet numbers/ratios graphically by changing the values in the value fields.

As you can change values for the properties for the start/end of tuplet brackets independently, you can also use the properties to change the angles of tuplet brackets.

Deactivating the properties resets tuplet brackets to their default positions.

- You can change the default position of all tuplet brackets project-wide in the **Horizontal Position** section of the **Tuplets** page in **Engrave > Engraving Options**.

Hiding/Showing tuplet brackets

You can hide/show tuplet brackets independently of tuplet numbers/ratios.

PROCEDURE

1. Select the tuplet brackets you want to hide/show. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Bracket** in the **Tuplets** group.
3. Choose one of the following options:
 - **Hidden**

-  **Shown**

-

Changing the angles of tuplet brackets

You can change the angles of individual tuplet brackets by moving the square handles on each corner of tuplet brackets to new graphical positions independently.

PROCEDURE

1. In Engrave mode, select one of the following handles on the tuplet brackets whose angle you want to change:
 - The start corner handle
 - The end corner handle
2. Move the handles in any of the following ways:
 - Press **Alt-Right Arrow** to move them to the right.
 - Press **Alt-Left Arrow** to move them to the left.
 - Press **Alt-Up Arrow** to move them upwards.
 - Press **Alt-Down Arrow** to move them downwards.

TIP

If you want to move handles by larger increments, you can press **Ctrl/Cmd** as well as the standard key command, for example, **Ctrl/Cmd-Alt-Left Arrow**.

- Click and drag them in any direction.
3. Optional: Repeat steps 1 and 2 for the other corner handle on the tuplet brackets whose angle you want to change.
-

RELATED LINKS

[Moving tuplet numbers/ratios and brackets graphically](#) on page 1012


[Forcing tuplet brackets to be horizontal](#) on page 1016

[Tuplet brackets](#) on page 1012

Changing the placement of tuplet brackets relative to the staff

You can change the placement of individual tuplet brackets and tuplet numbers/ratios relative to the staff.

PROCEDURE

1. Select the tuplet brackets and tuplet numbers/ratios whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Placement** in the **Tuplets** group.
3. Choose one of the following options:
 - **Above**

 - **Below**



- **Cross-staff above**



- **Cross-staff below**



RESULT

The placement of the selected tuplet brackets is changed.

TIP

- Deactivating **Placement** returns the selected tuplets to their default placement.
 - You can change the placement of all tuplet brackets relative to vocal staves project-wide in the **Placement** section of the **Tuplets** page in **Engrave > Engraving Options**.
-

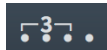
Changing the rhythmic end positions of tuplet brackets

You can change the rhythmic end positions of tuplet brackets relative to individual notes individually.

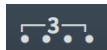
PROCEDURE

1. Select the tuplet brackets whose end positions you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **End position** in the **Tuplets** group.
3. Choose one of the following options:

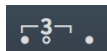
- **End at right-hand side of final note**



- **End immediately before following note**



- **End at position of final tuplet division**



RESULT

The end position for the selected tuplet brackets is changed.

TIP

- Deactivating the property returns the selected tuplets to your default settings.
 - You can change the horizontal position of tuplet numbers/ratios on all tuplets project-wide in the **Horizontal Position** section of the **Tuplets** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Changing the angles of tuplet brackets](#) on page 1014
[Project-wide engraving options for tuplets](#) on page 1008

Forcing tuplet brackets to be horizontal

You can change the angle of individual tuplet brackets so that they appear horizontal, independently of your project-wide setting.

PROCEDURE

1. Select the tuplet brackets whose angle you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Force horizontal** in the **Tuplets** group.

RESULT

The selected tuplet brackets appear horizontal when the property is activated. When the property is deactivated, the selected tuplet brackets follow your project-wide setting for angled tuplet brackets.

TIP

You can change whether all tuplet brackets can appear angled or always appear horizontal project-wide in the **Brackets** section of the **Tuplets** page in **Engrave > Engraving Options**.

RELATED LINKS

- [Project-wide engraving options for tuplets](#) on page 1008
- [Changing the angles of tuplet brackets](#) on page 1014

Tuplet numbers/ratios

Tuplet numbers and ratios are very similar: both indicate the number of equal notes included in the tuplet, such as 3 for triplets, but tuplet ratios also include the number of normal notes into whose duration the tuplet fits, such as 3:2 for triplets.

Additionally, tuplet ratios can include a note that indicates the duration of notes in the tuplet.



A triplet with a ratio and note value indication

Tuplet numbers/ratios help performers quickly identify the type of tuplet and how they must fit the number of notes indicated into the prevailing tempo and meter.

In Dorico Pro, you can change the appearance of all tuplet numbers/ratios project-wide on the **Tuplets** page in **Engrave > Engraving Options**, such as changing the font used for them, and for individual tuplets independently of this setting.

RELATED LINKS

- [Project-wide engraving options for tuplets](#) on page 1008
- [Changing the font used for tuplet numbers/ratios](#) on page 1018

Changing the tuplet number/ratio type

You can change which type of tuplet number/ratio is shown for individual tuplets, independently of your project-wide setting.

PROCEDURE

1. Select the tuplet brackets of the tuplets whose type of tuplet number/ratio you want to change. You can do this in Write mode and Engrave mode.

NOTE

The **Tuplets** group of the Properties panel is only shown if you select tuplet brackets. It is not shown if you select notes within the tuplet, or notes within the tuplet and the tuplet bracket.

2. In the Properties panel, activate **Number** in the **Tuplets** group.
3. Choose one of the following options:

- **None**



- **Number**



- **Ratio**



- **Ratio+note**



RESULT

The tuplet number/ratio shown for the selected tuplets is changed.

TIP

- Deactivating **Number** returns the selected tuplets to the default setting.
 - You can change which tuplet number/ratio appears on all tuplets project-wide in the **Number and Ratio** section of the **Tuplets** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Tuplet numbers/ratios](#) on page 1016

[Project-wide engraving options for tuplets](#) on page 1008

Changing the position of tuplet numbers/ratios

You can change the horizontal positions of tuplet numbers and ratios in individual tuplet brackets, independently of your project-wide setting.

PROCEDURE

1. Select the tuplet brackets whose tuplet number/ratio positions you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Center** in the **Tuplets** group.
3. Choose one of the following options:
 - **Visual**
Positions tuplet numbers/ratios at the visual center of the tuplet beam or tuplet bracket.
 - **Rhythmic**

Positions tuplet numbers/ratios at the rhythmic center of the tuplet beam or tuplet bracket, which might be visually off-center.

RESULT

The position of the tuplet numbers/ratios for the selected tuplets is changed.

TIP

- Deactivating the property returns tuplets to your project-wide setting.
 - You can change the horizontal position of tuplet numbers/ratios on all tuplets project-wide in the **Number and Ratio** section of the **Tuplets** page in **Engrave > Engraving Options**.
-

RELATED LINKS

[Tuplet brackets](#) on page 1012

[Changing the angles of tuplet brackets](#) on page 1014

Changing the font used for tuplet numbers/ratios

By default, tuplet numbers/ratios are drawn in a bold, italic, Arabic font that is similar in appearance to fingerings. You can change the font used for all tuplet numbers/ratios project-wide. This also affects the appearance of note value indications.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-E** to open **Engraving Options**.
 2. Click **Tuplets** in the page list.
 3. In the **Number and Ratio** section, choose one of the following options for **Tuplet digit style**:
 - **Bold weight**
 - **Regular weight**
 - **Plain font**
 4. Click **Apply**, then **Close**.
-

RESULT

The font used for tuplet numbers/ratios project-wide is changed.

- **Bold weight** and **Regular weight** are both based on the **Tuplet Font** style, which must be SMuFL-compliant.
- **Plain font** uses the **Tuplet Plain Font** style, which can be any text font.

TIP

You can edit different aspects of the **Tuplet Plain Font** style, such as its font size, in the **Edit Font Styles** dialog.

RELATED LINKS

[Edit Font Styles dialog](#) on page 364

Unpitched percussion

The term “unpitched percussion” covers all percussion instruments that are not tuned to specific pitches. This includes instruments such as bass drum, guiro, maracas, cymbals, and shakers.

Dorico Pro provides comprehensive support for unpitched percussion notation, with flexible options for combining music for multiple instruments into percussion kits that can then be displayed differently in different layouts. You can also define percussion kits as drum sets, which changes the default stem directions of notes.

The different percussion kit presentation types in Dorico Pro are layout-specific, meaning you can present percussion kits in different ways in different layouts. For example, you could present a percussion kit as a five-line staff in the full score layout but with single-line instruments in the percussion part layout.

You can also customize and create new playing technique-specific noteheads for unpitched percussion. This allows you to indicate how notes are played by using different noteheads for different playing techniques on each instrument in percussion kits.

RELATED LINKS

[Percussion kits](#) on page 1020

[Percussion kit presentation types](#) on page 1025

[Staff labels for percussion kits](#) on page 904

[Defining percussion kits as drum sets](#) on page 111

[Inputting notes in percussion kits](#) on page 154

[Playing techniques for unpitched percussion instruments](#) on page 1027

Percussion kits vs. individual percussion instruments

Percussion kits allow you to show multiple unpitched percussion instruments held by a single player at the same time in different ways. Multiple percussion instruments not combined into kits are shown on a single line that only shows the instrument currently being played by default.

One common type of percussion kit is a drum set. A drum set consists of a number of separate instruments mounted together on a frame, and is typically written on a regular five-line staff. Each instrument has its own position on the staff, and sometimes its own notehead type. Similarly, a pair of bongos is a percussion kit by default in Dorico Pro, consisting of the two bongo drums, typically written on a grid with two lines: the smaller drum shown on the top line, and the larger drum shown on the bottom line.

Showing individual percussion instruments separately can be appropriate if a player only has one or two percussion instruments. However, combining percussion instruments into a kit gives you more flexibility over the presentation of music, which you can vary in each layout independently. Kits also give you greater control over the labelling of instruments.

If instrument changes are enabled on the **Players** page in **Setup > Layout Options**, Dorico Pro changes from one instrument to the next, just as it does for pitched instruments.

NOTE

Kit instruments in player cards in the **Players** panel in Setup mode are colored green, whereas individual percussion instruments not part of percussion kits are colored the same light blue as all other instruments.

Percussion kits

A percussion kit is a collection of unpitched percussion instruments that are played by a single player. Drum sets are a particular type of percussion kit that are often used in pop and rock music.

In Dorico Pro, you can present percussion kits in different ways, including as a five-line staff and as a grid. If you want percussion kits to behave as drum sets, you can define them as drum sets.

You can create percussion kits in Setup mode. You can combine existing unpitched percussion instruments into kits and add empty kits to players, to which you can then add unpitched percussion instruments. You can also import existing kits you have previously exported and saved.

You can move percussion instruments between players, without affecting any music already added to that instrument.

NOTE

If the instrument you want to move is combined into a percussion kit, you must first remove the instrument from the kit before you can move it to another player.

You can change individual percussion instruments like any other instrument. However, you can only change unpitched percussion instruments to other unpitched percussion instruments, and you can only change the percussion instruments in kits within the **Edit Percussion Kit** dialog.

RELATED LINKS

[Percussion kit presentation types](#) on page 1025

[Staff labels for percussion kits](#) on page 904

[Edit Percussion Kit dialog](#) on page 107

[Combining individual percussion instruments into kits](#) on page 105

[Defining percussion kits as drum sets](#) on page 111

[Adding instruments to percussion kits](#) on page 110

[Removing individual instruments from percussion kits](#) on page 114

[Moving instruments between players](#) on page 107

Exporting percussion kits

You can export percussion kits as library files. This allows you to use kits again without having to create them from scratch.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player whose percussion kit you want to export.
 2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
 3. Click **Export Kit** at the bottom of the dialog to open the File Explorer/macOS Finder.
 4. In the File Explorer/macOS Finder, specify a name and location for the library file.
 5. Click **Save**.
-

RESULT

The kit is exported and saved as a library file.

NOTE

You can later import the library file into other projects to reuse the percussion kit.


Importing percussion kits

You can import library files containing percussion kits, which allows you to use kits again without having to create them from scratch.

PREREQUISITE

You have added a new solo player in the **Players** panel in Setup mode.

PROCEDURE

1. In Setup mode, open the instrument picker for your empty solo player in any of the following ways:
 - Select the empty player and press **Shift-I**.
 - Click the plus symbol in the empty player card.

 - Right-click the empty player and choose **Add Instrument to Player** from the context menu.
 2. Click **Import Kit** in the instrument picker to open the File Explorer/macOS Finder.
 3. In the File Explorer/macOS Finder, locate and select the percussion kit library file you want to import.
 4. Click **Open**.
-

RESULT

The selected library file is imported as a percussion kit. It is assigned to the player from whose card you opened the instrument picker.

Project-wide engraving options for unpitched percussion

You can find options for the project-wide appearance and position of percussion legends and ghost notes on the **Percussion** page in **Engrave > Engraving Options**.

The options are accompanied by diagrams to help you visualize how they affect the appearance of your music.

RELATED LINKS

[Engraving Options dialog](#) on page 299

Per-flow notation options for unpitched percussion

You can find options for how notes in percussion kits are notated in each flow independently on the **Percussion** page in **Notation Options**.

For example, you can choose to notate all notes in a percussion kit in a single voice rather than in multiple voices.

You can open **Notation Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-N** in any mode.

- Choose **Write > Notation Options** in Write mode or **Setup > Notation Options** in Setup mode.
- Click **Notation Options** in the **Flows** panel in Setup mode.



You can then click **Percussion** in the page list.

Changing the playing techniques of notes on percussion kit staves

For notes on percussion kit staves that use playing technique-specific noteheads to indicate different playing techniques, you can change their playing techniques after they have been input by cycling through the available playing technique-specific noteheads.

NOTE

This only applies to changing playing technique-specific noteheads.

PREREQUISITE

The percussion kit instruments whose playing techniques you want to change have at least two playing technique-specific noteheads defined in the **Percussion Instrument Playing Techniques** dialog.

PROCEDURE

1. In Write mode, select the notes whose playing technique-specific notehead you want to change.

NOTE

The current playing technique is shown above the rhythmic grid if you select a single note. It is not shown if you select multiple notes.

2. Cycle through the available playing techniques for the selected instruments in any of the following ways:
 - Press **Shift-Alt-Up Arrow** to cycle upwards.
 - Press **Shift-Alt-Down Arrow** to cycle downwards.
-

RESULT

The playing techniques of the selected notes are changed. Their notehead design and/or position might be changed.

RELATED LINKS

[Percussion Instrument Playing Techniques dialog](#) on page 1027

[Inputting notes in percussion kits](#) on page 154

[Defining how combinations of articulations and single-note tremolos sound in playback](#) on page 465

[Playing techniques](#) on page 790

Showing notes in percussion instruments as ghost notes

You can show notes in percussion instruments as ghost notes. Ghost notes are shown in parentheses.

PROCEDURE

1. Select the unpitched percussion notes that you want to show as ghost notes. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Ghost note** in the **Notes and Rests** group.

RESULT

The noteheads of the selected notes are shown in parentheses.

Moving notes to different instruments in percussion kits

You can move notes to different instruments in the same percussion kit after they have been input, except in layouts using the single-line instruments kit presentation type.

In layouts using the single-line instruments kit presentation type, you can instead cross notes to other staves to create cross-staff beams.

PROCEDURE

1. In Write mode, select the notes you want to move to a different instrument in the percussion kit.
2. Move the notes to another instrument in any of the following ways:
 - Press **Alt-Up Arrow** to move them to the instrument above.
 - Press **Alt-Down Arrow** to move them to the instrument below.

RESULT

The notes are moved to another instrument in the kit.

AFTER COMPLETING THIS TASK

You can change the position of each instrument in the kit.

RELATED LINKS

[Edit Percussion Kit dialog](#) on page 107

[Changing the positions of instruments within percussion kits](#) on page 113

[Percussion kit presentation types](#) on page 1025

[Changing the presentation type of percussion kits](#) on page 1026

[Creating cross-staff beams](#) on page 544

Notations on notes in percussion kits

You can add notations to notes and use different rhythms in percussion kits in the same ways as for normal notes; however, they can behave differently.

Articulations

You can add articulations to percussion instruments in all kit presentation types in the same ways as for other instruments.

However, in grid and five-line staff presentations, any articulations you add apply to all instruments in the same voice that have notes at that rhythmic position. For example, if both a

snare drum and tom-tom note are at the same rhythmic position, and you add an accent, the accent is added to both instruments because they are both shown in the same down-stem voice by default.

You can see the accent applied to each note if you switch to the single-line instruments presentation type.

Tuplets

When working in the grid and five-line staff kit presentation types, tuplets are added to all instruments in the same voice.

You can switch to the single-line instruments presentation type to input cross-rhythms on each instrument separately. When you switch back to the grid or five-line staff kit presentation types, Dorico Pro attempts to resolve the rhythmic conflicts.

- Conflicting tuplets: One tuplet is moved into an extra voice for the duration of the conflict.
- Tuplet notes in one instrument and non-tuplet notes in another instrument starting at the same rhythmic position: The non-tuplet note is displayed as if it were part of the tuplet. This is because the note onset is at the same position as the start of the tuplet, so it sounds the same as the original notation.
- Tuplet notes in one instrument and non-tuplet notes in another instrument that do not start at the same rhythmic position, or other non-tuplet notes that start part-way through the tuplet: Non-tuplet notes are moved into an extra voice for the duration of the conflict.

NOTE

Deleting a tuplet from grid and five-line staff kit presentation types deletes the tuplet from all instruments whose notes contribute to the same shared voice.

Playing techniques

You can input playing techniques, such as + for closed and o for open hi-hat, during step input and add them later to existing notes in the same ways as for other instruments. You can use the playing techniques popover or click any of the playing techniques in the Playing Techniques panel in Write mode.

Playing techniques are only added to the instrument to which the note you select belongs, even if there are other instruments in the same voice.

Percussion stickings

Dorico Pro does not yet have a dedicated feature for percussion stickings. However, you can use lyrics to represent percussion stickings in all kit presentation types:

- Grid/Five-line staff presentation types: Select a note in the instrument in which you want to show stickings.
- Single-line instruments presentation type: Input lyrics directly into instruments in which you want to show stickings.

RELATED LINKS

[Inputting articulations](#) on page 182

[Inputting tuplets](#) on page 169

[Changing the pitch of individual notes](#) on page 173

[Input methods for playing techniques and pedal lines](#) on page 238

[Inputting lyrics](#) on page 246

Dynamics in percussion kits

Unlike other items, dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

This is due to the complexity of combining a large number of different dynamics at the same rhythmic position, as allowed in the single-line instruments presentation, into the single position required for both the grid and five-line staff presentations. Therefore, you can add dynamics in the grid and five-line staff presentation types independently of the single-line instruments presentation type.

RELATED LINKS

[Input methods for dynamics](#) on page 208

Percussion kit presentation types

You can show percussion kits in three different presentation types, which can be different in each layout in your project.

NOTE

Dynamics are not shared between the grid/five-line staff presentation types and the single-line instruments presentation type. Any dynamics added to instruments in the single-line instruments presentation type do not appear when you switch to grid/five-line presentations.

You can edit the appearance/structure of each presentation type independently in the **Edit Percussion Kit** dialog. For example, changing the order of instruments in the five-line staff presentation does not affect the order of instruments in the grid presentation of the same percussion kit.

5-line staff

Kit instruments are shown on a five-line staff. You can determine which instruments are shown on each line and in each space of the staff. A single staff label containing the name of the kit is shown.

The numbers down the left-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to staff positions. For example, position 0 is the middle line of the five-line staff, position 1 is the space immediately above the middle staff line, position -2 is the line below the middle staff line, and so on.

Bold black lines show the five staff lines, while gray lines above and below the staff show nominal staff line positions. Each instrument is shown on its staff position.

Grid

Kit instruments are shown on a grid, with each instrument on its own line. You can customize the size of the gaps between each line. Staff labels are shown for each instrument in a smaller font than normal staff labels.

The numbers down the right-hand side of the editing area in the **Edit Percussion Kit** dialog correspond to the number of staff spaces between each instrument line. By default, all instruments in a grid are two spaces apart.

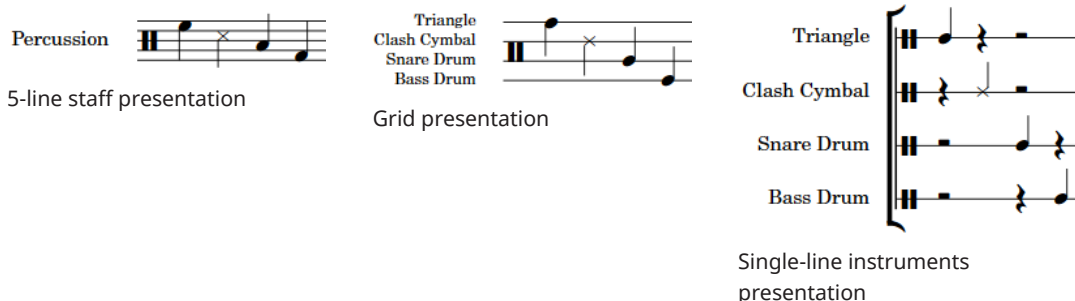
The order in which the instruments are listed matches the order in which they appear in the score.

Each instrument in a grid shows its own staff label by default, aligned vertically with its own line, but you can group adjacent instruments together and show a single label for each group.

Single-line instruments

Kit instruments are shown as individual instruments with their own lines. Normal-sized staff labels are shown for each instrument.

The editing area in the **Edit Percussion Kit** dialog lists all of the instruments in the order in which they appear in the score.



Multiple instruments held by the same player are vertically spaced according to the ideal gaps defined on the **Vertical Spacing** page in **Setup > Layout Options**.

RELATED LINKS

[Edit Percussion Kit dialog](#) on page 107

[Changing the presentation type of percussion kits](#) on page 1026

[Staff labels for percussion kits](#) on page 904

[Overriding the appearance of playing technique-specific noteheads](#) on page 1031

[Override Percussion Noteheads dialog](#) on page 1029

Changing the presentation type of percussion kits

You can change the presentation type of percussion kits in each layout independently of other layouts and independently of each other. For example, you can use a five-line staff in the full score layout but a grid in the percussion part layout, and have two percussion kits with different presentation types in the same full score layout.

PROCEDURE

1. Press **Ctrl/Cmd-Shift-L** to open **Layout Options**.
 2. In the **Layouts** list, select the layouts in which you want to change the percussion kit presentation type.
By default, the layout currently open in the music area is selected when you open the dialog. You can select other layouts by using the selection options in the action bar, **Shift**-clicking adjacent layouts, and **Ctrl/Cmd**-clicking individual layouts.
 3. Click **Players** in the page list.
 4. In the **Percussion** section, choose one of the following options for each percussion kit in your project:
 - **5-line Staff**
 - **Grid**
 - **Single-line Instruments**
 5. Click **Apply**, then **Close**.
-

RESULT

The presentation type is changed for the selected percussion kits in the selected layouts.

RELATED LINKS

[Percussion kit presentation types](#) on page 1025

Playing techniques for unpitched percussion instruments

As well as using normal playing techniques on notes in percussion kits, you can use the design and position of noteheads to indicate different playing techniques for unpitched percussion instruments and percussion kits.

You can indicate playing techniques for unpitched percussion instruments in any of the following ways:

- Use playing technique-specific noteheads
- Position notes in spaces directly above/below the line on which notes are normally written
- Add articulations or single-note tremolos
- Add playing techniques in the same ways as for pitched instruments

For example, you can add open and closed techniques for hi-hats using the playing techniques popover, or by clicking the playing techniques you want in the Playing Techniques panel.

You can edit the set of playing technique-specific noteheads defined for each percussion instrument in the **Percussion Instrument Playing Techniques** dialog.

RELATED LINKS

[Edit Percussion Kit dialog](#) on page 107

[Defining how combinations of articulations and single-note tremolos sound in playback](#) on page 465

[Exporting percussion kits](#) on page 1020

[Importing percussion kits](#) on page 1021

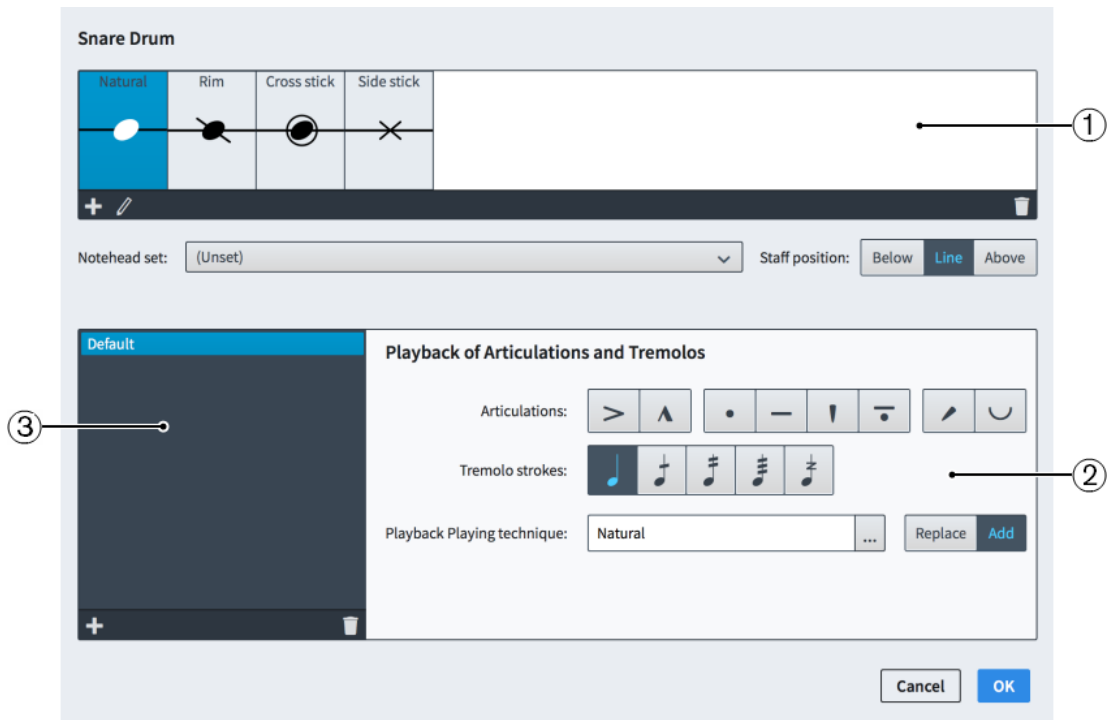
[Input methods for playing techniques and pedal lines](#) on page 238

Percussion Instrument Playing Techniques dialog

The **Percussion Instrument Playing Techniques** dialog allows you to edit the set of playing technique-specific noteheads defined for each percussion instrument.

You can open the **Percussion Instrument Playing Techniques** dialog in Setup mode in the following ways:

- For an individual percussion instrument: In the **Players** panel, expand the card of the player holding the instrument, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
- For percussion instruments that are part of percussion kits: In the **Players** panel, click the arrow in the kit instrument label, and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.



Percussion Instrument Playing Techniques dialog

1 List of playing technique-specific noteheads

Contains the main playing technique-specific noteheads currently defined for the selected percussion instrument, showing the notehead set and the staff position corresponding to the playing technique as applicable.

You can add new playing technique-specific noteheads for unpitched percussion instruments. Normally, percussion instruments define at least the **Natural** playing technique, which is usually shown using the default notehead set.

2 Playback of Articulations and Tremolos

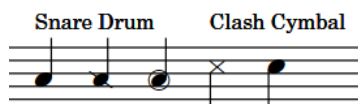
Allows you to define how combinations of articulations and tremolo strokes affect or override the playback of playing techniques.

For example, you can define an entirely different playing technique for a playing technique-specific notehead for when an accent is added to it.

3 Overrides of articulations and tremolos list

Displays any overrides of articulations and tremolos you define.

EXAMPLE



Three different snare drum playing technique-specific noteheads followed by two clash cymbal playing technique-specific noteheads

All of these settings are saved in the percussion instrument within your project, and you can export them from one project and import them into others.

NOTE

Overrides for articulations and tremolos are not currently reflected in playback, but this is planned for future versions.

RELATED LINKS

[Creating new playing technique-specific noteheads for unpitched percussion instruments](#) on page 1030

[Overriding the appearance of playing technique-specific noteheads](#) on page 1031

[Defining how combinations of articulations and single-note tremolos sound in playback](#) on page 465

[Exporting percussion kits](#) on page 1020

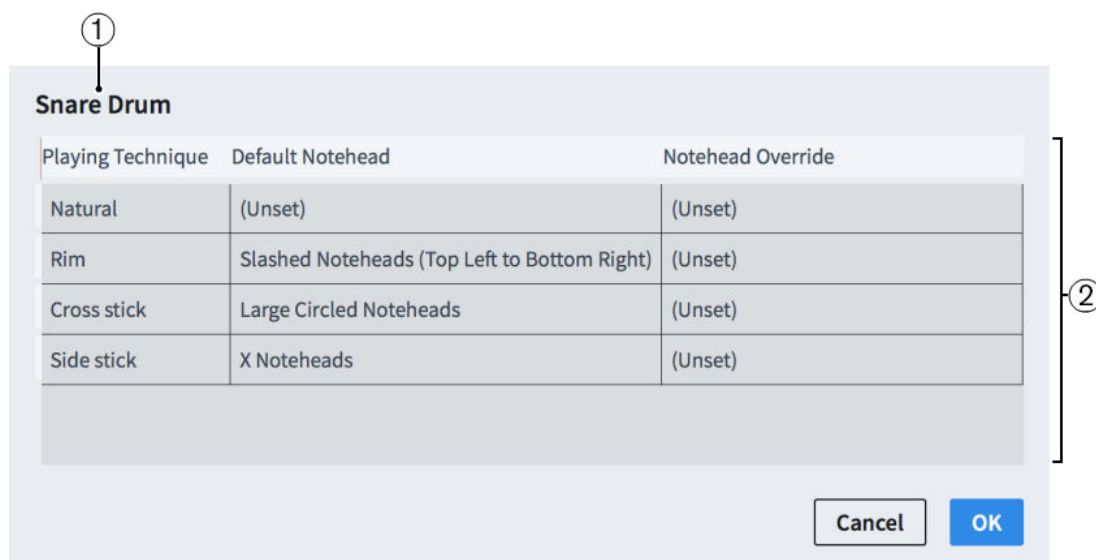
[Importing percussion kits](#) on page 1021

Override Percussion Noteheads dialog

The **Override Percussion Noteheads** dialog lists the playing technique-specific noteheads defined for the selected instrument in the **Percussion Instrument Playing Techniques** dialog, shows the notehead type mapped for each technique, and allows you to override those noteheads for five-line staff kit presentations only.

For example, the same notehead can indicate different playing techniques for different instruments. When those instruments are presented on the same five-line staff, this can cause confusion, so you can use the **Override Percussion Noteheads** dialog to disambiguate the notes for one instrument from another in five-line staff kit presentations only.

- You can open the **Override Percussion Noteheads** dialog by selecting an instrument in the **Edit Percussion Kit** dialog and clicking **Edit Noteheads**.



Override Percussion Noteheads dialog for a snare drum

The **Override Percussion Noteheads** dialog comprises the following:

- 1 Instrument name**
Displays the name of the percussion instrument whose noteheads are listed in the dialog.
- 2 Playing techniques table**
Contains the noteheads for the selected percussion instrument, arranged into the following columns:
 - Playing Technique**
Displays the playing technique associated with the notehead in the corresponding row of the table.
 - Default Notehead**
Displays the notehead used by default for the playing technique in the corresponding row of the table.

- **Notehead Override**
Displays the notehead override used in five-line staff presentations for the playing technique in the corresponding row of the table. You can change the notehead override by clicking it and selecting another notehead from the menu.

RELATED LINKS

[Overriding the appearance of playing technique-specific noteheads](#) on page 1031

[Percussion kit presentation types](#) on page 1025

Creating new playing technique-specific noteheads for unpitched percussion instruments

You can define new playing technique-specific noteheads for unpitched percussion instruments individually, which are saved for that type of percussion instrument in your project. You can also export playing technique-specific noteheads from your project and import them into other projects.

PROCEDURE

1. In Setup mode, open the **Percussion Instrument Playing Techniques** dialog in one of the following ways:
 - For an individual percussion instrument: In the **Players** panel, expand the card of the player holding the instrument, click the arrow in the instrument label, and choose **Edit Percussion Playing Techniques** from the menu.
 - For percussion instruments that are part of percussion kits: In the **Players** panel, click the arrow in the kit instrument label, and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog, select the instrument whose playing techniques you want to edit in the main editing area, and click **Edit Percussion Playing Techniques**.
2. Click **Add Playing Technique**.



3. Select the playing technique you want to create in the dialog that opens.
4. Click **OK** to add the selected playing technique to the list of playing technique-specific noteheads.
5. Select the notehead you want for the playing technique from the **Notehead set** menu.

NOTE

Leave **Notehead set** as **(Unset)** to use the default notehead set as defined on the **Notes** page in **Engrave > Engraving Options**.

6. Choose one of the following options for **Staff position**:
 - **Below**
 - **Line**
 - **Above**

RESULT

A new playing technique-specific notehead is added to the selected unpitched percussion instrument.

RELATED LINKS

[Input methods for playing techniques and pedal lines](#) on page 238

[Defining how combinations of articulations and single-note tremolos sound in playback](#) on page 465

Overriding the appearance of playing technique-specific noteheads

It might be necessary to override the appearance of playing technique-specific noteheads in order to disambiguate the notes for one instrument from another if they share a staff position in five-line staff kit presentations.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player holding the kit whose playing technique-specific noteheads you want to override.
 2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
 3. Select the instrument whose noteheads you want to override in the main editing area of the dialog.
 4. Click **Edit Noteheads** to open the **Override Percussion Noteheads** dialog.
 5. Click in the **Notehead Override** column for the appropriate playing technique and select a new notehead type from the menu to override its notehead.
 6. Click **OK** to save your changes and close the dialog.
-

RESULT

The playing technique-specific notehead is overridden for the selected instrument in five-line staff kit presentations.

NOTE

This does not affect the appearance of playing technique-specific noteheads in grid and single-line instrument kit presentation types.

RELATED LINKS

[Override Percussion Noteheads dialog](#) on page 1029

[Defining how combinations of articulations and single-note tremolos sound in playback](#) on page 465

Percussion legends

Percussion legends list the percussion instruments in use when using the five-line presentation type. Percussion legends can include all instruments that are represented on the staff, or only show sounding instruments in a set range to remind players which instruments to play at certain points.

You can change the default position of percussion legends in the **Percussion Legends** section of the **Percussion** page in **Engrave > Engraving Options**.

You can change the placement and appearance of percussion legends individually using properties in the **Percussion Legends** group of the Properties panel.

You can change various aspects of the paragraph style for percussion legends, such as the font size and style, in the **Paragraph Styles** dialog.

Percussion legends appear as signposts if there are no instruments sounding at their position, or in layouts using the grid presentation type. Percussion legends do not appear at all in layouts using the single-line instrument presentation type.

TIP

You can hide/show percussion legend signposts by choosing **View > Signposts > Percussion Legends**. Percussion legend signposts are shown when a tick is shown beside **Percussion Legends** in the menu, and hidden when no tick is shown.

RELATED LINKS

[Paragraph Styles dialog](#) on page 366

[Project-wide engraving options for unpitched percussion](#) on page 1021

[Per-flow notation options for unpitched percussion](#) on page 1021

[Staff labels for percussion kits](#) on page 904

Adding percussion legends to five-line staff kit presentations

You can add percussion legends at specific rhythmic positions to indicate the instruments in the kit. Percussion legends can show all instruments in the kit or only instruments sounding within the specified range.

PROCEDURE

1. In Write mode, select one of the following:
 - An item on the staff at the rhythmic position where you want to add a percussion legend for all instruments.
 - The range of notes/items for which you want to show a percussion legend for sounding instruments.
2. Add a percussion legend in one of the following ways:
 - Choose **Edit > Percussion > Legend for All Instruments**.
 - Choose **Edit > Percussion > Legend for Sounding Instruments**.

TIP

You can also choose these options from the context menu.

RESULT

A percussion legend is added above the staff. It lists instruments, either all instruments or just instruments with notes within the selected range, in the order in which they appear in the five-line staff, from highest down to lowest.

Changing the sounding instrument percussion legend range

You can change the rhythmic range of sounding instrument percussion legends to include more/fewer instruments in the legend, as they only show the instruments playing at the rhythmic positions included in the range.

PROCEDURE

1. In Write mode, select the sounding instrument percussion legend whose range you want to change.
2. Change the range in any of the following ways, according to the current rhythmic grid value:
 - To move the whole range to the right, press **Alt-Right Arrow**.
 - To move the whole range to the left, press **Alt-Left Arrow**.
 - To lengthen the range, press **Shift-Alt-Right Arrow**.
 - To shorten the range, press **Shift-Alt-Left Arrow**.

NOTE

Key commands lengthen/shorten items by moving their end only.

- Click and drag the circular handle at the start/end to the right/left.
-

RESULT

The rhythmic range covered by the selected sounding instrument percussion legend is changed according to the current rhythmic grid value.

The instruments included in the percussion legend are automatically updated to reflect the instruments playing within the range.

Changing the percussion legend type

You can change the type of percussion legends so they show all instruments or only sounding instruments in five-line staff presentations.

PROCEDURE

1. Select the percussion legends whose type you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Legend type** in the **Percussion Legends** group.

NOTE

The property is already activated for sounding instrument percussion legends.

3. Choose one of the following options:

- **Legend**
 - **Sounding Instruments**
-

RESULT

The legend type of the selected legends is changed.

Showing short instrument names in percussion legends

Percussion legends use full instrument names by default, but you can choose to use short names to save space.

PROCEDURE

1. Select the percussion legends whose instrument name lengths you want to change. You can do this in Write mode and Engrave mode.
 2. In the Properties panel, activate **Use short names** in the **Percussion Legends** group.
-

RESULT

Short instrument names are shown in the selected percussion legends.

Deactivating **Use short names** returns the selected percussion legends to showing full instrument names.

RELATED LINKS

[Staff labels for percussion kits](#) on page 904

Changing the text shown in percussion legends

By default, percussion legends show the instrument names of percussion instruments in five-line staff presentations, stacked vertically. You can change the text shown in percussion legends to show custom text.

PROCEDURE

1. In Engrave mode, select the percussion legends whose text you want to change.
2. In the Properties panel, activate **Custom text** in the **Percussion Legends** group.
3. Enter the text you want into the value field.
4. Press **Return**.

RESULT

The text shown in the selected percussion legends is changed.

Changing the placement of percussion legends relative to the staff

By default, percussion legends are shown above the staff but you can change their placement so they are shown below the staff.

PROCEDURE

1. Select the percussion legends whose staff-relative placement you want to change. You can do this in Write mode and Engrave mode.
2. In the Properties panel, activate **Placement** in the **Percussion Legends** group.
3. Choose one of the following options:
 - **Above**
 - **Below**

RESULT

The selected percussion legends appear above/below the staff.

TIP

- Deactivating **Placement** returns the selected percussion legends to their default staff-relative placement.
- You can change the default distance between all percussion legends and other items project-wide in the **Percussion Legends** section of the **Percussion** page in **Engrave > Engraving Options**.

RELATED LINKS

[Project-wide engraving options for unpitched percussion](#) on page 1021

[Per-flow notation options for unpitched percussion](#) on page 1021

Voices in percussion kits

Dorico Pro automatically combines music into a smaller number of voices when multiple percussion instruments are presented in a five-line staff or as a grid, even if they contain

different rhythms. By default, music is combined into one up-stem voice and one down-stem voice.

Alternatively, you can choose to notate all notes in a percussion kit in a single voice when the kit is defined as a drum set on the **Percussion** page in **Write > Notation Options**. This convention is used less frequently for orchestral percussion.

You can also override this option for individual percussion kits, and for individual notes in percussion kits.

Notes in the same voice cannot be notated using different durations and are notated using ties by default instead. You can eliminate the use of ties by choosing to truncate longer notes so that only their onsets appear on the **Percussion** page in **Notation Options**.

If one of the instruments in a percussion kit has a tuplet rhythm, other instruments can share the voice if their notation is compatible, such as if the tuplet structure is the same, or if they have a single note that coincides with the start of the tuplet. In this case, the single non-tuplet note is notated as the same duration of the first note of the tuplet.

If the music of the different instruments in the same voice is incompatible, Dorico Pro dynamically creates another voice and notates the remaining music in that voice until the music is compatible again.

RELATED LINKS

[Notations on notes in percussion kits](#) on page 1023

[Notation Options dialog](#) on page 139

[Defining percussion kits as drum sets](#) on page 111

[Adding slash voices to percussion kits](#) on page 1045

Changing the voice of individual notes in percussion kits

You can override the default voice for individual notes in percussion kits, including drum sets.

PROCEDURE

1. Select the notes whose voice you want to override. You can do this in Write mode and Engrave mode.
2. Choose **Edit > Percussion > Change Voice > [Voice]**.
For example, to change notes to the second down-stem voice, choose **Edit > Percussion > Change Voice > Down-stem Voice 2**. You can also choose this option from the context menu.

RESULT

The voice of the selected notes is changed, independently of the default voice for their instrument and independently of your setting for voices in drum sets.



TIP

You can reset the voice of individual notes by selecting them and choosing **Edit > Percussion > Change Voice > Reset Note Destination Voice**. You can also choose this option from the context menu.

Specifying the stem direction/voice of instruments in percussion kits

You can specify the stem direction for each instrument in individual percussion kits. You can also set which voice they are in, allowing you to control which instruments share voices in percussion kits.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player holding the kit whose instrument stem directions and voices you want to specify.
2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
3. In the dialog, select an instrument whose stem direction and voice you want to specify.
4. Choose one of the following stem directions for **Stem direction and voice**:
 - **Up-stem**

 - **Down-stem**

5. Specify a voice by changing the value for **Stem direction and voice**.

NOTE

You do not have to change the voice number if you are switching between up- and down-stem voices as the number corresponds to the voice number for each stem direction.

6. Click **Apply**, then **Close**.

RESULT

The default stem direction and voice of the selected instrument is changed.

Unpitched percussion in Play mode

Unpitched percussion instruments are handled differently in Play mode than pitched instruments. Instead of showing the usual piano roll view, the onset of each note on each percussion instrument is shown in the drum editor.

You can expand each instrument in a kit at the left end of the track header in order to assign that particular instrument to another playback endpoint. For example, you can assign instruments to another channel on the same VST instrument or MIDI output device, or to a different device.

NOTE

The endpoint must have an appropriate selected percussion map.

Notes can be moved in Play mode by dragging them to the rhythmic position you want. However, like other instruments, you cannot move notes between percussion instruments, even if they are in the same percussion kit.

NOTE

You cannot change the duration of unpitched percussion notes within Play mode. This is planned for future versions.

RELATED LINKS

[Percussion maps](#) on page 460

[Drum editor](#) on page 409
[Inputting notes in the event display](#) on page 409
[Moving notes in the event display](#) on page 410

Unpitched percussion imported from MIDI files

When importing MIDI files, Dorico Pro optionally interprets music for tracks set to use channel 10 as drum sets if **Interpret channel 10 as General MIDI percussion** is activated in the **MIDI Import Options** dialog.

NOTE

The **MIDI Import Options** dialog opens automatically when you open MIDI files in Dorico Pro.

This is the only condition under which Dorico Pro interprets any music in MIDI files as percussion.

Unpitched percussion imported from MusicXML files

Unpitched percussion music can be expressed in a number of ways in MusicXML. Scoring applications take different approaches to what data is exported and how it is encoded. Therefore, the results of importing MusicXML into Dorico Pro vary considerably.

Dorico Pro identifies each instrument in kits explicitly and then combines them dynamically onto five-line staves. Other scoring applications and MusicXML have a different approach to how unpitched percussion music is represented. For example, a drum set may be effectively notated as pitched notes on a five-line staff and annotated with additional information to help identify which instrument corresponds to each staff position.

Because of these different approaches, mapping information between the MusicXML representation and the Dorico Pro representation can be challenging, so Dorico Pro employs heuristics to improve the quality of results.

Typically, drum set instruments in MusicXML files exported from both Sibelius and Finale are imported quite cleanly into Dorico Pro.

Results are particularly good, and more likely to be imported correctly, if the voicing of the drum set is consistent, such as consistently notating the snare drum in a down-stem voice. If the voicing changes from bar to bar, it is possible that some notes are either identified correctly or not imported at all.

Other kinds of percussion that are notated on five-line staves produce more variable results. In most cases, Finale includes information about which percussion instrument maps onto each staff position, but Sibelius does not. As a result, you might find that Dorico Pro chooses different instruments than you expected, but you can change instruments using the **Edit Percussion Kit** dialog.

RELATED LINKS

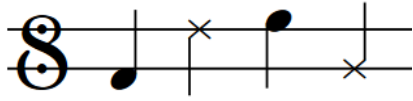
[Edit Percussion Kit dialog](#) on page 107
[Changing instruments in percussion kits](#) on page 110
[Adding instruments to percussion kits](#) on page 110

Universal Indian Drum Notation

Dorico Pro supports the Universal Indian Drum Notation system developed by Keda Music Ltd.

Universal Indian Drum Notation has been designed primarily for tabla, but can also be applied to other Indian drums with two heads, such as nagara, dhol, dholak, mridangam, and pakhawaj.

An Indian drum clef is automatically added to the staff when you add tabla instruments to players.



You can input Indian drum clefs by clicking **Indian drum clef** in the **Uncommon Clefs** section of the Clefs panel.

RELATED LINKS

[Adding instruments to players](#) on page 104

[Input methods for clefs and octave lines](#) on page 219

Voices

For many instruments, such as flute or trombone, each staff usually contains a single musical line in a single voice that is read from left to right along the staff. When multiple, independent lines must be shown in a single staff, each line can be a separate voice.

The most common use for showing multiple voices in a single staff is in vocal music, when the soprano and alto lines share a single staff and the tenor and bass lines share another staff. Showing each vocal line in its own voice helps to separate the lines, making the music easier to read and making the shape of each melodic line clear.

In Dorico Pro, you can create as many voices as you like on each staff. Each voice has its own color, which you can see if you show voice colors. This can help you to keep track of which notes are in which voices if there are multiple overlapping musical lines in your project.

Voices in Dorico Pro are divided into up-stem voices and down-stem voices. Stems of notes in up-stem voices point upwards, while stems of notes in down-stem voices point downwards. However, in bars where only one voice contains notes, stem directions are automatically changed to the directions they would have if there were only one voice on the staff. By default, the first voice on the staff is up-stem.

Following most notation conventions, rests are shown in bars for all voices that have notes in the bar. If two or more voices have a rest of the same rhythmic duration at the same rhythmic position, that rest is consolidated: instead of showing two identical rests, only one is shown.

RELATED LINKS

[Inputting notes into multiple voices](#) on page 159

[Showing voice colors](#) on page 1041

[Per-flow notation options for voices](#) on page 1040

[Per-flow notation options for rests](#) on page 862

[Adding notes above/below existing notes](#) on page 171

[Stem direction](#) on page 943

[Implicit rests in multiple-voice contexts](#) on page 861

[Moving rests vertically](#) on page 866

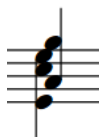
Note positions in multiple-voice contexts

Notes are usually placed directly above each other and at the same horizontal position, so that it is immediately clear which notes are played together. However, the horizontal alignment of notes can be different in multiple-voice contexts.

When there are three or more voices in a single staff, some notes must be positioned slightly to one side in a different voice column to ensure the division of notes across the voices is clear.

Interlocking notes in different voices can be positioned in two ways:

1. Notehead to notehead, which allows noteheads to overlap partially. This voice order often takes up less horizontal space than positioning notes stem to stem, as notes can overlap.



2. Stem to stem, which does not allow noteheads to overlap. This voice order keeps notes in different voices separate.



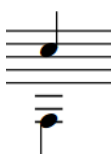
You can choose how interlocking notes in different voices are positioned project-wide on the **Voices** page in **Write > Notation Options**.

Dorico Pro positions notes by default with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and to maintain the clarity of the rhythm.

The order and position of notes in different voices is also automatically adjusted so that each rhythmic position uses as little horizontal space as possible, while remaining clear and legible. The voice column for some voices automatically changes as more voices are added, as Dorico Pro prefers showing voices with the widest pitch range between them on the left of the rhythmic position and voices with narrower pitch ranges to the right, as this produces the most balanced result, especially when there are multiple accidentals.



One voice



Two voices vertically aligned



Three voices all still vertically aligned



Four voices with two voice columns



Five voices with two voice columns

RELATED LINKS

[Slashes in multiple-voice contexts](#) on page 851

[Stem direction](#) on page 943

[Implicit rests in multiple-voice contexts](#) on page 861

Per-flow notation options for voices

You can find options controlling how notes in multiple voices are positioned in each flow independently on the **Voices** page in **Notation Options**.

The options on this page allow you to change the position and order of notes in multiple-voice contexts, and choose when noteheads in different voices can overlap.

Musical examples demonstrate how each option affects the appearance of your music.

You can open **Notation Options** in any of the following ways:

- Press **Ctrl/Cmd-Shift-N** in any mode.
- Choose **Write > Notation Options** in Write mode or **Setup > Notation Options** in Setup mode.
- Click **Notation Options** in the **Flows** panel in Setup mode.



You can then click **Voices** in the page list.

Showing voice colors

You can show notes in different colors according to their voice, for example, to check which notes are in which voice.

PROCEDURE

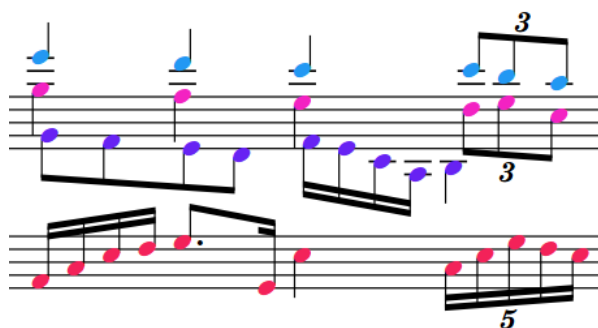
- Choose **View > Note and Rest Colors > Voice Colors**.

RESULT

Voice colors are shown when a tick appears beside **Voice Colors** in the menu, and hidden when no tick appears.

When voice colors are shown, noteheads appear with colors according to their voice. Colors are randomly assigned, meaning colors do not refer to specific voices.

EXAMPLE



Voice colors shown

AFTER COMPLETING THIS TASK

If showing voice colors reveals some notes are not in the voice you want, you can change their voice.

RELATED LINKS

[Changing the voice of existing notes](#) on page 287

[Swapping the contents of voices](#) on page 288

[Stem direction](#) on page 943

Unused voices

An unused voice is one that contains no notes anywhere in the project. Any unused voices are automatically deleted when you close a project, but you cannot manually delete voices once they have been created. You can create as many voices as you want in each staff.

NOTE

Deleting all notes in a voice does not delete the voice immediately.

If you later want to input notes in a voice that was automatically deleted when you last closed the project, you can create a new voice at any rhythmic position.

RELATED LINKS

[Inputting notes into multiple voices](#) on page 159

Swapping the order of voices

Dorico Pro automatically positions notes with the noteheads partially overlapping, in order to minimize the horizontal space they occupy and maintain the clarity of the rhythm. You can manually swap the order in which opposing voices are positioned horizontally.

PROCEDURE

1. Select the notes whose order you want to change. You can do this in Write mode and Engrave mode.
2. Choose **Edit > Voices > Swap Voice Order**. You can also choose this option from the context menu.

RESULT

The voice order of the selected notes is changed.

NOTE

If you want to revert the selected notes to their default voice order for the current flow, we recommend that you deactivate **Voice column index** in the **Notes and Rests** group of the Properties panel, which is available in Engrave mode and is activated automatically when you swap the order of voices. If you simply swap the contents of these notes again, their positions might not appear as expected.

EXAMPLE



Interlocking notes in opposing voices positioned notehead to notehead.



Interlocking notes in opposing voices positioned stem to stem.

RELATED LINKS

[Per-flow notation options for voices](#) on page 1040

[Stem direction](#) on page 943

[Implicit rests in multiple-voice contexts](#) on page 861

Voice column index

The voice column index is used to determine the positions of notes when multiple columns are needed, for example, when notes are in multiple voices and cannot be placed directly above each other vertically, and instead must partially overlap.

The **Voice column index** property in the **Notes and Rests** group of the Properties panel is automatically activated when you swap the order of voices manually.

NOTE

This property is available in Engrave mode only.

You can activate this property to change the index number, and therefore the horizontal order, of individually selected notes. Deactivating the property returns the selected notes to their default position.

TIP

- You can change the order of notes in multiple voices project-wide on the **Voices** page in **Write > Notation Options**.
- You can also change the minimum gaps between notes in different voices in the **Voices** section of the **Notes** page in **Engrave > Engraving Options**.

You can move notes graphically in Engrave mode. You can move notes individually and independently of all other items at that rhythmic position, or move everything at the same rhythmic position.

RELATED LINKS

[Per-flow notation options for voices](#) on page 1040

[Notation Options dialog](#) on page 139

[Engraving Options dialog](#) on page 299

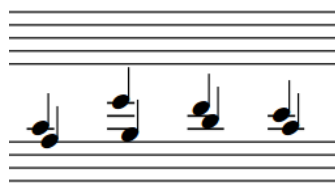
Notes crossed to staves with existing notes in other voices

When you create cross-staff beams by crossing notes to staves that already contain notes, the stem direction of the existing notes may change. This is due to how multiple voices at the same rhythmic position are handled in Dorico Pro.

For example, if a piano part contains notes in up-stem voices on both staves, the stem direction of notes in both voices can change if notes from the upper staff are crossed to the lower staff. In this situation, the notes from the two staves are not combined, but are instead treated as two up-stem voices in a multiple-voice context.



Two piano staves, each with notes in a single up-stem voice.



When the notes in the upper staff are crossed to the lower staff, the stem direction of the notes already in the lower staff changes so they point upwards.

You can change the stem direction of the notes originally in the lower staff in any of the following ways:

- Select the notes originally in the lower staff and change their voice to another voice, such as a down-stem voice.
- Select the notes originally in the lower staff and change their stem direction.

Alternatively, you can move the notes in the upper staff permanently to the lower staff.

RELATED LINKS

[Moving notes to other staves](#) on page 286

[Changing the voice of existing notes](#) on page 287

[Creating cross-staff beams](#) on page 544

[Changing the stem direction of notes](#) on page 946

[Stem direction](#) on page 943

Slash voices

Slash voices allow you to notate specific rhythms for rhythm slashes. They behave similarly to normal voices as you must input notes and rhythms manually, but all notes in slash voices are positioned by default on the middle line of the staff, regardless of the pitches you input.

If you later change the time signature, such as from 3/4 to 6/8, Dorico Pro only changes the note grouping to fit the meter just like for other notes; it does not change the presentation of rhythm in slash voices like it does for slash regions.

NOTE

- Because you can change notes in slash voices to normal voices and vice versa, the pitches you input are retained.
 - Notes in slash voices are not played back.
-

You can have multiple slash voices active at the same time. To accommodate all slash voices in multiple-voice contexts, Dorico Pro changes their staff position automatically. However, you can also change the staff position of rhythm slashes manually.

You can use slash regions and slash voices in the same project and at the same rhythmic positions, for example, you can input a slash region where you do not want to be specific about the rhythm, then input notes in a slash voice for a single bar where you want to specify an exact rhythm.

RELATED LINKS

[Rhythm slashes](#) on page 849

[Slash regions](#) on page 849

[Slashes in multiple-voice contexts](#) on page 851

[Changing the voice of existing notes](#) on page 287

[Changing the default stem direction of voices](#) on page 946

[Changing the staff position of rhythm slashes](#) on page 852

[Copying and pasting notes into different voices](#) on page 284

Changing the slash voice type

You can change the voice type of slash voices, for example, if you want to change a slash voice from having stems to being stemless. You can also change the type to normal notes, which restores the original pitches you input, and change normal notes to rhythm slashes.

NOTE

This affects all notes in the same voice. If you only want to change the slash voice type of some notes, you must change the voice of those notes instead.

PROCEDURE

1. Select a note in the voice whose slash type you want to change. You can do this in Write mode and Engrave mode.
2. Choose **Edit > Voices > Rhythmic Slashes > [Voice type]**.
For example, to change a whole normal voice to a stemless slash voice, choose **Edit > Voices > Rhythmic Slashes > Slashes without Stems**.

TIP

You can also choose these options from the context menu.

RESULT

The slash voice type of all notes in the same voice and flow as the selected note is changed.

If you change normal notes to a slash voice, they are all automatically positioned on a single staff line. By default in single-voice contexts, this is the middle line of the staff.

If you change rhythm slashes to normal notes, their original pitches are restored, meaning their staff positions reflect their pitches.

RELATED LINKS

[Changing the voice of existing notes](#) on page 287



Adding slash voices to percussion kits

You can add slash voices to percussion kits, for example, to show the desired rhythm for a passage without specifying the instruments to be played. You can add multiple slash voices to the same kit, including slash voices with and without stems.

NOTE

Rhythm slashes in percussion kits only appear when the five-line staff presentation is used. They do not appear in grid or single-line instrument presentations.

PROCEDURE

1. In the **Players** panel in Setup mode, expand the card of the player holding the percussion kit to which you want to add slash voices.
 2. Click the arrow that appears in the kit instrument label when you hover over it and choose **Edit Percussion Kit** to open the **Edit Percussion Kit** dialog.
 3. In the action bar below the five-line staff editor, click the button that corresponds to the type of slash voice you want to add.
 - Slashes with stems

 - Slashes without stems

 4. Optional: Repeat step 3 as many times as required for the number of slash voices you want to add.
-

RESULT

The slash voices are added to the kit. They are positioned on the middle line of the staff by default.

In note input, you can move the caret to slash voices just like moving it to other instruments in the kit, and input notes into slash voices just like inputting notes in percussion kit instruments.

AFTER COMPLETING THIS TASK

You can change the staff position of the slash voices you added to the kit.

RELATED LINKS

[Percussion kits](#) on page 1020

[Percussion kit presentation types](#) on page 1025

[Voices in percussion kits](#) on page 1034

[Edit Percussion Kit dialog](#) on page 107

[Inputting notes in percussion kits](#) on page 154

[Changing the positions of instruments within percussion kits on page 113](#)

Glossary

A

action

The mechanism inside pianos that allows the hammers to strike the strings with different forces, depending on the strength with which the player depresses the corresponding key. It allows pianos to use a greater dynamic range, hence their full name “pianoforte”.

anacrusis

See [pick-up bar](#).

articulation

(1) In music notation, symbols that indicate how a note should be played, typically affecting their onset (attack), release, or duration. (2) In sample libraries, a term that refers to playing techniques generally.

attachment

The rhythmic position at which an item occurs, or to which an item applies, in the music. In Engrave mode in Dorico Pro, an attachment line is shown between a selected item and its rhythmic position.

B

bar

A span of music comprising a specific number of beats, as defined by the prevailing time signature, whose boundaries are indicated by bar lines. Also known as a “measure”, but this documentation uses “bar”.

C

cancellation natural

A natural accidental positioned on the staff immediately before a change in key signature or a single note. It indicates that the previous accidental no longer applies and can be followed immediately by a new accidental if applicable. Showing cancellation naturals before single accidentals that follow double accidentals is also known as “archaic cancellation”. Cancellation naturals before a change in key signature are known as “traditional” when positioned after the barline and “Russian” when positioned before the barline.

caret

Shown during note input, the caret is the vertical line that extends above and below the staff and indicates the rhythmic position at which items are input. Also known as an “insertion point”. In Dorico Pro, the caret, cursor, and pointer are related but serve different purposes. See also [rhythmic grid](#), [note input](#).

casting off

The act of fixing the layout of pages of music, such as defining a set number of systems per page or the number of bars per system.

cautionary accidental

A restatement of an earlier accidental to eliminate ambiguities, such as when a tied note with an accidental continues onto another page. Also known as “courtesy accidentals”.

channel

In MIDI, a channel determines which note, controller, or other data is played by which sound on which device. In Dorico Pro, notes on a single staff may be played by different channels, depending on which playing techniques are provided by the patch assigned to each channel. See also [MIDI](#), [patch](#).

chord

Two or more notes of the same duration that start at the same rhythmic position and share a stem.

chord input

A variation of note input where notes are stacked on top of each other to create chords rather than being input after the previous note in sequence. Notes are input at the caret position, which does not advance automatically. See also [caret](#), [note input](#).

collision avoidance

Automatic adjustments made by Dorico Pro to ensure multiple items at the same position do not overlap and that all remain clearly legible. Includes changing the shape of items, such as slurs, and changing the vertical and/or horizontal position of items, such as accidentals in chords.

column

A vertical line representing the same horizontal position across all staves in the system. Used to determine the position of notes and chords for the purposes of spacing music accurately. Multiple columns can be used for the same rhythmic position to accommodate multiple voices, with notes or chords in some voices being offset horizontally from notes or chords in other voices.

concert pitch

All notes are written as they sound. Full scores are often notated in concert pitch, so that harmonies and themes are easier to identify. Also known as “sounding pitch”. See also [transposed pitch](#), [instrument transposition](#).

context menu

A menu that you can access by right-clicking on a mouse or double-tapping on a touchpad. Its options vary by the location of the mouse pointer when you access it, but it most commonly contains options also found on the **Edit** menu.

cursor

The vertical blinking line that appears when entering or editing text. See also [caret](#).

D**disclosure arrow**

A small arrow that is shown on all edges of the main window in Dorico Pro. It allows you to hide/show the toolbar and panels individually.

divisi

Italian for “divide” or “divided”, divisi is when players split in order to play multiple lines of music. This commonly involves a section, such as Violin I, dividing and using two staves rather than one for a limited passage. Divisi passages can be notated all on the same staff, using multiple voices if required, or across multiple staves. See also [tutti](#).

E**EDO**

An abbreviation for Equal Division of the Octave, it is a unit used to describe how an octave can be divided into equal parts, often for the purpose of defining a microtonal scale or tonality

system. Traditional Western European music uses 12-EDO, that is, each octave is divided into 12 equal semitones or half-steps. Music that uses equal quarter tones uses 24-EDO.

endpoint

The unique combination of inputs and outputs that together allow the correct sounds to be played for each instrument.

Engrave mode

A workspace in Dorico Pro that allows you to make fine graphical adjustments and to adjust the page layout and the format of the system. See also [modes](#).

engraving options

Options that affect the graphical appearance of the notation, including choice of symbols, line thicknesses, and distances. These options apply to the whole project, including all flows and layouts, and can be set in the **Engraving Options** dialog.

enharmonic equivalent

An alternative spelling of a note that uses a different scale degree and accidental but produces the same sounding pitch, such as G \sharp and A \flat .

ensemble

A predefined collection of players, each holding instruments that are often used together, such as string quartet, wind quintet, brass quintet, string ensemble, and double woodwinds.

explicit rest

A rest that was deliberately input during rest input or imported from a MusicXML file. Explicit rests cannot be suppressed between notes in a particular voice. See also [implicit rest](#).

exploding

The process of assigning music to more instruments than it was written for originally. Exploding music is often a key step in arranging and orchestrating music, such as when a piano piece is arranged for string quartet. See also [reducing](#).

F**family**

Instruments of a similar kind that are typically bracketed together in a score, such as woodwind, brass, percussion, and strings.

fermata

A notation that indicates all notes at that position are held for longer than their notated length. It is most commonly shown as a curved line with a dot under the curve, but it can also be shown with a pointed arch or square shape. Also known as a “pause” or a “birds’ eye”.

flow

A self-contained span of music of any scope, such as a movement in a symphony, a song in an album, a number in a musical, or a short exercise in a music theory worksheet. A flow can contain the same players as other flows in the project or separate players just for that flow. See also [player](#).

formatting

The act of determining the number of bars in a system, the number of systems on a page, and the distances between staves and systems.

fps

A unit of measurement, short for “frames per second”, that refers to the number of video frames occurring each second.

fragment

Part of a notation item. For example, fragments of a note include its notehead, rhythm dots, accidentals, the tip of its stem, and beam. In Write mode, selecting any part of an item also selects all of its fragments, so any changes you make affect the whole item. In Engrave mode, you can select each fragment individually to tweak its position or appearance. See also [item](#).

frame

A rectangular container for music, text, or graphics on a page.

full score

A score comprising all of the music for all of the players and their instruments, typically laid out in a specific order. The order used varies according to the ensemble for which the music is written. In full scores for orchestra, the players are typically ordered from the highest wind instrument at the top of the page, for example, piccolo, to the lowest string instrument at the bottom of the page, for example, contrabass, with brass, keyboards, voices, and percussion in between.

G**galley view**

A viewing option that shows music laid out as a single, infinitely wide system.

grace note

A small note, often used to show an ornament or embellishment, that is not counted towards the number of beats in the bar; instead, it steals from the duration of either the preceding or the following rhythmic notes. Also known as an “arhythmic note”. In common practice, a grace note with a slashed stem is an *acciaccatura*, which is to be played as quickly as possible, either immediately before or at the rhythmic position of the note or chord that follows it. A grace note with an unslashed stem is an *appoggiatura*, which is played as half of the written duration of the note or chord that follows it.

group

A collection of players that comprises either a subset of the main ensemble, for example, a choir within an orchestra, or a separate group, for example, an off-stage brass group or second orchestra. Each group of players is labeled separately in the full score and is grouped and numbered together in the instrument order. See also [player](#).

H**hairpin**

A notation for dynamics that uses a pair of angled lines, diverging from or converging on a single point, to show a gradual increase or reduction in the dynamic level, that is, a *crescendo* or *diminuendo*.

half-bar

The rhythmic position that divides bars into two equal sections when the prevailing time signatures can be divided into four equal beats. In Dorico Pro, specific beam grouping and note grouping settings apply to bars with a half-bar. Time signatures that have a half-bar include 4/4 and 12/8.

handle

A selectable item that marks the ends of lines, the corners of frames, and other moveable positions, such as pedal line retakes and slur control points. In Write mode, handles are circular and mark rhythmic positions. In Engrave mode, handles are square and mark graphical positions.

hook

A short line that extends from other lines, most commonly at a right angle, that helps to clarify the end position of lines. In Dorico Pro, hooks can be used at the end of pedal lines, octave lines, repeat endings, and tuplet brackets.

horizontal justification

The alignment of musical content to the left and right edges of the frame. To ensure that all staves in a system occupy the same width, any remaining space that is left over after the music is spaced is distributed evenly between all of the columns in the system. Sometimes the final system of a flow is not fully justified and is allowed to end partway across the width of the frame. See also [frame](#), [justification](#).

I**implicit rest**

A rest that is automatically shown around the notes you input. Its notated duration automatically adjusts according to the time signature and its position in the bar. Implicit rests can be suppressed between notes in a particular voice, which hides them. See also [explicit rest](#).

Insert mode

A way of changing how notes are input. When Insert mode is activated, new notes push all the music that follows after the caret along by the input duration instead of overwriting existing notes. Similarly, reducing the duration of notes with Insert mode activated pulls them closer together without leaving rests between the notes.

instrument

Anything that requires at least one staff to represent the sounds or music it produces. Common instruments include the violin, flute, tuba, and bass drum. However, human voices, computer triggering samples, and tape recordings can also be instruments.

instrument transposition

The interval difference between the pitch the instrument plays and the resulting sounding pitch, often included as part of the instrument name. For example, when a Clarinet in B \flat plays a C, the pitch produced is a concert B \flat . Instrument transposition is also known as “instrument pitch”. See also [concert pitch](#), [transposed pitch](#).

item

Generic term for any note, rest, chord, notation, or other selectable object that appears in the score in Dorico Pro. See also [fragment](#).

J**justification**

The alignment of musical content to the edges of the frame, both horizontally and vertically. See also [frame](#), [horizontal justification](#), [vertical justification](#).

K**key command**

A set of keys that perform a defined task when pressed together. Also known as a “keyboard shortcut”.

L**layout**

A page-based presentation of the music for one or more players in one or more flows, for example, a full score that contains all players or an instrumental part that contains only a single player. See also [flow](#), [player](#).

layout options

Options that affect the setup of an individual layout, such as page and staff size. These options can be set in each layout independently in the **Layout Options** dialog. See also [layout](#).

lock duration

Functionality that allows you to change the pitches of existing music while retaining existing rhythms.

lyric

Any text that is intended to be sung or spoken by an individual singer or group of singers. A lyric can be a whole word or an individual syllable in a multi-syllabic word. Lyrics are shown at each rhythmic position where a new word or syllable begins. Typically, lyrics are found below the staff, but are sometimes placed above the staff, for example, in the case of a short score.

M

measure

See [bar](#).

MIDI

An abbreviation for Musical Instrument Digital Interface, a standard for how electronic musical instruments, computers, and virtual instruments can connect to and communicate with each other. In Dorico Pro, MIDI data can be sent to one of 16 channels, which allow either a specific instrument, or a specific patch on a specific instrument, to receive and respond to the data. See also [channel](#), [patch](#).

minor key

A key signatures based on a minor scale, which have a different pattern of intervals to major scales. See also [minor scale](#).

minor scale

A sequence of notes containing the pitches of a minor key. There are three types of minor scales: natural, harmonic, and melodic. Natural minor scales follow the interval pattern of the Aeolian mode, which on a keyboard is all the white notes from A-A. Harmonic minor scales also follow the Aeolian mode interval pattern but the seventh degree of the scale is sharpened, for example, G# in A harmonic minor. Melodic minor scales follow different interval patterns when they are rising/falling: when rising, melodic minor scales have sharpened sixth and seventh degrees, but when falling, the sixth and seventh degrees are both natural. See also [minor key](#).

modes

Selectable workspaces in the project window that represent different phases in the workflow of preparing a score.

multi-bar rest

A consolidation of multiple adjacent empty bars into a smaller unit, typically shown as a single bar with the total number of bars' rest written above the staff. A multi-bar rest normally shows an H-bar symbol, which is a thick horizontal line with vertical lines at each end. In some older published scores, a multi-bar rest of up to nine bars in length is shown using a combination of double whole and whole rests.

music area

The main part of the window in Setup, Write, and Engrave modes where you input and edit your music.

MusicXML

A file format designed to allow the interchange and archiving of music notation data in an open and non-proprietary way. It is useful for exchanging scores between different music applications.

N

notation options

Options that affect the way the music is notated, particularly concerning how notes and rests are grouped according to meter, rules for the extent of accidentals, and options for transposition. These options can be set independently for each flow in the **Notation Options** dialog.

note input

The standard method of adding notes to staves in sequence that is possible when the caret is active. The caret automatically advances to the next rhythmic position after each note is input. During note input, it is also possible to input other items at the caret position. See also [caret](#), [chord input](#), [Insert mode](#).

P**padding**

The minimum distance/gap between two items, such as text and its enclosure. Padding values can be independent of other set values, such as minimum height or width.

padding rest

A rest that fills the extra rhythmic space before or after cues that start or end partway through bars. This shows clearly how the rhythm of the cue fits within the current time signature and how it relates to the player's existing material.

page break

The forced termination of a page of music at a particular rhythmic position, typically at a barline. Often used to ensure a convenient page turn in a part. In Dorico Pro, page breaks can be achieved using frame breaks, which are indicated using signposts.

page view

A viewing option that shows music laid out on a page with a fixed width and height, as it appears when printed. See also [galley view](#).

panel

Wide palettes of tools on the left, right, and bottom edges of the program window that are available in all modes, but their content varies in each mode.

part

The music belonging to the instruments played by one or more players, shown on its own rather than in a full score. Performers who do not need to see the music belonging to the whole ensemble play from parts so they only have to read the music they play themselves. See also [full score](#).

patch

An older term for a discrete sound on a MIDI device or virtual instrument. See also [channel](#), [MIDI](#).

pedal level change

A change to how far a piano sustain pedal is depressed, between 1 (fully depressed) and 0 (not depressed). It is notated as a change to the height of a pedal line. Also known as a "pedal lift".

pick-up bar

A note or notes played before the first full bar of a piece. Also known as an "upbeat" or "anacrusis". Pick-up bars often only comprise one or two beats whose main purpose is to lead in to the start of the piece.

player

A musician who plays one or more instruments. Players are defined as either solo players or section players and are assigned to flows and layouts. See also [solo player](#), [section player](#), [flow](#), [layout](#).

playhead

A vertical line that moves alongside music during playback and when recording, showing the current rhythmic position. Also known as a "playback line".

Play mode

A workspace that allows you to assign VST instruments, to adjust the mix, to apply automation, and to tweak note data. See also [modes](#).

playthrough

A single time playing from the beginning of the piece to the end. Music that contains multiple possible endings, such as music with repeat endings or codas, requires multiple playthroughs.

plug-in

A software program that can operate within another software program. Dorico Pro supports VST instruments and effects and script plug-ins written in Lua.

pointer

The symbol on the computer screen that follows movements made by the user with a mouse or on a touchpad. It is most commonly an arrow pointing towards the top left corner of the screen.

polymer

Music containing multiple simultaneous meters, for example, one instrument in the ensemble plays in 6/8 and another plays in 7/4.

popover

A temporary value field that is evoked using a key command and allows you to input items using text entries. You can open popovers in Write mode during note input or when items are selected in the music area. There are dedicated popovers for different types of items.

preamble

The notations typically drawn before the first note or rest on each system of music. The preamble usually includes clefs, key signatures, and time signatures. In Dorico Pro, the preamble is drawn automatically and so you cannot select any items included in it.

Print mode

A workspace that allows you to print to your printer, export to PDF, and export to other graphics files. See also [modes](#).

print preview area

The main part of the window in Print mode where you can see a preview of what is going to be printed or exported as a graphic. See also [Print mode](#).

project

A Dorico Pro file that can contain multiple flows and layouts. See also [flow](#) and [layout](#).

properties

The characteristics of individual items and fragments of items in your project that can be edited via the Properties panel. Many properties are layout-specific, meaning changing the properties of an item in one layout does not affect the same item in other layouts.

Q**quantization**

In music, the act of adjusting the positions and durations of notes so they align with the nearest defined beat. This process eliminates small variations in rhythm and duration produced naturally by live performers, and can be useful when importing/exporting MIDI data as quantized music produces neater notation.

R**rastral size**

The size of a full five-line staff, measured from the bottom line to the top line. The term comes from the *rastra* engravers historically used to draw five-line staves on blank paper. Because the *rastrum* is a fixed object, people became used to their set sizes and Dorico Pro continues this tradition by offering users a selection of rastral staff sizes.

reducing

The process of taking music for more than one instrument and assigning it to fewer instruments, such as a keyboard reduction of a choral piece. A piece of music that has been reduced is known as a "reduction". See also [exploding](#).

rhythmic grid

A unit of rhythmic duration whose value affects certain aspects of inputting and editing, such as the amount by which items move. Its current value is shown by the note value in the status bar, and by ruler markings indicating beat divisions and subdivisions above the staff on which the caret is active. See also [caret](#).

S

score

See [full score](#), [part](#), [project](#).

section player

Multiple musicians who all play the same instrument and read from the same part layout, for example, Violin I. Section players may not play multiple different instruments, but can divide. See also [player](#).

Setup mode

A workspace that allows you to add players, to assign instruments to those players, to create flows, and to assign players and flows to layouts. See also [modes](#).

SMuFL

Short for “Standard Music Font Layout”, it is a font specification that maps all the different symbols required for music notation onto a standard layout. Dorico Pro requires SMuFL-compliant fonts for certain areas of the program, such as clefs and dynamic glyphs, to ensure it can locate the correct symbol. SMuFL-compliant fonts include Bravura, Petaluma, and November 2.0.

solo player

An individual musician who can play one or more instruments, for example, a flute doubling piccolo. See also [player](#).

space

A unit of measurement in music engraving based on the distance between the center of two adjacent staff lines. Practically all notation items are scaled in proportion to the size of a space, for example, a notehead is normally one space tall.

spacing

The act of determining the horizontal distance between successive columns in order to format the music. Horizontal spacing in Dorico Pro considers the graphical shape and size of notes and other items, such as rhythm dots and accidentals, and the note spacing values set. Full systems are automatically horizontally justified.

spelling

The way in which a note of a given pitch is specified by a letter name plus an accidental. For example, assuming the conventional 12-EDO pitch system, MIDI note 61 can be spelled as C#, D \flat , and B \sharp . The same pitch is normally spelled a certain way in a given key, for example, MIDI note 61 is normally spelled as C# in D major, but is spelled as D \flat in A \flat major. See also [EDO](#), [MIDI](#).

split stem

A way of presenting altered unisons that keeps each accidental directly beside the notehead to which it applies. Also known as a “cherry stalk” or “tree”.

staff-relative placement

The vertical position of items relative to musical staves, that is, either above or below.

staff spacing handle

The square handle on the bottom left corner of each staff when **Staff Spacing** is activated in Engrave mode. Staff spacing handles only change the vertical position of a single staff. See also [system spacing handle](#).

string shift indicator

An angled line that indicates the direction of movement when string players have to shift position on the fingerboard to play a higher/lower note with the same finger as the previous note.

stroke

The short line that bisects editorial slurs and ties. Also known as a “notch”.

SVG

SVG stands for Scalable Vector Graphics, which is an XML-based way of displaying and modifying graphics. Due to the way it is coded, it allows you to modify graphics very flexibly compared to other formats.

system break

The forced termination of a system of music at a particular rhythmic position, typically at a barline. Indicated in Dorico Pro with signposts.

system formatting

The distribution of bars into systems and systems into frames. When copying part formatting between layouts, Dorico Pro considers the positions of system breaks, frame breaks, and note spacing changes to be aspects of system formatting.

system fullness indicator

The highlighted region in the right page margin that is shown when **Note Spacing** is activated. It combines a color (green, purple, or red) and a percentage to indicate how full the system is.

system object

An item that applies to all staves in the system, but is not necessary to show on every staff, such as tempo marks and rehearsal marks. In Dorico Pro, you can show system objects at multiple positions in each system by showing them above multiple instrument families.

system spacing handle

The square handle on the top left corner of each system when **Staff Spacing** is activated in Engrave mode. System spacing handles change the vertical position of the top staff in systems, which also moves all staves in the system accordingly. See also [staff spacing handle](#).

T**tempo track**

The timing-related information included in MIDI data that affects tempo, SMPTE offsets, time signatures, timecodes, and markers, which can be imported independently of the rest of the data in MIDI files.

token

A code used in a text string that is automatically replaced by a piece of information from elsewhere in the project, such as the title of the current flow, the name of the player, or the page number. Also known as a “wildcard” or “text code”.

touchpad

Any flat device with a tactile sensor that functions as an alternative to the traditional computer mouse. Commonly built into laptop computers but can also be separate appliances connected wirelessly or via a cable.

transport

Encompasses all options related to playback and recording.

transposed pitch

In transposed pitch, the pitches notated are the pitches that the instrument plays, rather than the desired sounding pitch. Instrumental parts are always in transposed pitch so that players can simply play the written notes, which is especially important for transposing instruments. See also [concert pitch](#), [instrument transposition](#).

tuplet

A rhythm that is performed at a fraction of its normal written duration. For example, a triplet is three notes of a given note value played in the time it would normally take to play two notes of that note value. Also known as an “irrational rhythm” or a “countermetric rhythm”.

tutti

Italian for “everyone”, tutti indicates that a passage of music is to be played by all players reading from that part or staff. It is most commonly used to indicate the end of a divisi passage, or for

clarification when a staff can indicate both solos and tutti passages at different times. See also [divisi](#).

U

upbeat

See [pick-up bar](#).

V

vertical justification

The spreading out of staves and systems across the full height of frames with as even a distribution of space as possible. If the music in the frame requires less vertical space than is available, the remaining space is distributed evenly between the systems, and between the staves of the systems. See also [frame](#), [justification](#).

voice

In Dorico Pro, a series of notes, chords, rests, and other notations that make up a single musical line and are normally played by the same instrument. Assigning notes and items to different voices allows multiple lines of music to be presented on the same staff as clearly as possible, such as in vocal music where the soprano line uses an up-stem voice and the alto line uses a down-stem voice. Dorico Pro allows as many voices as are needed to be input onto a single staff, and lays them out and spaces them automatically.

VST instrument

Short for “Virtual Studio Technology instrument”, it is a digital plug-in that converts MIDI data into audio output. It can emulate an existing piece of studio hardware or can be an entirely new creation.

W

Write mode

A workspace that allows you to input music and other notations. See also [modes](#).

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