

# Operation Manual



# THE GRAND 3

The Ultimate Virtual Piano Suite



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# Welcome

Congratulations and thank you for purchasing The Grand 3 by Steinberg.

With the purchase of The Grand 3 you have chosen a premium virtual piano suite which comes with five virtual pianos perfectly recorded to meet your demands, providing stunning sound quality unrivaled by current standards. The Yamaha C7, Bösendorfer 290 Imperial, and Steinway D grand pianos plus the classic Yamaha CP80 Electric Grand, as well as the charismatic upright piano by Nordiska Pianofabriken have been recorded to offer you an entire palette of virtual piano greatness.

Thanks to the incorporated intelligent sample architecture and latest recording technology, The Grand 3 does not simply play back samples, but responds to your individual playing behavior as well as adding natural full-length sustain and decay, distinctive pedal and hammer noises, and key thumps in order to recreate the sound of acoustic pianos so perfectly. And it doesn't stop here. To further enhance the effectiveness of your system, both ECO Mode and RAM Save technology featured in The Grand 3 help you to reduce the RAM consumption and improve CPU performance.

Whether you are a musician, arranger or composer, The Grand 3 is certainly your first choice when it comes to breathtaking authenticity, extraordinary dynamic response and the breadth and depth of tones only made available in this virtual piano software conceived and designed by Steinberg.

The standalone version allows you to use The Grand 3 without a host application – a great choice for performing live. It has two additional features: the quick-idea scratch pad, which lets you instantly store spontaneous ideas, and the metronome.

We wish you a lot of musical inspiration!

Your Steinberg The Grand Team

## Key Commands

Many of the default key commands, also known as keyboard shortcuts, 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.

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EXAMPLE

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

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## How you can reach us

Clicking the Steinberg logo in the top right corner of The Grand opens a pop-up menu where you will find items for getting additional information and help:

- On this menu, you can find links to various Steinberg web sites. Selecting one automatically launches your browser application and open the page.

On the web sites you can find support and compatibility information, answers to frequently asked questions, links for downloading new drivers, etc. This requires that you have a browser application installed on your computer, and a working Internet connection.

- When you choose the Help item, an online version of the documentation opens.

# The content

## The recording of The Grand



The four acoustic piano models were recorded in Sweden by highly experienced recording specialists, in a large studio with a high ceiling well suited for the recording of acoustic instruments. The piano models were recorded using top-of-the-line recording equipment, and no filters or effects were applied during mixing to preserve the natural piano sound. For all keys of each of the 4 acoustic piano models, up to 20 velocities were recorded.

## The models

The Grand 3 includes five different piano models, each characterized by individual attributes. You can choose between 3 grand pianos, one upright model and an electric grand piano.

The virtual acoustic pianos are available in the two recording perspectives “Close” and “Player”:

### Close

In this recording perspective the focus is nearer to the keyboard, delivering a very bright and shiny sound with a minimum of ambience. It is ideal for adding a reverb effect (see [The Ambience page](#)).

### Player

The focus of this recording perspective is closer to the strings and hammers and offers a mellower, pleasing sound with natural ambience.

The following section gives you an overview of the characteristics of the different piano models.

## **Yamaha C7**

The unparalleled tone of a Yamaha C7 Grand was recorded in its whole beauty and musical range. Its incredible sound, resulting from the tonal projection and long sustain, and response with super realistic playing behavior delivers the musical equivalent of perfection. This virtual piano is truly in a class of its own and conveys the expressiveness of the player. If you prefer a brilliant, crisp piano sound, you should use the Yamaha C7.

## **Model D**

A Steinway D Grand was recorded to obtain the Model D samples. The enchanting depth of tone and ultra-responsive touch of the Steinway D grand piano is reflected in the Model D. Its warm and vibrantly rich sound and its overall performance simply make playing this virtual piano a pure joy.

## **Bösendorfer 290**

The wider register of the Bösendorfer 290 Imperial Grand adds to the piano's timbre which has intricately been sampled to give you the required control when playing the softest pianissimo through crescendos to the reserves of power needed for the loudest fortissimo. This virtual piano model shines in every musical aspect, providing the exuberant sound quality and assertiveness of its corresponding real piano pendant. The recording for The Grand includes the full extended key range of eight full octaves (97 keys) provided by the 290 Imperial Grand.

## **Upright Piano**

The upright by Nordiska Pianofabriken definitely has personality of the right sort! And its characteristic tone has been captured in the virtual upright piano model, designed to get the job done when looking for that little extra edge to your song. It might be rock, blues, jazz, gospel or any other style that simply needs some attitude — when your track requires a less “grand” sound this model is definitely your first choice.

## **Yamaha CP80**

The Yamaha CP80 Electric Grand is one of the most favorable classic electric grand pianos around and comes with the built-in effects tremolo, phaser, flanger and chorus. Here, the samples come directly from the source: the content experts at Yamaha.

# Parameters



- 1 The controls for the standalone player (see [Additional controls when using The Grand as a standalone instrument](#))
- 2 General plug-in controls
- 3 Performance meters (see [Performance meters](#))
- 4 Editor view (see [Switching views](#))
- 5 Keyboard display and pedals (see [Preview keyboard and pedals](#))

## General plug-in controls

In the upper section of the plug-in window, you will find a number of general controls. Here you can load and save presets and adjust the main volume. In addition, there are buttons to activate the ECO Mode (see [ECO Mode \(general controls\)](#)) and the RAM Save functions (see [RAM Save \(general controls\)](#)). The Reset MIDI function (the “lightning” icon) allows you to reset the plug-in. Use this function when you lose the MIDI connection, for example, while performing on stage. On the upper left, you will find a button for switching between the Editor and the Player view. Finally, you can click the plug-in and company logos to open the about box or to get in contact with Steinberg. The general plug-in controls are described in detail on the following pages.



**NOTE**

All controls in The Grand can be set to their default value by holding down [Ctrl]/[Command] and clicking on the control.

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## Preset handling

To the right of the plug-in logo, you will find the preset pop-up menu of The Grand. The presets you load and save here include any sound settings of The Grand, i.e. the settings on the Model page, the Equalizer page, the Ambience page, etc. You will find the factory presets for each piano model on separate submenus. The factory presets are separated from your user presets by a line.

**NOTE**

The presets do not include the setting of the Disk versus RAM usage on the Options page.

---

To load a preset, proceed as follows:

1. Click the arrow button to the right of the preset field to open the preset pop-up menu.
2. Open the submenu for the desired piano model.
3. Select the preset you wish to load.

**NOTE**

When you select a preset from a different model than the one that is loaded, the respective samples have to be replaced. Therefore, the loading process will take longer.

---

To save a preset, proceed as follows:

1. Click the disk icon to the left of the preset pop-up menu.
2. Specify a location and file name in the file dialog.
3. Click Save to store the preset and close the dialog. Click Cancel to close the dialog without saving the preset.

To delete a preset, proceed as follows:

1. Select the preset you wish to delete from the preset pop-up menu.  
If necessary, wait until it has been loaded.
2. Click the trash icon to the left of the preset menu.  
A dialog opens.
3. Click Yes to delete the preset and close the dialog. Click No to close the dialog without deleting the preset.

**NOTE**

Factory presets cannot be deleted.

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## Adjusting the main volume

Use the Main Volume knob to adjust the overall volume of The Grand. The maximum value is +12dB (the default value is  $\pm 0$ dB).

- Turn the control clockwise by clicking on it and dragging upwards to raise the volume.

- Turn the control clockwise by clicking on it and dragging downwards to lower the volume.

## Switching views

The Grand includes two views: the Editor and the Player view.



The Editor view

The Editor view shows the piano viewed from above. Instead of a lid there is a display with controls for accessing the sound parameters and plug-in settings. Below the display there are buttons for switching between the Model, Equalizer, Ambience, Control and Options pages. The keyboard and the three pedals in the lower section can be used to preview the pianos.



The Player view

The Player view focuses on the piano display. It shows a high-quality 3D model of the selected piano model. Above the piano display, there are the general plug-in controls, which give access to the presets and the main volume. Apart from that, there are no distracting controls in the Player view. Just load a preset from the pop-up menu above and start playing.

#### NOTE

When you load the plug-in, it always opens in the Editor view.

Before you can switch to the Player view, you must load a piano in the Editor view.

To switch to the Player view, proceed as follows:

1. From the Editor view, load a piano model or a preset.
2. In the upper left section of the control panel, click the “p” button to the left of the plug-in logo.

The Player view opens, showing the selected piano model.

To switch back to the Editor view, click the “e” button in the upper left of the Player view.

## Reset MIDI

Sometimes, notes can get stuck, e.g. because the plug-in lost the MIDI connection, or the plug-in receives the wrong MIDI controller data. In such a case, you can “emergency- reset” the plug-in:

#### PROCEDURE

- Click the Reset MIDI button (the lightning icon) to the right of the Main Volume knob, to send an “All Sound Off” and “Reset All Controllers” message to the plug-in.

This is the same as sending the MIDI controllers 120 (All Sound Off) and 121 (Reset All).

#### RESULT

The plug-in stops playback immediately and resets the controllers to their default values.

## Steinberg logo and about box

If you click on the Steinberg logo in the upper right corner of the plug-in, a pop-up menu opens. You can open the manual in pdf format by selecting Help. Selecting one of the other options opens your default internet browser and direct you to the Steinberg web site. To check for software updates and to find information for trouble shooting, select the appropriate link from the menu.

### NOTE

- To open the manual in pdf format a pdf reader application must be installed on your computer.
  - Your computer needs an active and working Internet connection for accessing the Steinberg homepage.
- 

If you click on the plug-in logo in the upper left of the control panel, the about box opens. It contains information about the version and build number of the plug-in. With the plug-in version and build number you can verify if your software is up-to-date. Please visit [www.steinberg.net](http://www.steinberg.net) regularly to check for updates. To close the about box, click on it or press [Esc] on your computer keyboard.

## Preview keyboard and pedals

Typically, you will play the pianos with your MIDI controller keyboard and MIDI pedals. However, you can also preview the pianos by clicking on the keys of the keyboard and the three pedals below it in the Editor view.

- To play the piano with your mouse, click the desired note on the keyboard.  
In the Editor view, the closer you click to the tip of the key, the higher the velocity and vice versa.  
In the Player view, the keyboard always plays with full velocity.
- To play the pedals with your mouse, click the desired pedal to press it. Click the pedal again to release it.

The order of the pedals is as follows (from left to right): soft pedal, sostenuto and sustain. The four acoustic piano models support all three pedals. The CP80 only supports sustain.

The function of the pedals is as follows:

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Pedal	MIDI controller number	Function
Soft pedal	67	This modifies the tone quality towards a softer sound.

Pedal	MIDI controller number	Function
Sostenuto	66	Notes that are held while pressing the sostenuto pedal will sustain. Any successive notes (after pressing the sostenuto pedal) will not sustain.  Either the pedal or the keys must be controlled externally to produce the sostenuto effect.
Sustain	64	This lifts all dampers from the strings adding sustain resonances to the sound. All notes played will sustain.

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## The Model page



On this page you can select the piano model and adjust its sound. All important aspects of the acoustic pianos were sampled separately. This does not only include the sustain resonances, but also release sounds and mechanical noises from the keys and pedals. You can control the loudness for each of these aspects separately. This way, you can adjust the character and sense of playing of the piano to your liking. For example, if you want a more intimate character and sense of playing, just like sitting in front of the piano, you can increase the mechanical noises of the keys and pedals.

Note that this page is different for the CP80 model. Since the CP80 is an electro-acoustic instrument, it does not produce any mechanical noises that would be of interest. For creating sound variations, the Model page of the CP80 provides a tremolo and a modulation effect (Chorus, Flanger and Phaser) instead.

## The virtual acoustic piano models

By selecting the piano model, you choose the basic character and sound of your piano. The virtual acoustic pianos are available in two recording perspectives: Close and Player, see [The models](#).

### NOTE

If you change the piano model, only the samples are exchanged. All other settings, e.g. on the Equalizer and Ambience pages, remain unchanged.

---

To select the piano model, proceed as follows:

1. In the Editor view, click the Model button to open the Model page.  
If the Player view is active, click the “e” button in the upper left corner to open the Editor view.
2. Click on the picture of the piano model.  
The five available piano models are displayed above the picture.
3. Select the desired piano model and recording perspective.

During the recording of the acoustic pianos not only the notes were recorded, but also every sound produced by the piano, e.g. by damping vibrating strings, releasing the hammer, the sound of the pedals when stepping them. On the Model page you can activate or deactivate these “additional” sounds by clicking the corresponding buttons and set their volume with the knobs. The following parameters are available:

### Sustain Resonance

When you press a key on an acoustic piano, only the damper of that key is raised. All other strings are damped and only the sound of the string hammered by that key is audible.

When you step on the sustain pedal, all the dampers of all keys are lifted from all strings. Now when you hit a key, the vibration of its string causes surrounding strings and the housing to resonate. The sound produced by this could be described as something similar to a reverb. This effect is only audible when the sustain pedal is used.

### String Release

When a key on a piano is released, the felt damper falls on a string that is still vibrating. It doesn't stop vibrating abruptly, but continues to travel to complete that last oscillation thus producing a sound that we call String Release.

Note that when you deactivate this option, the response of the instrument will sound a little less natural.

### Hammer Release (Yamaha C7, Model D and Bösendorfer only)

When a key is released, the hammer returns to its initial position and generates a sound best described as low and woody. We call this effect Hammer Release. The pianist seated at the grand piano hears this sound very clearly, though, depending on the position of the microphones, it may not be audible in recordings.

When this option is activated, you get the pianist's sonic perspective: The Grand sounds as if you were seated in front of a real concert grand. When it is disabled, The Grand sounds like what the audience hears.

### Key Sound (Yamaha C7, Model D and Bösendorfer only)

When you press a key on a real piano, the sound is also shaped by a subliminal noise that is produced by moving the key and its mechanics. This noise can be described as

wooden, soft and unobtrusive. Use this feature to emulate a listener's position close to the piano.

### Damper Pedal Sound (Yamaha C7, Model D and Bösendorfer only)

This sound is produced when you step on one of the pedals.

## CP80 model



Modulation effects are a vital part of the CP80 sound. The CP80 model offers a tremolo and a modulation effect. You can use these effects for sound variations.

Tremolo produces amplitude (volume) modulation. The modulation signals for the left and right channels have a fixed offset of 180°. Hence, the sound image is moving between left and right.

1. Click the button at the top left of the Tremolo section to activate the Tremolo effect.  
The button turns red.
2. Adjust the Speed and Depth controls to your liking:

#### Depth

This sets the intensity of the effect. The control range is from 0% to 100%.

#### Speed

Use this to specify the frequency of the modulation in Hertz (Hz). The control range is from 0.01Hz to 10.0Hz.

Modulation effects thicken and broaden the sound by means of pitch or phase modulation. The CP80 model allows you to add Chorus, Flanger, or Phaser as a modulation effect.

1. In the Modulation section, click on the button to the left of the pop-up menu to activate the modulation effect.  
The button turns red.
2. From the pop-up menu, select a modulation effect: Phaser, Chorus or Flanger.
3. Adjust the controls to your liking.

The following parameters are available for the modulation effects:

#### Depth

This sets the intensity of the effect. The control range is from 0% to 100%.

#### Feedback

This adds resonance to the effect. The control range is from -100% to +100%.

### Mix

This controls the mix between the dry and the wet signals. The control range is from 0% to 100%. At 100%, you will hear the wet signal only.

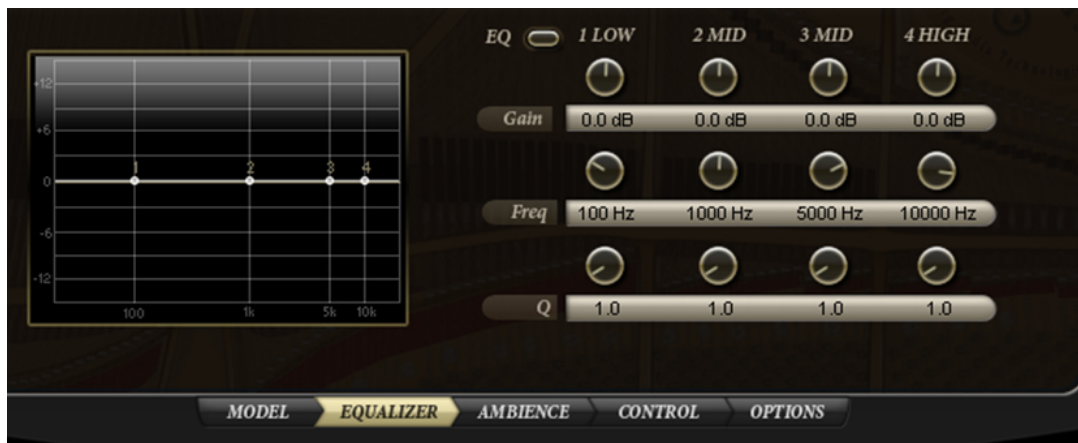
### Speed

Use this to specify the frequency of the modulation in Hertz (Hz). The control range is from 0.01Hz to 10.0Hz.

### Phase

This widens the sound image of the effect from mono to stereo. The control range is from 0° to 180°.

## The Equalizer page



The Equalizer page gives you access to a high-quality 4-band parametric stereo equalizer. With the four frequency bands, 1 Low, 2 Mid, 3 Mid and 4 High, you can shape the tone color of the piano, e.g. for a brighter or darker sound. The two midrange bands act as peak filters, while the low and high bands act as shelving filters. All bands are fully parametric with adjustable Gain, Frequency and Q factor.

### Adjusting the equalizer settings

1. Click the EQ button to the left of the equalizer controls to activate the equalizer. This activates all 4 EQ bands.
2. Adjust the Gain, Freq, and Q parameters as desired. To adjust Gain and Frequency simultaneously, drag the points in the EQ graph to the left.

Each frequency band offers the following controls:

#### Gain

Use this to set the amount of cut or boost for the EQ band. The control range is from -24dB to +24dB.

#### Freq

This sets the frequency that is cut or boosted by the Gain parameter. The control range is from 20Hz to 20000Hz.

#### Q

This sets the quality factor. Use this to adjust the band- width of the midrange peak filters from wide to narrow. By increasing the Q value on the low and high shelving filters, you can add a dip to their shape. The control range is from 0.5 to 10.0.



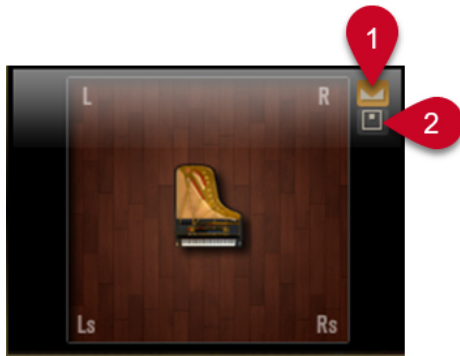
## The Ambience page



The settings on the Ambience page allow you to position the piano in the room and to add reverb to the dry piano sound.

## Positioning the piano

With its two stereo outputs, The Grand supports quad surround (4.0 channels). You can activate this to the right of the graphical control.



- 1 Click here to activate stereo panning.
- 2 Click here to activate surround panning.

When surround panning is activated, you can position the piano between the front and rear of the room.

### NOTE

To hear the rear channels, you must assign the second stereo output of the plug-in to the physical outputs of your audio hardware.

You can position the piano in the stereo or surround panorama by using the Left/Right and Rear/Front parameters or by dragging the piano to the desired position in the graphical control on the left.

### Left/Right

Use this parameter to adjust the position of the piano between the left and right boundaries of the room. The control range is from -100% to +100%. Positive values move the piano right, negative values left.

### Rear/Front

Use this parameter to adjust the position of the piano between the front and rear boundaries of the room. The control range is from -100% to +100%. Positive values move the piano towards the front, negative values towards the rear.

#### NOTE

The Rear/Front parameter only comes into effect when the rear channels have been assigned to an output and the surround option is activated.

---

The graphical control on the left indicates the position of the piano in the room when viewing it from above. With the graphical control, you can adjust the Left/Right and Rear/Front parameters simultaneously.

## Applying reverb

You can process the dry piano sound with the built-in high-quality reverb. With the reverb parameters, you can specify different ambient spaces, e.g. concert halls, churches, or studios. In addition, you can adjust the characteristics of the reverb.

#### NOTE

To hear the reverb in surround, the surround option must be activated.

---

To add reverb to the piano sound, proceed as follows:

1. From the reverb pop-up menu, select an ambience preset.  
The On/Off button to the left of the pop-up menu turns red.
2. If necessary, adjust the parameters Room Size, Time, Pre-Delay, and Mix, see below.

#### NOTE

To deactivate the selected preset, click the On/Off button to the left of the pop-up menu.

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The following reverb parameters are available:

### Reverb pop-up menu

The integrated reverb effect can use two different reverb engines, a convolution and an algorithmic reverb. For both, the Reverb menu offers various ambient spaces, organized in correspondingly named submenus. When you change the Reverb preset, the parameters Room Size, Time and Pre-Delay are updated accordingly to match the characteristics of the selected room. Only the Mix parameter remains unchanged.

### Room Size

This parameter lets you scale the dimensions of the room.

The control range is from 0% to 100%. For example, by decreasing the Room Size you can turn a concert hall into a small room.

### Time

Use this parameter to shorten or extend the reverb time. The control range is from 0% to 100%. With lower settings, the reverb decays earlier and vice versa.

### Pre-Delay

With Pre-Delay, you can add a short delay to the reverb signal. The greater the delay, the later the reverb will start and the more separated the reverb signal will be from the direct sound of the piano. The control range is from 0ms to 500ms.

### Mix

This determines the mix of the piano and the reverb. The control range is from 0% to 100%. At a setting of 0% you will hear only the piano, just like the player sitting close to the piano. At a setting of 100% you will hear only the reverb, just like sitting in the audience. Hence, by increasing this parameter, you increase the distance between the listener and the player.

## The Control page



Unlike an acoustic grand piano, The Grand is played using a MIDI-enabled keyboard or digital piano. We recommend the use of an instrument with weighted keys to benefit from its sensitive and complex dynamic response. However, not everyone has this type of instrument at hand and response and handling vary from keyboard to keyboard.

Therefore, you can adapt The Grand to suit your MIDI keyboard and style of playing by means of ready-to-use velocity curve presets. In addition, you can create your own velocity curves and save and load them as presets.

On the left of the Control page you will find the velocity curve editor. The editor plots the incoming velocity (the horizontal axis) against the outgoing velocity (the vertical axis). By default, the curve is a straight line from the lower left to the upper right corner. This means, the incoming velocity is mapped one-to-one to the outgoing velocity. You will hear the piano with its original dynamic range. By changing this curve, you change the dynamic response of the piano. For example, if you prefer a harder sound of the piano, select an inward bent curve. If you prefer a softer sound, select an outward bent curve. You can even create your own curve by editing the user-definable curve with the mouse.

To the right of the velocity curve editor you will find buttons for selecting the shape of the velocity curve. The top-most button selects the user-definable curve. The other buttons select the nine factory preset curves.

## Selecting velocity curves

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### PROCEDURE

- To select a velocity curve, click on the button for the desired curve to the right of the velocity curve editor.

The button indicates the shape of the curve.

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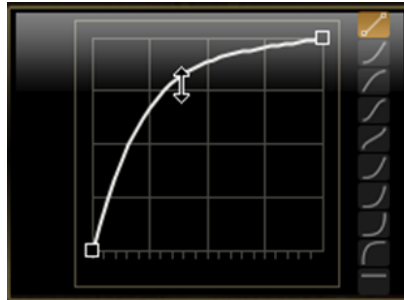
## Editing the user-definable curve

You can create your own velocity curve by editing the user-definable curve.

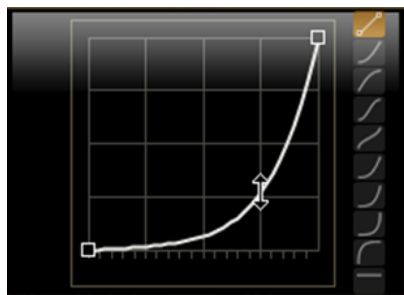
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### PROCEDURE

- Activate the topmost button to the right of the velocity curve editor.
  - In the velocity curve editor, double-click to add curve points.
  - Click and drag each curve point to the desired position.
  - To delete a curve point, double-click on it.
  - Drag the curvature up and down for a more inward or outward bent curve.



Drag the curvature up for a harder sound of the piano



Drag the curvature down for a softer sound of the piano

### NOTE

The nodes in the bottom left and top right corners can only be moved up and down.

---

## Saving a user-definable curve

### PROCEDURE

1. Click the disk icon to the left of the velocity preset pop-up menu.
  2. In the file dialog that appears, specify a location and a file name.
  3. Click Save to store the preset.
-

## Loading a user-definable curve

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### PROCEDURE

- To load a previously saved user-definable curve, select it from the velocity preset pop-up menu.

### NOTE

If you modify a velocity preset, an asterisk is shown behind its name to indicate that the settings of the preset have changed. The asterisk will disappear when you save or recall the preset.

---

## Deleting a user-definable curve

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### PROCEDURE

1. Select the preset you wish to delete from the velocity preset pop-up menu.
  2. Click the trash icon.  
A dialog opens.
  3. Click Yes to delete the preset and close the dialog.
- 

## Polyphony settings

Using the Polyphony settings below the velocity preset pop-up menu you can specify how many voices, or samples The Grand will play simultaneously.

The following settings are available:

### Max Voices

Here, you can specify a hard limit for the total number of voices The Grand will be able to play simultaneously. Each sample counts as a voice. When the number of simultaneously played voices exceeds this limit, The Grand starts excluding notes from playback. You can specify a value between 1 and 256 voices. This setting is particularly helpful to limit the system load when using The Grand.

### Low Notes Reserved

You can use this setting to prioritize low notes over high notes when The Grand has to exclude notes. For example, if you play a long left-hand chord together with a right-hand solo, you might need to reserve a certain number of notes for the left-hand chord to avoid that it suddenly gets cut. Use the control to adjust the number of notes to be reserved for low notes.

### Repedaling

On a real acoustic piano, after releasing the sustain pedal, you can repedal the sustain as long as the strings are not yet completely damped and still vibrate. The effect is that the strings continue vibrating with the remaining energy. You can achieve a similar effect by activating the Repedaling option. Please note that this feature demands more performance and should be turned off on less powerful systems.

### NOTE

To avoid drop-outs during playback, The Grand excludes voices automatically when the CPU load exceeds 95%.

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## The Options page



## Tuning

To match The Grand with the tuning of accompaniment instruments or recordings, use the Master Tune control. The control range is from 415.3Hz to 466.2Hz, which equals -100 cents to +100 cents. The default value is 440Hz, which in The Grand corresponds to A3 and is the commonly used pitch for tuning.

The default tuning of The Grand is the tuning the pianos have originally been recorded with. This is a “stretched tuning”, i.e. in order to compensate for the inharmonicity of the piano strings, the upper notes are tuned increasingly higher and the lower notes are tuned increasingly lower. For the most genuine sound of the piano, leave the tuning as it is. By deactivating the Stretched Tuning button you can apply an equal temperament. This can be necessary when you want to layer the piano with other sounds that come with a pure equal temperament.

Additionally, The Grand comes with many ready-to-use tuning scale presets, e.g. historical tuning scales in different keys like the Werckmeister, Kirnberger, and other scales.

## Loading scale presets

### PROCEDURE

- To load a scale preset, select it from the pop-up menu to the right of the Scale button. The pop-up menu lists factory scale presets and user scale presets. Factory and user scale presets are separated by a line.

### NOTE

To deactivate the selected preset, click the On/Off button to the left of the pop-up menu. When turned off, no tuning scale is applied and the piano sounds with its originally recorded stretched tuning.

## Saving user-defined scale presets

### PROCEDURE

- Click the disk icon to the left of the scale preset menu.
- In the file dialog that appears, specify a location and a file name.

3. Click Save to store the preset and close the file dialog.
- 

## Deleting scale presets

---

### PROCEDURE

1. Select the preset you wish to delete from the scale preset menu.
2. Click the trash icon to the left of the scale preset menu.  
A dialog opens.
3. Click Yes to delete the preset and close the dialog.

### NOTE

- Factory presets cannot be deleted.
  - If you modify a scale preset, the preset name is shown with an asterisk to indicate that the settings of the preset have changed. The asterisk will disappear when you save the preset.
- 

## The factory tuning scale presets

The most common tuning scale in western music and the basis for all other tuning scales is the “equal” scale, where adjacent notes on the scale have an equal distance of 100 cents. This scale is particularly useful if you want to layer The Grand with other instruments that are tuned to equal temperament, e.g. strings, synthesizer pads, etc.

Additionally, The Grand provides the following scales:

- Arabic 1 (for all basic keys)
- Arabic 2 (for all basic keys)
- Arabic 3 (for all basic keys)
- Indian 1
- Kirnberger (for all basic keys)
- Pure Major (for all basic keys)
- Pure Minor (for all basic keys)
- Vallotti and Young (for all basic keys)
- Werckmeister (for all basic keys)

## Editing tuning scales

You can create your personal tuning scales by editing the notes per octave (the tune offsets are applied equally to all octaves on the keyboard) or by editing the MIDI notes individually (the tune offsets are applied only to individual notes). Editing the scale per octave is particularly useful for creating different temperaments. Editing the scale per note is mainly useful for creating stretched tunings.

To edit the scale per octave, proceed as follows:

1. Click the Oct button to the right of the scale editor.
2. In the scale editor, click in the Offset text field of the note you wish to adjust in the scale editor.

3. Set the tune offset within the range of -100.00 cent to +100.00 cent.

The offsets of the 12 notes are applied to all octaves equally.

To edit the scale per note, proceed as follows:

1. Click the Note button to the right of the scale editor.
2. In the scale editor, click in the Offset value field of the note you wish to adjust.
3. Set the tune offset within the range of -100.00 cent to +100.00 cent.

The offsets are applied to the 128 MIDI notes individually.

## Absolute and Relative Mode

MIDI notes can contain microtuning information, i.e. tune offsets per note. The Absolute or Relative Mode setting determines the way the incoming microtuning information is handled:

### Absolute

The incoming microtuning information is filtered out and The Grand applies only its own scale settings.

### Relative

The incoming microtuning information is kept and offset by the scale settings of The Grand.

## Importing scala files

The Grand allows you to import tuning scales in the popular scala file format (with the extension .scl). This gives you access to literally thousands of tuning scale presets.

---

### PROCEDURE

1. Select "Import Scale..." from the scale preset menu.
2. In the file dialog that appears, select the scala file you wish to import.
3. Click Open to import the scala file and close the dialog.

The imported scales are stored in the user preset folder and can now be loaded from there as any other user scale.

### NOTE

You can also import multiple scala files at the same time this way.

---

## Adjusting the amount

The amount setting determines how the tuning scale is applied. The control range is from 0% to 100%. At a setting of 100%, the tune offsets are applied as specified in the tuning scale. Lower values reduce the tune offsets relatively. At an amount of 0% the tuning scale is not applied at all.

## Performance settings

On the Options page, you will also find a slider for balancing disk vs. RAM usage. This is described in the section [Balancing Disk vs. RAM \(Options page\)](#).



## Tooltips

When you point at a control with the mouse, a short info about the control is shown. Deactivate the Tooltips option if this is not what you want.

## Additional controls when using The Grand as a standalone instrument

At the top of the program window you will find some additional controls for using The Grand as a standalone instrument.



## The Key Commands dialog

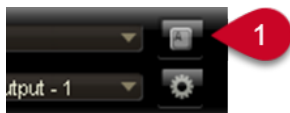
You can assign key commands to most operations that can be performed via the standalone panel of The Grand. The Key Commands dialog lists all available commands and any key commands assigned to them.

The commands are arranged in a hierarchical folder structure, similar to the Windows Explorer and Mac OS Finder. When you open a category folder by clicking the plus sign beside it, the items and functions are displayed with any currently assigned key commands.

---

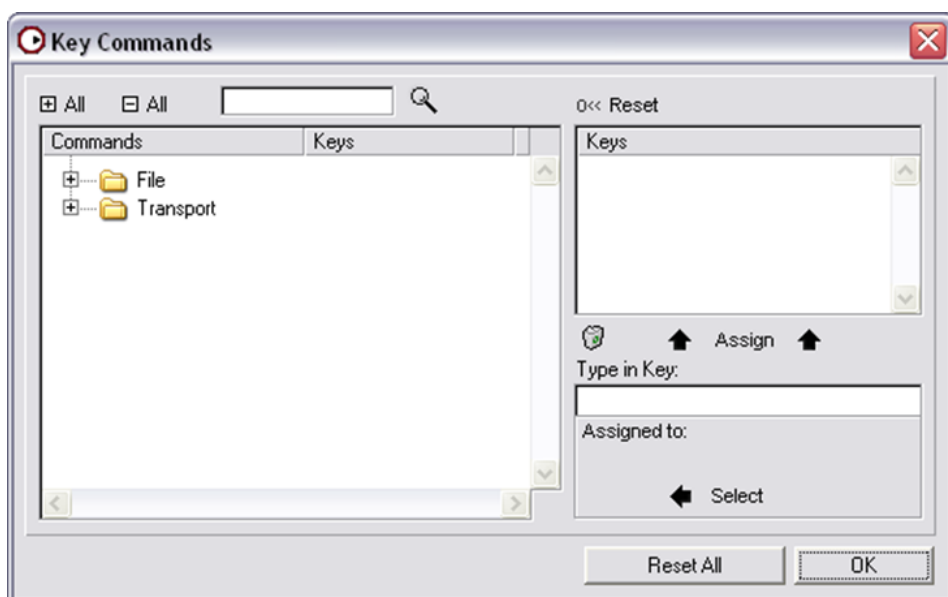
### PROCEDURE

1. In the top left corner of the standalone panel, click on the button to the right of the MIDI input pop-up menu.



1 Click here to open the Key Commands dialog.

The Key Commands dialog opens.



2. In the Commands list to the left, select a category.
3. Click the plus sign to open the category folder and display the items it contains.

**NOTE**

Note that you can also click the “global” plus and minus signs in the top left corner to open and close all category folders at once.

---

4. In the list, select the item to which you want to assign a key command.

**NOTE**

- Already assigned key commands are shown in the Keys column as well as in the Keys section in the top right corner.
  - You can also search for a specific function by entering its name in the search field at the top of the dialog and clicking the search button (the magnifying glass button).
- 

5. When you have found and selected the desired item, click in the “Type in Key” field and enter a new key command.

**NOTE**

You can choose any single key or a combination of one or several modifier keys ([Alt]/[Option], [Ctrl]/[Command], [Shift]) plus any key.

---

6. Click the Assign button above the field to assign the key command to the function. The new key command is displayed in the Keys list.
7. Click OK to close the dialog.

**NOTE**

- If a key command is already used for another function, a message is displayed allowing you to reassign the key command or cancel the operation.
  - You can set up several key commands for the same function.
  - To delete a key command, select the corresponding command, select the key command in the Keys list and click the Delete button (the trash icon).
- 

## Selecting the MIDI input and the audio outputs



In the upper left corner of the plug-in panel in standalone mode, you will find two pop-up menus for selecting the MIDI input and the main audio output of the plug-in.

The MIDI input pop-up menu lists all MIDI devices that are installed on your system.

- Open the MIDI input pop-up menu to select the MIDI device you want to use.

The orange MIDI Activity LED in the upper left corner of the plug-in indicates incoming MIDI messages via the currently selected MIDI input. The LED lights up on note-on and controller messages. This way, you can check if the plug-in and your MIDI keyboard are connected to the same MIDI device input.

The Audio output pop-up menu lists all outputs of the selected ASIO Device.

- Open the Audio output pop-up menu to select an audio output for the main stereo channel of the plug-in.

#### NOTE

- If you select an audio output, the front and rear channels are set to incrementing audio output ports – e.g. 1, 2, 3, 4 or 5, 6, 7, 8.
- Pressing [Alt]/[Option]-[Shift] and selecting an audio output assigns the audio outputs in pairs to the front and rear channels – e.g. 1, 2, 1, 2 or 5, 6, 5, 6.
- Use the Preferences dialog to select the ASIO device and other audio outputs.

## Scratch pad



- 1 Play
- 2 Stop
- 3 Record
- 4 Loop
- 5 Load MIDI file
- 6 Save MIDI file
- 7 Select record mode
- 8 Metronome setting



- 1 Info icon
- 2 MIDI channel filter
- 3 Song position fader
- 4 Song position display
- 5 Time format
- 6 Tempo track
- 7 Tempo value
- 8 Adjust tempo
- 9 Time signature

The scratch pad allows you to record and play back MIDI files in standard MIDI file format (file name extension .mid). You can load existing MIDI files and you can record your own files and save them. The transport section provides buttons for play, stop, record and cycle. The display shows the song position, the tempo and the time signature of the MIDI file. In addition, there is a metronome which you can use for recording and practising.

## Using the transport controls

- Click the Play button to start playback of the MIDI file.  
Playback always starts at the song position.
- Click the Stop button to pause the MIDI file at the current position.  
Click the Stop button twice to reset the song position to the start.
- Click the Record button to start recording.
- Click the Loop button to play the whole MIDI file in a loop.

## Loading a MIDI file

To load a standard MIDI file (.mid), proceed as follows:

---

PROCEDURE

1. Click the Load File button below the transport buttons.
  2. In the file dialog that appears, select the desired file.
  3. Click Open to load the MIDI file.
- 

## Saving a MIDI file

To save the performance you recorded as a MIDI file, proceed as follows:

---

PROCEDURE

1. Click the Save File button (the disk icon) below the transport buttons.
  2. In the file dialog that appears, specify a location and a file name.
  3. Click Save to store the MIDI file.
- 

## The info icon

---

PROCEDURE

- To check which MIDI file is currently loaded, point with the mouse at the info icon in the upper left corner of the song position display.  
A tooltip appears, showing the name of the MIDI file.
- 

## Using the MIDI channel filter

When a multi-track MIDI file is loaded, you can decide whether “all” or only the events of a specific MIDI channel are played back. The control can be found to the right of the info icon in the song position display.

## Song position

The song position fader indicates the position of the transport. Above the song position fader, the position is displayed numerically.

### NOTE

After loading a MIDI file, the display shows the full length of the file and the song position fader is positioned at the end. However, playback will start from the beginning when you click Play.

---

- To move the transport to a different song position, drag the song position fader to the desired position.
- To change the format, click the time format symbol in the top right corner of the display to switch between the time formats. When “Time” format is selected, a clock is displayed. In “Bars” format a note is displayed.

## Tempo and Time Signature

Below the song position display, you will find the Tempo and Time Signature fields which provide the plug-in with tempo and time signature information. In standalone mode, such information is not available via a host application. In this case, the settings are used by the scratch pad and the metronome.

### Tempo Track/Fixed

Set this to “Track” to follow the original tempo of the MIDI file. Set this to “Fixed” to specify a tempo manually.

### Tempo value

Determines the tempo of the MIDI file. The control range is from 1.000BPM to 300.000BPM.

### Adjust Tempo

When the Tempo Track option is selected, an additional control is displayed that allows you to scale the playback relatively to the original tempo of the MIDI file. The control range is from 0.5x (-50%) to 2x (+100%) of the original tempo.

### Sign. (time signature)

Determines the time signature of the plug-in. You can type in the desired signature as a fraction, e. g. 3/4, 6/8, 4/4, etc.

## Recording your performance

---

### PROCEDURE

1. Click on the record symbol below the Record button to select the desired record mode from the pop-up menu:

#### Direct

The recording starts immediately when you click the record button.

#### MIDI

The recording starts with the first MIDI note.

#### Count In 1

The recording starts after a count-in of one bar.

### Count In 2

The recording starts after a count-in of two bars.

2. Click the Record button to start the recording.
  3. When you are done recording, press the stop button.
- 

#### AFTER COMPLETING THIS TASK

Now you can save your performance as a MIDI file, see [Saving a MIDI file](#).

#### NOTE

To indicate that the recording is running, the song position fader is being animated (a small bar moves from left to right).

---

## Activating the metronome

---

#### PROCEDURE

- To select the playback mode of the metronome, click the Metronome button. You can select one of the following modes from the pop-up menu:

#### Off

The metronome is switched off.

#### Count In

The metronome plays only during the count-in of a recording.

#### On

The metronome plays always.

#### NOTE

The volume control next to the metronome icon allows you to set the volume of the metronome.

---

## Volume

Use this control to set the overall volume of the outputs of the standalone plug-in. This includes the volume of the main outputs, the rear outputs and the output of the metronome.

## Performance issues

Each of the piano models comes with several GB of samples. That is quite a large amount of data your computer system has to deal with. The Grand offers several possibilities that help optimizing your computer performance.

These are described in the following sections.

### ECO Mode (general controls)

In ECO Mode only 7 of the up to 20 velocity layers the grand pianos have been sampled with are available. With less velocity layers, the ECO Mode is less demanding on your computer system.

You should use it whenever you want to run many sequencer audio tracks or plug-ins together with The Grand.

- To switch on ECO mode, click the ECO Mode button in the general controls bar. When ECO mode is activated, the button lights up.

#### NOTE

- Loading the ECO mode piano models may take a while.
  - When you deactivate ECO Mode, the pianos will load with the full set of samples again. In case of the grand pianos, this can be up to 20 velocity layers on 97 keys.
- 

## RAM Save (general controls)

The RAM Save function is essential for optimizing the performance of your system. It scans the playback of your current project and unloads any unused samples.

To use RAM Save, proceed as follows:

---

#### PROCEDURE

1. In the general controls bar, click the RAM Save button.  
When this button is activated, a dialog opens asking whether you want to start collecting the necessary samples.
2. Click Yes to apply RAM Save.  
The RAM Save button starts blinking.
3. Play back the project in your host application from the beginning to the end (or to the point where no new notes are played).
4. Click the RAM Save button again.  
A dialog opens asking if you want to unload all unused samples.
5. Click Yes to unload the unused samples.  
The button stops blinking and remains lit to indicate that RAM Save is active.
6. To reload the unused samples, click the RAM Save button again to deactivate the function.  
A dialog opens asking if you want to disable RAM Save mode. Click Yes. The button turns dark and the samples are reloaded.

#### NOTE

Reloading the samples may take a while, depending on how many samples have been unloaded.

---

## Sound parameters (Model page)

Turning any of the parameters off reduces the details of the piano emulation, which puts less strain on RAM and disk streaming. On slower systems, this might allow you to play more voices at the same time.

## Balancing Disk vs. RAM (Options page)

Your computer cannot load all samples completely into the RAM. Therefore, The Grand loads only the first milliseconds of each sample into the RAM and constantly loads more manageable

portions from the hard disk while you play. Because the hard disk has to work harder for every additional note you play, it is a good idea to load as much material as possible into the RAM beforehand. This of course leaves less RAM for other applications. For an optimum performance of your system, you can balance the hard disk versus the RAM usage of The Grand.

To do so, use the Disk vs. RAM slider on the Options page:

- If your hard disk is not supplying data fast enough, drag the slider to the right, to increase RAM usage.
- If you need more RAM for other applications, drag the slider to the left, to use less RAM and rely more on the hard disk.

The memory display in the upper right of the plug-in panel is updated accordingly, see below.

#### NOTE

- If you experience no problems with the system performance, leave this setting as it is.
  - If you keep running into performance problems, no matter which settings you choose, activate the ECO Mode. This will load less velocity layers, see [ECO Mode \(general controls\)](#).
- 

## Performance meters

In the upper right of the plug-in panel, you find meters and text displays that indicate the system load of the plug-in.

### CPU

The upper meter shows the processor load during playback of voices. The more voices you play, the higher the processor load will be. If the red overload indicator lights up, reduce the Max Voices setting on the Control page. Alternatively, you can switch off articulations on the Model page to reduce the processor load.

### Disk

This meter shows the hard disk transfer load from streaming samples or loading models. If the red overload indicator lights up, the hard disk is not supplying data fast enough to the computer. In such a case, adjust the Disk vs. RAM slider on the Options page towards RAM. You may also decrease the Max Voices setting on the Control page. Alternatively, you can switch off sound parameters on the Model page to reduce the disk load.

### Voices

This display indicates the number of samples currently played back, to help you to trace performance problems. For example, if you have to reduce the Max Voices setting on the Control page, you can verify your settings by monitoring the Voices display.

### MEM

MEM is an abbreviation for Memory. This display indicates the overall amount of RAM currently used by the plug-in and the loaded model. The amount you see results from the streaming buffer and the preloaded samples. The MEM display will help you to trace performance problems. For example, if you need to free memory for other applications, you can do so by adjusting the Disk vs. RAM slider on the Options page towards Disk. You can verify your settings by monitoring the MEM display.

#### NOTE

If you keep running into performance problems, you can activate the ECO Mode. This will load less velocity layers, see [ECO Mode \(general controls\)](#).

---



## Low memory situations

In some situations, especially when you are working with lots of sample-based plug-ins, there might not be enough RAM to add an instance of The Grand. In this case, a dialog will warn you that there is not enough memory left.

The dialog offers the following options, which might allow you to load The Grand anyway:

### Switch to ECO Mode

The Grand will be opened in ECO mode, see [ECO Mode \(general controls\)](#).

### Disable Sustain Resonance Layer

The Grand will load without the sustain resonance samples.

### Reduce RAM usage (Disk<>RAM)

Selecting this option will change the Disk vs. RAM usage setting on the Options page by one step towards Disk.

- Start by activating one of the options and clicking OK.

#### NOTE

If the reduction of RAM usage is sufficient, you can now start playing The Grand. If the low memory situation still persists, the dialog opens again so that you can select another option.

---

## Using MIDI controllers

By default, most of the parameters of the plug-in are already mapped to a MIDI controller. You can customize the default mapping by assigning your own MIDI controllers with a convenient learn function. This way, you can adapt the mapping to your MIDI keyboard or controller. To provide much better control, you can set the minimum and maximum range for each assignment separately.

## Assigning MIDI controllers

---

### PROCEDURE

1. Right-click the control you want to control remotely.
  2. From the context menu, select Learn CC.
  3. On your MIDI keyboard or controller, use the potentiometer, fader, or button.
- 

### RESULT

The next time you right-click the control, the menu shows the assigned MIDI controller.

#### NOTE

You can assign the same MIDI controller multiple times to different parameters. However, you cannot assign different MIDI controllers to the same parameter.

---

## Removing MIDI control assignments

---

### PROCEDURE

- To remove a MIDI control assignment, right-click on the control and select Unassign from the context menu.
- 

## Setting the parameter range

You can specify the minimum and maximum value of the parameter separately for each assignment. This way, you have much better control over the parameter, e.g. when performing on stage.

- To set the minimum value of the parameter, set the parameter to the desired minimum value, right-click the control and select Set Minimum from the context menu.
- To set the maximum value of the parameter, set the parameter to the desired maximum value, right-click the control and select Set Maximum from the context menu.

## MIDI controllers

The following parameters on the plug-in surface can be controlled using an external MIDI controller (the controller numbers and names refer to the factory default assignments of these parameters):

---

Page	Parameter	Controller No.	Name
<b>All pages</b>	Main Volume	07	Main Volume
<b>Model</b>	Sustain Resonance	75	Sound Controller #6
	String Release	76	Sound Controller #7
	Key Sound	77	Sound Controller #8
	Hammer Release	78	Sound Controller #9
	Damper Pedal	79	Sound Controller #10
	Modulation On/Off (CP80 only)	93	Effect 3 Depth
	Modulation Depth (CP80 only)	75	Sound Controller #6
	Modulation Speed (CP80 only)	76	Sound Controller #7
	Modulation Feedback (CP80 only)	77	Sound Controller #8

Page	Parameter	Controller No.	Name
	Modulation Phase (CP80 only)	78	Sound Controller #9
	Modulation Mix (CP80 only)	79	Sound Controller #10
	Tremolo On/Off (CP80 only)	14	-
	Tremolo Depth (CP80 only)	12	Effect Control 1
	Tremolo Speed (CP80 only)	13	Effect Control 2
<b>Equalizer</b>	EQ On/Off	-	-
	Low Gain	-	-
	Low Frequency	-	-
	Low Q	-	-
	Mid 1 Gain	-	-
	Mid 1 Frequency	-	-
	Mid 1 Q	-	-
	Mid 2 Gain	-	-
	Mid 2 Frequency	-	-
	Mid 2 Q	-	-
	High Gain	-	-
	High Frequency	-	-
	High Q	-	-
<b>Ambience</b>	Left/Right	10	Pan
	Rear/Front	-	-
	Reverb On/Off	-	-
	Room Size	-	-

<b>Page</b>	<b>Parameter</b>	<b>Controller No.</b>	<b>Name</b>
	Reverb Time	-	-
	Pre-Delay	-	-
	Reverb Mix	91	Effect 1 Depth

---

## Automation parameters

The following parameters can be automated from your host software:

---

<b>Page</b>	<b>Parameter</b>
<b>All pages</b>	Main Volume
<b>Model</b>	Sustain Resonance
	String Release
	Key Sound
	Hammer Release
	Damper Pedal
	Modulation On/Off (CP80 only)
	Chorus Depth (CP80 only)
	Chorus Speed (CP80 only)
	Chorus Feedback (CP80 only)
	Chorus Phase (CP80 only)
	Flanger Depth (CP80 only)
	Flanger Speed (CP80 only)
	Flanger Feedback (CP80 only)
	Flanger Phase (CP80 only)
	Phaser Depth (CP80 only)
	Phaser Speed (CP80 only)

**Page**

**Parameter**

Phaser Feedback (CP80 only)

Phaser Phase (CP80 only)

Modulation Mix (CP80 only)

Tremolo On/Off (CP80 only)

Tremolo Depth (CP80 only)

Tremolo Speed (CP80 only)

**Equalizer**

EQ On/Off

1 Low Gain

1 Low Frequency

1 Low Q

2 Mid Gain

2 Mid Frequency

2 Mid Q

3 Mid Gain

3 Mid Frequency

3 Mid Q

4 High Gain

4 High Frequency

4 High Q

**Ambience**

Left/Right

Rear/Front

Reverb On/Off

Room Size

Reverb Time

---

**Page**

**Parameter**

Pre-Delay

Reverb Mix

---

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