

TRINITY

for Mac/PC

MUSIC WORKSTATION DRS

Owner's Manual



KORG

Contents

Introduction	1
Main Features.....	1
Elements of the user interface.....	1
Getting started	3
Installing and updating the software	3
Basic page layout	3
Sound browser	5
Saving the sounds	7
Main menu	8
EASY page (COMBI, PROG)	9
OSC 1/OSC 2/DRUM KIT	9
WAVEFORM.....	9
PITCH.....	9
FILTER.....	10
FILTER EG	10
AMP	10
AMP EG.....	10
IFX, MFX, EQ.....	11
OSC page (COMBI, PROG)	12
OSC 1/OSC 2	12
DRUMS	13
SCALE.....	14
VELOCITY ZONE.....	15
BASIC.....	15
PITCH page (COMBI, PROG)	16
PITCH ENVELOPE GENERATOR.....	16
OSC 1 PITCH/OSC 2 PITCH.....	17
LFO 1/LFO 2	18
MODULATION	19
FILTER page (COMBI, PROG)	23
OSC 1 FILTER/OSC 2 FILTER	23
LFO 1/LFO 2	25
MODULATION	26
AMP page (COMBI, PROG)	31
OSC 1/OSC 2 AMP EG.....	31
OSC 1/OSC 2 AMP	32
OSC 1/OSC 2 KEYTRACK	32
MODULATION	33
SETTINGS page (COMBI)	36
LAYER (A...H).....	36
STATUS (A...H)	36
FORCE POLY (A...H)	37
DELAY TIME (A...H)	37

USE PRO SCALE (A...H)	37
TRANSPOSE (A...H)	37
DETUNE (A...H)	37
BEND RANGE (A...H)	37
MIDI page (COMBI).....	38
MIDI (A...H).....	38
CONTROL CHANGE (A...H).....	38
AFTERTOUCH (A...H).....	38
SUSTAIN PEDAL (A...H).....	38
ZONES page (COMBI)	39
KEY ZONES (A...H).....	39
VELOCITY ZONES (A...H).....	40
FX ROUTING page (COMBI, PROG)	41
LAYER A (PROG)	42
LAYER (A...H) (COMBI)	43
IFX (1...8).....	44
MFx.....	45
EQ.....	45
FX EDIT page (COMBI, PROG)	46
IFX (1...8).....	46
MFx (1, 2)	46
FX settings.....	46
Global Settings	47
MIDI	47
CONTROLLER	47
MIDI FILTER.....	47
KEYBOARD	48
SCALE.....	49
SYSTEM.....	49
TEMPO	50
EFFECTS	50
Save Global Settings.....	50
Troubleshooting	51
No sound	51
Clicks, pops or noise in the sound, or high CPU usage.....	51
Delay between playing and hearing the sound	51
Can't control the software synth from a MIDI device.....	51
Specifications.....	52
Operating requirements	52
Support and service.....	53
Before you contact us.....	53
Information to provide when contacting us	53

Introduction

Thank you for purchasing the Korg Collection TRINITY software synthesizer. Please read this manual carefully to achieve the full performance of this product.

Main Features

Originally released in 1995 with its iconic silver body and groundbreaking TouchView GUI, the legendary KORG music workstation TRINITY has been faithfully brought back to life as a software synthesizer—now with all of the sample options from across the series included.

Supervised by original TRINITY developers

For the KORG Collection, nothing is more essential than sound. KORG Collection TRINITY was meticulously fine-tuned under the supervision of the original TRINITY engineers. In addition to faithfully reproducing the original PCM samples and effects circuits, even the subtle sonic nuances unique to the hardware have been recreated in detail.

All sounds, including optional expansions

KORG Collection TRINITY includes not only the original built-in TRINITY PCM samples, but also all four of the optional sample expansions released at the time, as well as the additional PCM samples from the TR-Rack—a 1U rack-mounted version of TRINITY released in 1998. Over 2,000 high-quality Combinations and Programs unique to TRINITY are included.

EASY page for instant access to main parameters

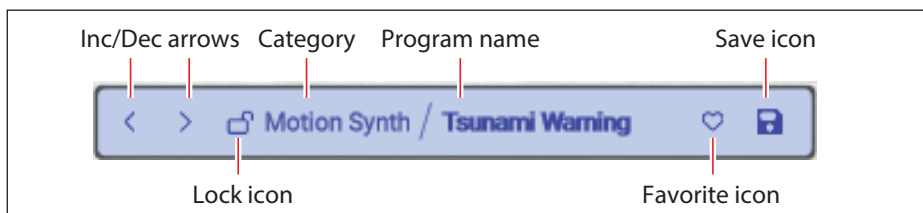
Just like the original TRINITY, every detailed parameter is fully editable in KORG Collection TRINITY. At the same time, it features an EASY page that allows for more intuitive editing. From oscillator waveform selection and pitch transpose to filter and envelope adjustments, as well as effects selection, you can easily control all the key parameters. Of course, beyond the EASY page, all other editing screens also provide a highly visual and intuitive interface, enabling you to freely shape every detail of your sound.

Elements of the user interface

Selector

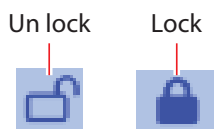
The KORG Collection TRINITY uses a database for playing the individual sounds and the various elements that make up a sound in real time, along with other processing. This database includes the sounds (combinations and programs), effect presets, scales and multisamples. The combination and program are shown on the onscreen selector.

Selector



This shows the currently selected item. You can use the inc/dec arrows to select the previous or next program. Clicking on the program name will open the [“Sound browser”](#).


The lock icon sets whether to lock the category or not. When you click the “<” or “>” arrow while the lock is activated, the programs within the same category are shown.

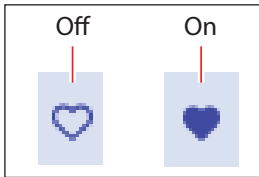


Introduction

Click the save icon () to open the save dialog box, where you can save the program.

 Programs are saved only in the user banks.

The selector contains a favorite icon. When this is turned on, the sound is registered as a favorite. Afterwards, when you click “  Favorites ” to the right of the search box in the browser, a list of registered sounds is shown. You can also use the sound browser or a librarian to register a favorite.

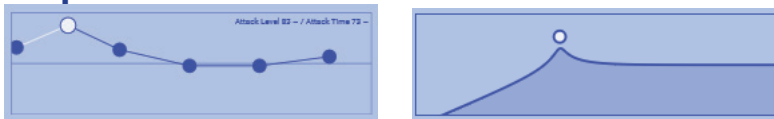


Knobs and sliders

To edit a knob's value, drag it either in a vertical or horizontal direction. Double-click the value of a knob to directly input the value.

To edit a slider's value, drag it in the slider's direction.

Graphical editor



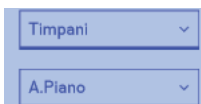
You can directly edit the envelope, filter and key tracking on the graphical editor.

Follow the steps below.

1. Move the cursor above the graphics to display a handle (dot).
2. Drag the handle to edit the value.

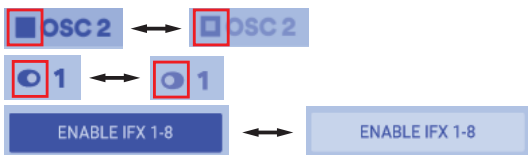
Use the white handle on the A/D/S/R segment to edit the envelope curve.

Combo box



Click to select a value from the pop-up menu that appears.

On/off switch



Click to toggle the setting on or off.

Toggle button



Click to toggle the setting on or off.

Getting started

Installing and updating the software

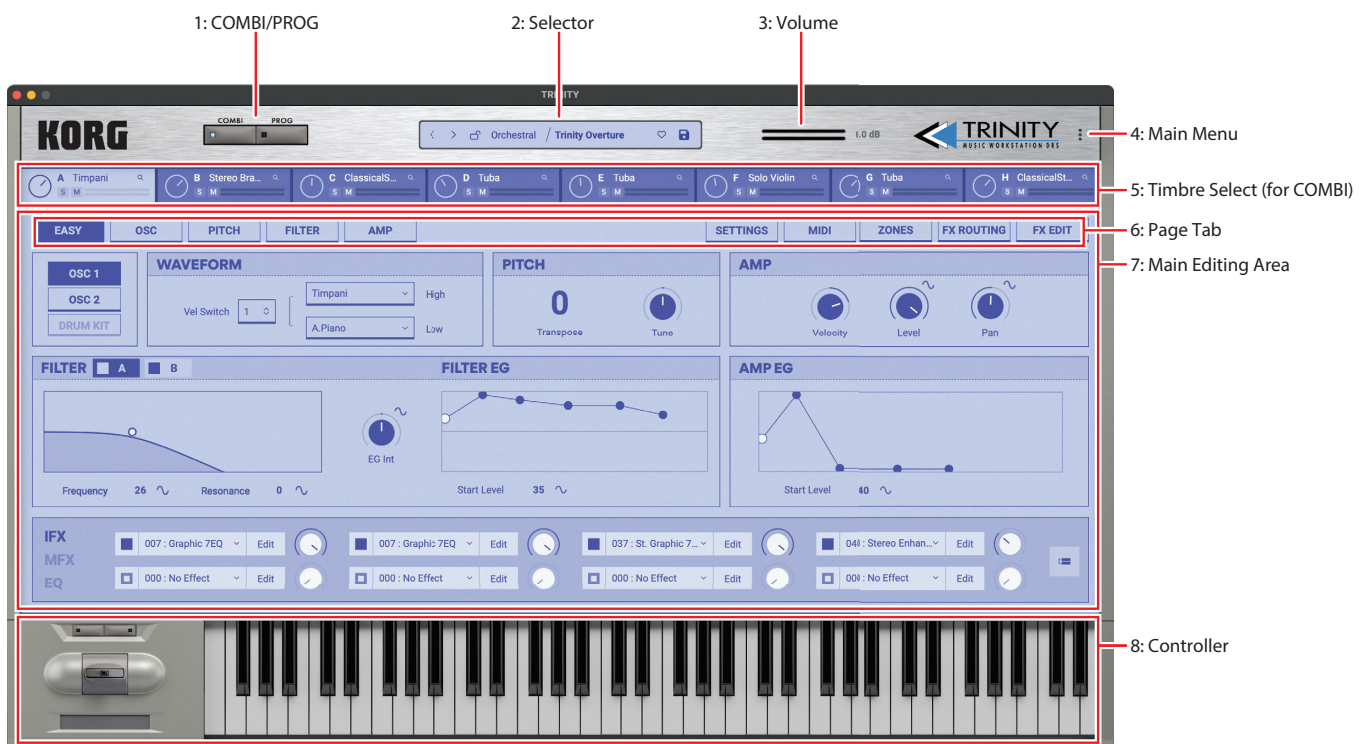
Use the KORG Software Pass application to install and update the KORG Collection TRINITY.

The license for the software is registered in conjunction with your KORG ID. Visit <https://id.korg.com> to download the KORG Software Pass application and to manage your KORG ID.

Where are the sounds saved?

The sound database is saved in a dedicated folder.

Basic page layout



1: COMBI/PROG mode

Switches between COMBI and PROG modes.

COMBI (Combination) mode

With this mode, you can combine up to eight timbres to create a sound.

Use this mode to layer multiple tones for a fat sound; or create a split sound that lets you play different sounds together, such as a drum kit and bass part along with a lead.

You can select the combinations from the preset banks. User banks are also available to save the combinations you create. Combinations consist of eight IFX (insert effects), two MFX (master effects) and a master EQ.

PROG (Program) mode

This mode is used for playing and editing a single program.

You can select a program from one of the four factory banks or four option banks, or from a GM bank. This software also includes user banks, where you can save the programs you have edited and created.

Programs consist of eight IFX (insert effects), two MFX (master effects) and a master EQ.

Getting started

2: Selector

Refer to [“Selector”](#).

3: Volume

Adjusts the overall volume. Use the VOLUME slider or the numeric value to adjust the volume.

4: Main Menu

From this menu, you can access Global Setting (Global MIDI channel, controllers, MIDI filter, keyboard settings, scale settings and so forth), screen size scaling and the “About” information. Refer to [“Main menu”](#).

5: Timbre Select (for COMBI)

In COMBI mode, you can check the contents of a layer or select a timbre to edit. When you select a timbre program, the parameters that make up the program are shown below.

S: Timbre solo on/off button

M: Timbre mute on/off button

6: Page Tabs

These select between pages to view in the main editing area.

7: Main Editing Area

The various parameter settings for the selected page are shown here. This shows the details and so forth for the oscillator, pitch, filter, amp and effect settings.

8: Controllers

These are the onscreen controllers used for playing (keyboard, SW1/SW2, joystick, ribbon controller). When operating these controllers from an external MIDI device, it’s useful to set their MIDI control numbers in Global Setting.

Keyboard

Click on the keyboard to play notes.

SW1/SW2

Enables (the LED turns on) or disables the functions assigned to SW1/SW2.

Right-click to configure the function assignments for SW1/SW2 or the operating mode (toggle or momentary).

When you assign the joystick or ribbon lock and enable SW1 (or SW2), these controllers are locked. For instance, when you enable (lock) SW1 (or SW2) while using a controller, the controller operation does not change thereafter, even when you use the controller.

When you assign Octave Up (or Octave Down) and enable SW1 (or SW2), the pitch goes up (or down) one octave; and when you disable SW1 (or SW2), the octave setting remains unchanged.

Joystick

Push the joystick up and down or to the left and right (+Y, -Y, -X, +X) to control the pitch and modulation.

Ribbon controller

Slide your finger on the controller (in the X directions) to control the pitch or modulation.

Sound browser



Overview

The sound browser features a filtering function that lets you find the combinations and programs you want from a massive list of sounds.

1: Sound List

This list shows the selectable sound data (combinations in the above illustration) that is filtered by your search keyword and by the bank, category and character settings in the filter panel. You can click in the list to select a sound to preview, and also set items in the list as favorites.

For the user banks, when you right-click a sound name, you can edit the category registration or program information, or delete the information.

Double-click to select a sound (or press the “x” at upper right) to close the browser.

 The search (search keyword), category and character settings have an effect on the data list display even after you close the browser.

2: Search

Input some text into this field to filter down the list by searching for text in the metadata fields. Click “x” to erase the contents of the field.


3: Preview

Plays back a preview of the phrase. This is useful when selecting a sound.

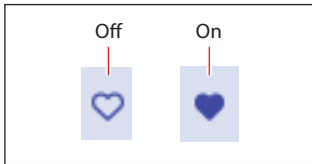
Click to select the sound you want to preview from the sound list.

Getting started

4: Favorite icon

When this is turned on, the sound is registered as a favorite. Afterwards, when you click  to the right of the search box in the browser, a list of registered sounds is shown. You can also use the sound browser or a librarian to register a favorite.

Favorite icon



5: BANKS

Select a bank.

When CATEGORIES is shown, click the  icon at right to show the bank (COMBI, PROG).
When you select “All”, all of the programs are shown.

6: CATEGORIES (COMBI, PROG)

You can filter the sounds by type, such as keyboards, organs, bells and so on.

When BANKS is shown, click the  icon at right to show the category.

The sounds in the selected category are shown.

There are 16 different categories for the programs and combinations.

7: CHARACTERS (COMBI, PROG)

You can filter the sounds by character, such as acoustic, electric and so on.

When BANKS is shown, click the  icon at right to show the character.

Saving the sounds

Here's how to save a combination or program.

1. In COMBI or PROG mode, select a sound to edit.
2. Click the save icon in the selector.

A save dialog box appears.

Save dialog box (program)



The screenshot shows a 'Program Editor' dialog box with the following settings:

- Name: Acoustic Piano
- Category: Keyboard
- Character: Acoustic (selected), Electric, Synthesized
- Mono (selected), Poly
- Long (selected), Short
- Bright (selected), Dark
- Fast (selected), Slow
- Single (selected), Ensemble
- Static (selected), Modulated
- One shot (selected), Sustained
- World (selected), Orchestral, (None)
- To Bank: USR-A
- To Number: 000

Buttons: Cancel, Save

3. Set the category, character, bank and so forth as necessary. You can also set all of this metadata later in the browser.
4. Click "Save" to save the sound.

Main menu

Click the icon with the three dots stacked vertically at the upper right corner to open the main menu.

From this menu, you can access the Global settings (velocity and aftertouch curves, interface options, scale, etc.), adjust the screen size, view the “About” information and so forth.



Open Global Settings

Shows the “[Global Settings](#)”, which contains controller CC assignment and scale settings, keyboard settings and more.

View Size

Changes the screen size. Any changes to this setting will take effect the next time the softsynth is launched.

Utility

Initialize

Initializes the currently selected sound.

Manual

Shows the manual for the software or the original hardware.

Acknowledgements

Shows the software components used to create this software, as well as acknowledgements of those involved in developing this product.

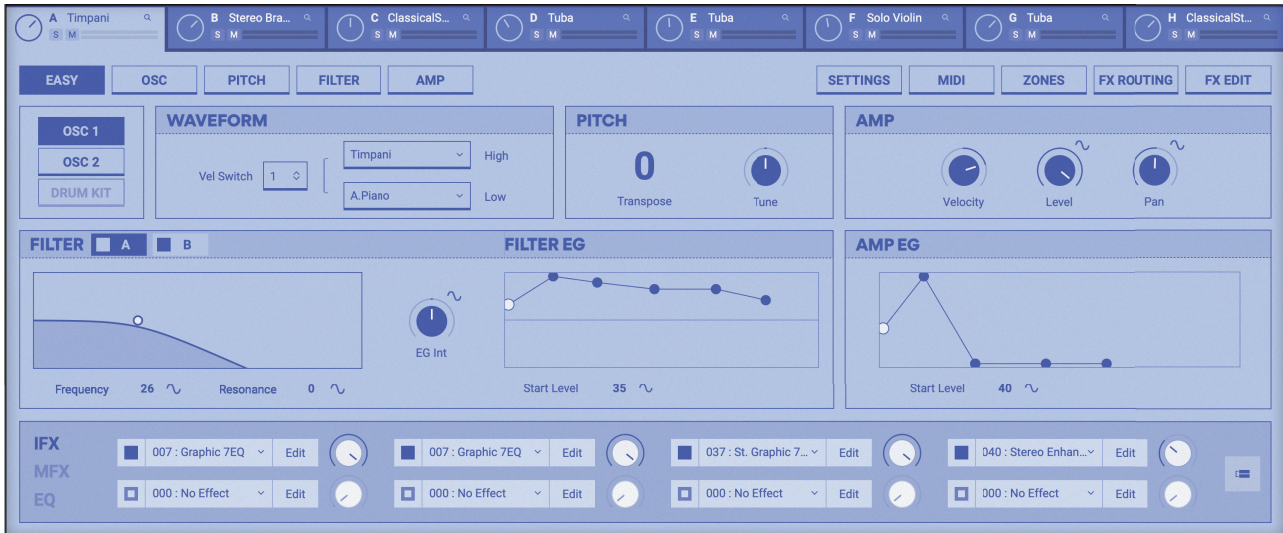
About TRINITY

Shows the software version.

EASY page (COMBI, PROG)

Click the EASY button to show the main parameters for COMBI or PROG mode.

These settings are synchronized with a number of parameters including the following: [“OSC page \(COMBI, PROG\)”](#)–
[“AMP page \(COMBI, PROG\)”](#), [“FX ROUTING page \(COMBI, PROG\)”](#), [“FX EDIT page \(COMBI, PROG\)”](#).



OSC 1/OSC 2/DRUM KIT

Selects the oscillator to edit.

DRUM KIT selects the [“DRUMS”](#).

WAVEFORM

Vel Switch

This is shown when OSC 1 or OSC 2 is selected. Use this to set the velocity value used for switching between High and Low multisamples.

When you play the keyboard at a velocity equal to or greater than this value, the High multisample plays; and when you play the keyboard at a velocity less than this value, the Low multisample plays.

High, Low

Sets the multisamples used for OSC 1 and OSC 2. Clicking on the multisamples name will open the [“Sound browser”](#).

DrumKit

Sets the drum kit used for DRUM KIT. Clicking on the drum kit will open the [“Sound browser”](#).

PITCH

Transpose

Adjusts the pitch in semitone steps over a range of ± 1 octave for OSC 1 and OSC 2.

For the drum kit, this does not affect the pitch, but rather shifts the drum kit position. Set this to zero if it is not needed.

Tune

Adjusts the pitch in cents (1 semitone = 100 cents) over a range of ± 1 octave for OSC 1 and OSC 2.

For example, if you want to change the pitch more than a semitone, normally you would use Transpose. However, if you want a more strained sound (like you'd hear when raising the pitch with a pitch bender), you can use the Tune setting.

For the DRUM KIT, this sets the pitch in cents (1 semitone = 100 cents).

FILTER

A, B

Selects the filter to edit.

Graphical editor (filter)

When you click a point on the graphical editor, the Frequency and Resonance values are shown below.

You can also set the values by dragging the points on the graphical editor.

Select the filter type from [“FILTER page \(COMBI, PROG\)”](#).

EG Int

Adjusts the depth at which the EG modulates the cutoff frequency.

FILTER EG

This sets the changes in the filter EG over time.

Graphical editor (filter EG)

When you click each point on the graphical editor, the level or time values are shown below.

You can also set the values by dragging the points on the graphical editor. Please refer to [“FILTER page \(COMBI, PROG\)”](#).

AMP

Velocity

This changes the volume according to changes in velocity.

+ **value**: Playing the keys harder makes the volume louder.

– **value**: Playing the keys harder makes the volume softer.

Level

Sets the volume of the oscillator.

Pan

Sets the pan (position in the stereo field) of the oscillators.

AMP EG

This sets the changes in the amp EG over time.

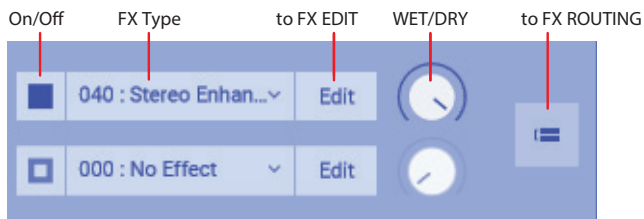
Graphical editor (amp EG)

When you click each point on the graphical editor, the level or time values are shown below.

You can also set the values by dragging the points on the graphical editor. Please refer to [“AMP page \(COMBI, PROG\)”](#).

IFX, MFX, EQ

IFX indicators



IFX

For the IFX, you can select the insert effect type, turn the effect on or off, and set the wet/dry balance.

On/Off

Turns the insert effect on/off.

IFX Type

Selects the insert effect. See the “Effect Guide” in the original documentation.

to FX Edit

Switches to the FX EDIT page.

WET/DRY

Sets the balance between the effect sound and the direct sound.

to FX ROUTING

Switches to the FX ROUTING page.

MFX

For the MFX, you can select the master effect type, turn the effect on/off, and set the wet/dry balance.

On/Off

Turns the master effect on/off.

MFX Type

Selects the master effect. See the “Effect Guide” in the original documentation.

to FX EDIT

Switches to the FX EDIT page.

OUTPUT LEVEL

Sets the effect output volume.

to FX ROUTING

Switches to the FX ROUTING page.

EQ

Sets the High Gain and Low Gain for output.

High Gain

Adjusts the high note range level.

Low Gain

Adjusts the low note range level.

OSC page (COMBI, PROG)



OSC 1/OSC 2

Configures the oscillators. For DRUMS, see [“DRUMS”](#).

Delay

Sets the delay time from note on (when the key is pressed) to when the note actually sounds.

When this is set to “KEY OFF”, the note sounds when the key is released (note off). This is used for harpsichords and similar sounds. When using this setting, set the Amp EG sustain level to “0”.

Octave

Sets the reference pitch in octaves. The standard octave for the multisamples is set to 8’.

Transpose

Adjusts the pitch in semitones over a range of ± 1 octave.

Tune

Adjusts the pitch in cents (1 semitone = 100 cents) over a range of ± 1 octave.

For example, if you want to change the pitch more than a semitone, normally you would use Transpose. However, if you want a more strained sound (like you’d hear when raising the pitch with a pitch bender), you can use the Tune setting.

Vel Switch

This switches between the High and Low multisamples for OSC 1 or OSC 2, based on the velocity value you set here.

When you play the keyboard at a velocity equal to or greater than this value, the High multisample plays; and when you play the keyboard at a velocity less than this value, the Low multisample plays.

Low/High

Selects the multisamples to use. Clicking on the multisample name will open the [“Sound browser”](#).

Level

Sets the multisample volume.

Start Offset

Sets the point at which the multisample starts playing.

On: The multisample starts playing at the predetermined position.


Off: The multisample starts playing at the beginning of its waveform.

DRUMS

This is shown when the DRUMS are on.

Octave

Sets the oscillator reference pitch in octaves. The octave is set to 8' when you use the drum kit.

 When editing a drum program, be sure to set this parameter to 8'. If the parameter is set to a different value, the drum kit keyboard assignments will be shifted.

Transpose

This does not affect the pitch, but rather shifts the drum kit position. Set this to zero if it's not needed.

Tune

Sets the pitch in cents (1 semitone = 100 cents).

DrumKit

Selects the drum kit. Clicking on the drum kit name will open the ["Sound browser"](#).

Edit Key

Selects the key to which you assign a drum sample and its settings.

The drum sample and its settings correspond to the Low and High drum sample shown on the right side of the screen.

You can select two drum samples per key, and switch between the samples according to how hard (the velocity with which) you play the key.

Midi Select

On: When you play a key, that key is shown as the ["Edit Key"](#).

Off: Normally, this is set to "Off".

Assign

On: The Low and High drum samples selected at the right side of the screen will play. Normally, this is set to "On".

Off: The Low and High drum samples selected at the right side of the screen are disabled. Instead, the drum sample of the key to the right of the key you selected in ["Edit Key"](#) plays. At that time, the sound is played a semitone lower than the key to the right. If you want to change the pitch of the drum sample, set this to "Off".

Bypass Filter

Sets whether to apply the filter of the program used by the drum kit for each key.

On: No filter effect is applied.

Off: The filter effect is applied.

Exclusive Group

001–127: Groups the keys together that have drum samples assigned to them. The keys that have the same group number assigned act as a single group, and the last key played is given priority and played in monophonic sound. For instance, if you assign the same type of drum samples, such as a closed hi-hat and an open hi-hat or the like to a key and group them, you can make it so that the various types of hi-hats don't play back at the same time.

Off: No grouping is used. Normally, this is set to "Off".

Bus

Configures the program oscillator output bus for each key.

Send 1, Send 2

Sets the send level for each key.

Pan

Sets the pan for each key.

Off: No output is made.

L000–R127: Sets the pan for the drum samples assigned.

When this is set to C064, the same volume level is used for both L and R, so that the sound comes from the center of the stereo field.

This setting can be changed for each key, so that you can create a drum kit with the hi-hat on the left, the snare on the right side, the toms from the center to the right, and the cymbals on the left and right sides.

Vel Switch

This switches between the High and Low drum samples for each key, based on the velocity value you set here.

When you play the keyboard at a velocity equal to or greater than this value, the High drum sample plays; and when you play the keyboard at a velocity less than this value, the Low drum sample plays.

Low/High

Selects the drum sample. Clicking on the drum sample name will open the [“Sound browser”](#).

Level

Sets the drum sample volume.

Start Offset

On: Starts playing the drum sample waveform at a position after the beginning (which is set beforehand for each drum sample).

Off: Starts playing at the beginning of the drum sample waveform.

SCALE

Type

Selects the basic scale for the internal sound engine. You can also edit the user scales in [“Global Settings”](#).

EQUAL TEMPERAMENT: This is a widely-used scale in general use, where the difference in pitch between each semitone is uniform.

PURE MAJOR: This is a scale in which the major chord for the primary overtones selected harmonizes perfectly.

PURE MINOR: This is a scale in which the minor chord for the primary overtones selected harmonizes perfectly.

ARABIC: This is a scale that includes quarter tones used in Arabian music.

PYTHAGORAS: This is the scale used in ancient Greece, and is effective for playing melodies.

WERKMEISTER (Werckmeister III): This is an equal temperament tuning used in later-era baroque music.

KIRNBERGER (Kirnberger III): This was a scale created in the 18th century, mainly used for harpsichord tuning.

SLENDRO: This is a scale used on gamelans in Indonesia, with five notes per octave.

When [“Edit Key”](#) is set to “C”, use the C, D, F, G and A notes to play (the other notes use equal temperament tuning).

PELOG: This is another scale used on gamelans in Indonesia, with seven notes per octave.

When [“Edit Key”](#) is set to “C”, use only white notes when playing (the black notes use equal temperament tuning).


STRETCH: This is a scale used for acoustic pianos.

USER ALL NOTES SCALE: This scale uses the whole note range (C-1 to G9) that’s set in [“User All Notes Scale”](#) of Global Setting.

USER OCTAVE SCALE 00–15: This scale uses a one-octave range that’s set in [“User Octave Scale”](#) of Global Setting.

Key

Sets the primary overtones for the scale key you selected.

 This setting is disabled when using the EQUAL TEMPERAMENT, STRETCH and USER ALL NOTES SCALE. If you select a scale besides these, the tuning of the key that represents the reference pitch (example: A = 440 Hz) may vary. You can correct this in [“Master Tune”](#) of Global Setting.

Random

Higher values make the pitches sound more irregular when played. Normally, this is set to 0.

Adjust this when you want the effect of unstable pitch on an instrument, such as a cassette tape organ or an acoustic instrument.

VELOCITY ZONE

OSC 1/OSC 2

For oscillators 1 and 2, you can use velocity to switch between which oscillator sounds. Here you can make velocity zone settings for oscillators 1 and 2.

This velocity zone setting is given priority over the multisample A–H velocity settings in [“ZONES page \(COMBI\)”](#).

BASIC

Mono

Selects the basic voice mode.

On: The sound plays monophonically. Only one note can be played at a time with the program.

Off: The sound plays polyphonically. This lets you play chords.

Single Trig

This is enabled when the [“Mono”](#) setting is “Off”.

On: Each sound is played only after the previous sound fades out, even when you play the same key twice, so that each sound does not play at the same time.

Off: When you play the same key twice, the sounds play at the same time.

Hold

On: This makes the sound hold, so that it sounds as if you are still pressing the key even after you release the key. This is optimal when playing drum sounds. Set this to “On” when you have selected “DRUMS” in [“OSC page \(COMBI, PROG\)”](#).

Off: Normally, this is set to “Off”.

Legato

This is enabled when the [“Mono”](#) setting is “On”.

On: The sounds play in single trigger mode.

Off: The sounds play in multisample trigger mode.

 In single trigger mode, the note may not sound at the correct pitch due to the multisample or keyboard position.

Priority

This is enabled when the [“Mono”](#) setting is “On”.

If two or more keys are held down, this sets which note is given priority.

“Low” gives priority to the lower note, “High” gives priority to the higher note, and “Last” gives priority to the note last played.

PITCH page (COMBI, PROG)



PITCH ENVELOPE GENERATOR

This configures the changes in pitch over time.
Each of the EG parameters is configured using the graphical editor.

Start Level

Sets how much the pitch changes when a note is played (note on).

Attack Level

Sets how much the pitch changes after the attack time ends.

Attack Time

Sets how long it takes from note on until the attack level you set is reached.

Decay Time

Sets how long it takes from when the attack level is reached until the reference pitch is reached.

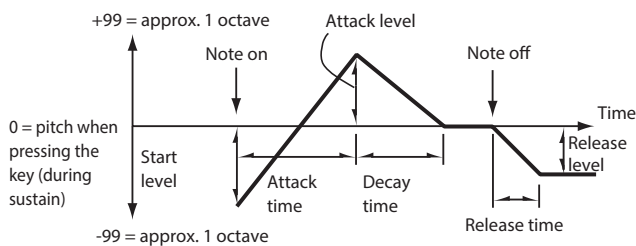
Release Level

Sets how much the pitch changes after the release time ends.

Release Time

Sets how long it takes from note off until the pitch you set with the release level is reached.

Settings for time-related changes in pitch (when Pitch EG Intensity = +12.00)



OSC 1, OSC 2

Int

Sets the depth and direction of the pitch modulation produced by the pitch EG.
When this is set to “12.00,” the pitch will change up to a ± 1 octave range.

Velocity

This sets how much your playing strength controls the depth and direction of the pitch modulation produced by the pitch EG.

+ **value**: The harder you play, the greater the pitch changes.

– **value**: The harder you play, the lesser the pitch changes.

For either a positive or negative value, the pitch approaches the amount of pitch change set in the Int parameter above.

OSC 1 PITCH/OSC 2 PITCH

Slope

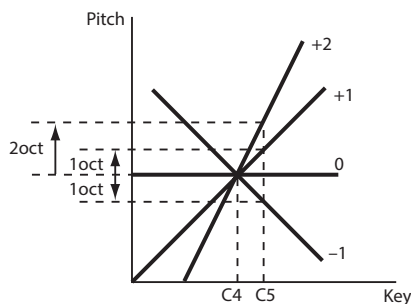
Normally, this is set to +1.0.

+ **value**: The higher you play, the higher the pitch goes.

– **value**: The higher you play, the lower the pitch goes.

0: The pitch does not change regardless of what key you play, and only a C4 pitch is produced.

Relationship between the Slope setting, the pitch and the note played



Ribbon

Sets how much the pitch changes in semitones, at the location where you press the ribbon controller (or when a CC#16 message is received).

When you set this to a positive value and press the ribbon controller to the right of the center position (or when the CC#16 message value is 64 or greater), the pitch rises. Negative values make the pitch fall.

BEND RANGE

–X

Sets how much the pitch changes in semitones when you move the joystick to the left (or when a pitch bend message of -1 or less is received). Normally, this is set to a negative value.

A value of “12” is equal to one octave.

+X

Sets how much the pitch changes in semitones when you move the joystick to the right (or when a pitch bend message of 1 or greater is received).

A value of “12” is equal to one octave.

– Step

Sets the width of pitch change that occurs when you move the joystick to the left.

+ Step

Sets the width of pitch change that occurs when you move the joystick to the right.

LFO 1/LFO 2

This controls the LFO, which makes cyclical changes to the oscillator pitch (for a vibrato effect).

Waveform

Selects the LFO waveform.

The numbers to the right of the LFO names that are shown for some LFO shapes represent the phase at which the waveform starts.

GUITAR: This is a guitar-like vibrato, with a shape that is adjusted in particular for this. The waveform is positive only, and when it is applied to pitch, only a pitch bend up effect will result.

RAND1 S/H: This is a typical sample/hold waveform, on which the level changes at random in fixed intervals.

RAND2 S/H: Randomly changes the level and timing.

RAND3 S/H: Generates a pulse wave at a random timing. This works the opposite as a typical sample/hold, as the timing changes but the level does not.

RAND4–6 VECTOR: Different from step-based changes, these are smoothed versions of RAND1–3 S/H that create non-linear changes. Use these for gradual random changes.

Int

Sets the depth and direction of the pitch modulation produced by the LFO. This setting is applied before the “Joystick (+Y) Int” or “AMS” modulation is applied. When this is set to “12.00”, the pitch changes over a maximum of one octave.

A negative value inverts the LFO phase.

Freq/Rate, x

For “Hz/♩”, when Hz is selected, this is the Freq setting; and when ♩ is selected, this is the Rate setting.

Freq

Sets the frequency of the LFO. “99” is the maximum speed.

Rate, x

Sets the note length and multiple (x) for the tempo. These values determine the frequency of the LFO.

Offset

Sets the center value for the LFO waveform.

For example, if this is set to “0” as shown in the illustration below, vibrato is applied with the note-on pitch considered as center.

When this is set to “+99”, vibrato is applied by moving the pitch upwards from the note-on pitch, similar to applying vibrato on a guitar.

Note that on the Guitar waveform, vibrato is applied in the positive direction even when Offset is set to zero.

Offset settings and changes in pitch from vibrato



Delay

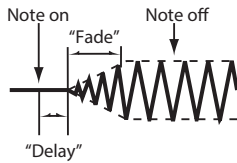
Specifies the time it takes from note-on to when the LFO effect is applied.

When “Key Sync” is “Off”, this is applied only to the LFO that started first.

Fade

Sets how long it takes for the amplitude to reach maximum from when the LFO starts taking effect. When “[Key Sync](#)” is “Off”, this is applied only to the LFO that started first.

How the LFO is applied based on FADE settings (when KEY SYNC is “On”)



Hz/♪

Selects either the LFO frequency or the note length relative to the tempo and the multiple (base note and times).

Start

Key On: The LFO starts at note on. Normally, this is set to “Key On”.

Key Off: The LFO starts at note off.

Both: The LFO starts taking effect at note on, and stops at note off.

Key Sync

On: The LFO starts each time you press a key, and an independent LFO operates for each key.

Off: The LFO that started when you first pressed a key continues to be applied to all succeeding keys that you press. At this time, the delay and fade effects are applied only to the LFO that started first.

MODULATION

This sets the modulation for the pitch-related settings of oscillators 1 and 2.

OSC 1/OSC 2

Selects the OSC for which to set the modulation.

OSC 1/OSC 2 PITCH

Controls the pitch of OSC 1 and 2.

PITCH EG Int

Sets the depth and direction of the pitch modulation produced by the pitch EG.

When this is set to “12.00,” the pitch will change up to a ± 1 octave range.

LFO Int

Sets the depth and direction of the pitch modulation produced by the LFO.

When this is set to “12.00,” pitch modulation is applied up to a ± 1 octave range.

Source, Int

The “Source” controls what modulates the pitch, and “Int” sets the depth of modulation.

When “Source” is set to Tempo and “Int” is set to +12, the pitch goes up one octave when the inputted tempo ($\text{♩}=120$) is doubled.

When “Source” is set to EG or LFO, you can control the pitch up to a maximum of ± 1 octave (the LFO can be used to adjust the offset another ± 1 octave). For example, when “Source” is set to Filter LFO, you can get a vibrato that’s synchronized with the wah-wah of the filter, and you can adjust the vibrato depth here.

When “Source” is set to a controller (JS+Y, etc.), you can set “Int” to a positive value to make the controller raise the pitch, and you can set “Int” to a negative value to make the controller lower the pitch. The maximum range of pitch change is ± 1 octave.

OSC 1/OSC 2 PITCH EG

This controls the depth of pitch modulation by the pitch EG set for OSC 1 and 2.

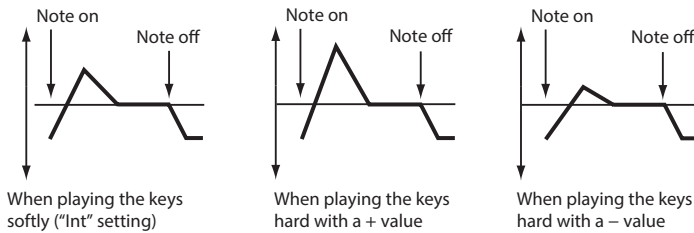
Velocity Int

A positive value makes the pitch change that was set in “Int” for the PITCH ENVELOPE GENERATOR even greater when you play harder (up to a maximum of ± 1 octave).

A negative value makes the pitch change that was set in “Int” for the PITCH ENVELOPE GENERATOR even smaller when you play harder (up to a maximum of ± 1 octave).

For either a positive or negative value, the pitch approaches the amount of pitch change set in “Int” for the PITCH ENVELOPE GENERATOR.

Pitch change (level)



Source, Int

The “Source” selects what controls the depth of pitch EG modulation, and “Int” sets the depth and direction of modulation.

When Source is set to a controller, you can set “Int” to a positive value to make the pitch modulation from the pitch EG be applied as-is, and you can set “Int” to a negative value to invert the phase. When “Int” is set to +12.00, you can apply pitch modulation from the pitch EG, from zero modulation to ± 1 octave.

When “Source” is set to SW1 or SW2, and the values of “Int” and the PITCH ENVELOPE GENERATOR’s “Int” add up to zero, you can make the modulation stop when SW1 or SW2 is switched on.

When “Source” is set to Tempo and “Int” is set to a positive value, the modulation gets stronger as the tempo increases. Each time the tempo doubles, pitch modulation is applied in a ± 1 octave range. Note that when the tempo is slower than 120 ($\text{♩}=120$), the modulation is applied with an inverted phase. If you don’t want modulation to be applied with an inverted phase, adjust the “Int” of the PITCH ENVELOPE GENERATOR as well. When “Int” is set to a negative value, these work in reverse.

When “Source” is set to Note Number and “Int” is set to a positive value, the modulation gets stronger when you play higher notes. ± 1 octave of pitch modulation is applied for every two octaves you move up or down the keyboard. Note that for note numbers lower than C4, modulation is applied with an inverted phase. If you don’t want modulation to be applied with an inverted phase, adjust the “Int” of the PITCH ENVELOPE GENERATOR as well. When “Int” is set to a negative value, these work in reverse.

When “Source” is set to a controller and “Int” is set to +12.00, you can apply pitch modulation from the pitch EG, from zero modulation to ± 1 octave.

OSC 1/2 PITCH EG Time

This controls the pitch EG time.

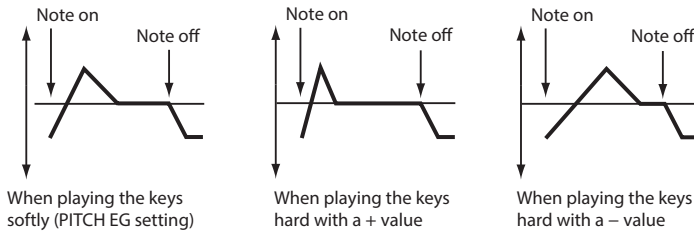
Velocity Int

For positive values, the harder you play, the shorter the pitch EG time is.

For negative values, the harder you play, the longer the pitch EG time is.

For either positive or negative values, the lighter you play the keys, the closer to the pitch EG setting time that the degree of change will be.

Changes in pitch (over time)



Source, Int

The “Source” selects what controls the pitch EG time, and “Int” sets the depth of modulation. For the EG times, the subsequent time is determined by the “Int” value when each point is reached. For example, the decay time is determined by the “Int” value of “Source” when the attack level has been reached.

You can increase the “Int” setting times of 16, 33, 49, 66, 82 and 99 by a maximum factor of 2, 4, 8, 16, 32 and 64 (or 1/2, 1/4, 1/8, 1/16, 1/32 and 1/64) respectively.

When “Source” is set to EG or LFO, the amplitude can be applied from 1/64th of the original setting time to 64 times the setting time. (The LFO can be adjusted for an even greater offset.)

When “Source” is set to a controller, and “Int” is set to a positive value, the time is shortened, and can be set to a maximum of 1/64 of the original setting time. When “Int” is set to a negative value, the time is lengthened, and can be set to a maximum of 64 times the original setting time.

When “Source” is set to SW1 or SW2, the setting time can be multiplied to a maximum of 1/64 or 64 times.

When “Source” is set to Tempo and “Int” is set to +16, the setting time is halved when the tempo is doubled. You can use this to make the EG speed follow the tempo.

OSC 1/OSC 2 PITCH LFO

This controls the depth of pitch modulation by the pitch LFO.

Joystick (+Y) Int

The larger the value, the deeper the modulation by the pitch LFO is when you tilt the joystick in the +Y direction (away from you).

After Touch Int

The larger the value, the deeper the modulation by the pitch LFO is when you press into the keyboard after playing a key.

Source, Int

The “Source” controls what modulates the pitch LFO, and “Int” sets the depth of modulation.

When “Source” is set to EG or LFO, the amplitude can be used to change the modulation depth up to the maximum. When the EG or LFO level passes through the negative area, the modulation is inverted.

When “Source” is set to a controller, you can set “Int” to a positive value to make the pitch modulation from the pitch LFO be applied as-is, and you can set “Int” to a negative value to invert the phase.

When “Source” is set to SW1 or SW2, and these are switched on, you can apply pitch modulation from zero modulation (modulation off) as necessary. When this value and the value of “Int” for the LFO adds up to zero, you can make the modulation stop when the switch is switched on.

When “Source” is set to Tempo and “Int” is set to a positive value, the modulation gets deeper as the tempo increases. Note that when the tempo is slower than 120 ($\text{♩}=120$), the modulation is applied with an inverted phase. If you don’t want modulation to be applied with an inverted phase, adjust the “Int” of the LFO as well. When “Int” is set to a negative value, these work in reverse. Each time the tempo doubles, pitch modulation is applied in a ± 1 octave range.

When “Source” is set to Note Number and “Int” is set to a positive value, the modulation gets stronger when you play higher notes. Note that for note numbers lower than C4, modulation is applied with an inverted phase. If you don’t want modulation to be applied with an inverted phase, adjust the “Int” of the LFO as well. When “Int” is set to a negative value, these work in reverse. ± 1 octave of pitch modulation is applied for every two octaves you move up or down the keyboard.

OSC 1 PITCH LFO Frequency, OSC 2 PITCH LFO Frequency

This controls the speed and degree of change for the pitch LFO.

Key Track Int

For positive values, the higher you play, the faster the pitch LFO frequency is.

With a value of +33, the LFO speed is doubled when you go up the keyboard one octave, and the LFO speed is halved when you go down the keyboard one octave. Similarly, with a value of +66, the LFO speed is four times faster (1/4); and with a value of +99, the LFO speed is eight times faster (1/8).

For negative values, the higher you play, the slower the pitch LFO is. The relationship between the “Int” value and the change is the opposite of when the value is set to a positive value.

Joystick (+Y) Int

The larger the value that you set, the faster the pitch LFO speed is when you tilt the joystick in the +Y direction (away from you).

A setting of “99” makes the LFO operate at 64 times the speed when you tilt the joystick in the +Y direction (away from you).

Source, Int

The “Source” selects what controls the pitch LFO frequency, and “Int” sets the depth of modulation.

You can make the pitch LFO time change as needed.

You can increase the “Int” setting times of 16, 33, 49, 66, 82 and 99 by a maximum factor of 2, 4, 8, 16, 32 and 64 (or 1/2, 1/4, 1/8, 1/16, 1/32 and 1/64) respectively.

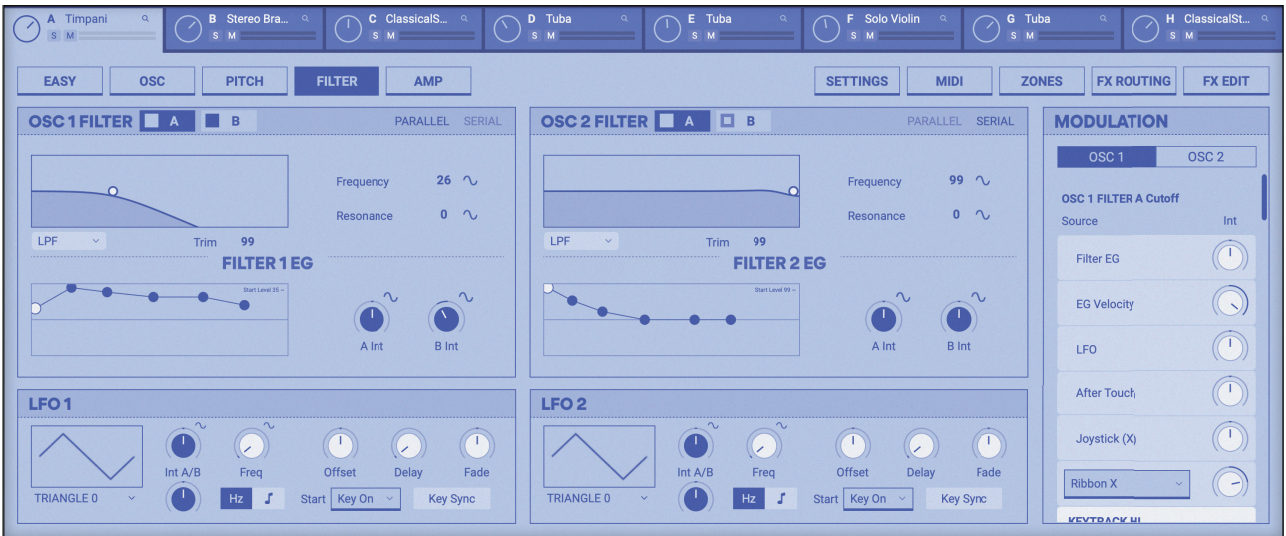
When Source is set to EG or LFO, the amplitude can be applied from 1/64th of the original setting time to 64 times the setting time. (The LFO can be adjusted for an even greater offset.)

When “Source” is set to a controller, and “Int” is set to a positive value, the time is shortened, and can be set to a maximum of 1/64 of the original setting time. When “Int” is set to a negative value, the time is lengthened, and can be set to a maximum of 64 times the original setting time.

When “Source” is set to SW1 or SW2, the setting time can be multiplied to a maximum of 1/64 or 64 times.

When “Source” is set to Tempo and “Int” is set to +16, the setting time is halved when the tempo is doubled. You can use this to make the EG speed follow the tempo.

FILTER page (COMBI, PROG)



OSC 1 FILTER/OSC 2 FILTER

A/B

This selects either filter A or B. Filters A and B can each be set to on or off. Please refer to [“On/off switch”](#)

PARALLEL/SERIAL

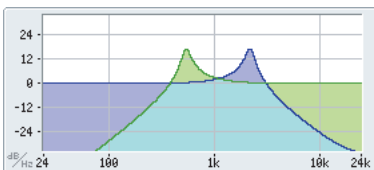
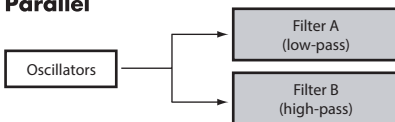
This selects either filter A or B for connection.

Set this to “PARALLEL” when you want to use the bandpass filter to create two peaks.

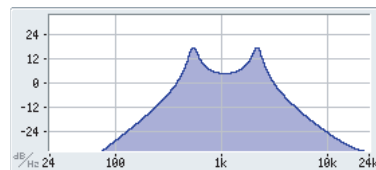
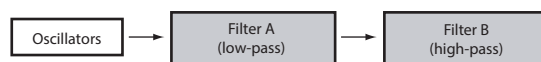
Set this to “SERIAL” when you want to use the band reject filter to create two troughs. When using this, the filter and cutoff slopes become steeper.

Parallel/serial connection

Parallel



Serial



Filter type

This selects the filter type.

The resulting sound will be different depending on the selected filter type.

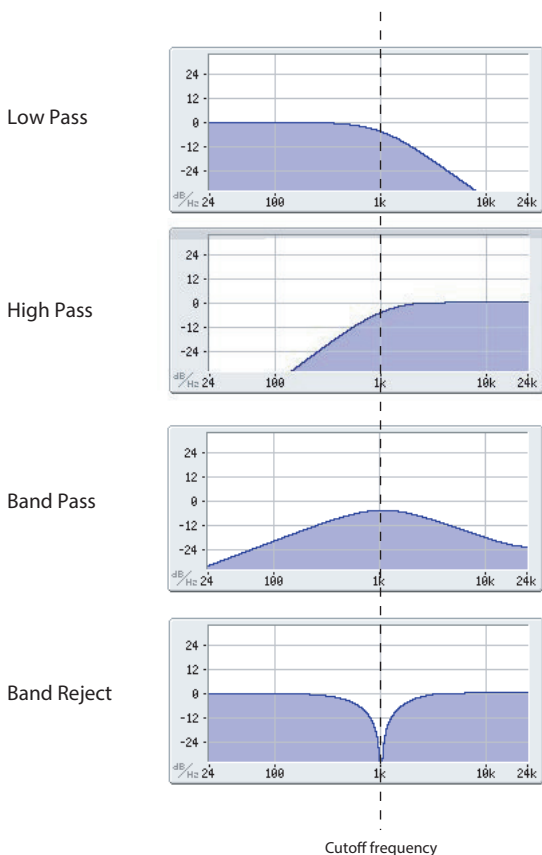
LPF (12 dB/oct): This is the most typical kind of filter, which cuts the frequencies that are above the cutoff frequency and makes bright sounds darker.

HPF (12 dB/oct): This filter cuts the frequencies that are below the cutoff frequency and makes the sound thinner.

BPF (6 dB/oct): This filter only allows the sound around the cutoff frequency to pass through, cutting all other high and low frequencies. Because of this, the sound can change dramatically depending on the cutoff setting and the multisample used by the oscillator.

With a low resonance, you can use a bandpass filter to simulate the sound of talking on the phone or of listening to an old phonograph. With a high resonance, you can get sounds with narrow bandwidth or nasal sounds.

BRF (6 dB/oct): This is also called a “notch filter” because of the dip in the midrange levels. Only the parts of the sound at and directly around the cutoff frequency are cut off. Try modulating the cutoff with an LFO to create phaser-like effects.



Trim

Adjusts the level of signal that is input to the filter. If the sound is distorting, such as when the resonance value is high, lower this value or lower the Output value.

FILTER 1 EG/FILTER 2 EG

Use the graphical editor to set the changes in the filter 1 or 2 EG over time.

Start Level

Sets how much the cutoff frequency will change when a note is played (note on).

Attack Level

Sets how much the cutoff frequency will change after the attack time ends.

Attack Time

Sets how long it will take from note on until the attack level is reached.

Break Level

Sets how much the cutoff frequency will change after the decay time ends.

Decay Time

Sets how long it will take from when the attack level is reached until the break point level.

Sustain Level

Sets how much the cutoff frequency will change after the slope time until the note is released (note off).

Slope Time

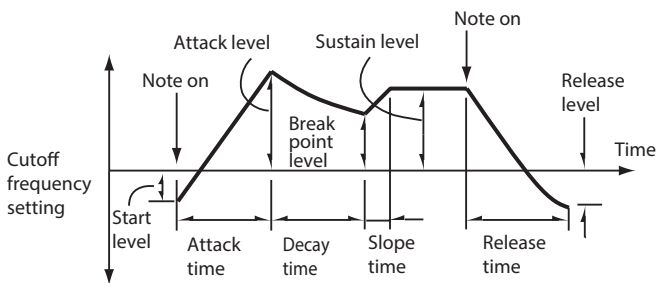
Sets how long it will take to reach the sustain level after the decay time is finished.

Release Level

Sets how much the cutoff frequency will change after the release time ends.

Release Time

Sets how long it will take from note off until the release level is reached.



A Int/B Int

Adjusts the depth at which the EG modulates the cutoff frequency for filter A or B.

LFO 1/LFO 2

This sets the LFO, which makes cyclical changes to the cutoff frequency (for a wah-wah effect).

Waveform

Selects the LFO waveform.

The numbers to the right of the LFO names that are shown for some LFO shapes represent the phase at which the waveform starts.

Int A/B

Adjusts the depth at which the LFO modulates the cutoff frequency for filter A or B.

The upper knob is for Int A, and the lower knob is for Int B.

Freq/Rate x

For “Hz/♩”, when Hz is selected, this is the Freq setting; and when ♩ is selected, this is the Rate setting.

Freq

Sets the frequency of the LFO. “99” is the maximum speed.

Rate, x

Sets the note length and multiple (x) for the tempo. These values determine the frequency of the LFO.

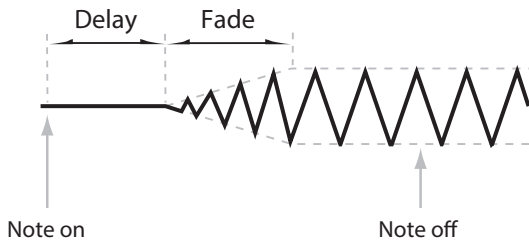
Offset

Sets the center value for the LFO waveform.

This works almost the same as “Offset” on PITCH page. Please refer to the explanation in question.

Fade

Sets how long it takes for the amplitude to reach maximum from when the LFO starts taking effect. When “[Key Sync](#)” is “Off”, this is applied only to the LFO that started first.



Hz/♪

Sets either the LFO frequency or the note length relative to the tempo and the multiple (base note and times).

Start

Specifies the position at which the LFO is applied. These settings are closely related to the Fade settings, so please refer to those settings as well.

Key On: The LFO starts at note on. Normally, this is set to “Key On”.

Key Off: The LFO starts at note off.

Both: The LFO starts taking effect at note on, and stops at note off.

Key Sync

On: The LFO starts each time you press a key, and an independent LFO operates for each note.

Off: The LFO that started when you first pressed a key continues to be applied to all succeeding notes that you play. At this time, the delay and fade effects are applied only to the LFO that started first.

MODULATION

This sets the modulation for the filter-related settings of oscillators 1 and 2.

OSC 1/OSC 2

Selects the OSC for which to set the modulation.

OSC 1 FILTER A Cutoff/OSC 2 FILTER A Cutoff

Controls the filter A cutoff frequency for OSC 1 and 2.

Filter EG Int

Adjusts the depth at which the filter EG modulates the cutoff frequency for filter A.

When set to a positive value, the EG levels set in the FILTER 1/2 EG Level and Time result in a brighter (sharper) sound in the positive range, and a darker (duller) sound in the negative range.

When set to a negative value, the EG levels set in the FILTER 1/2 EG Level and Time result in a darker (duller) sound in the positive range, and a brighter (sharper) sound in the negative range.

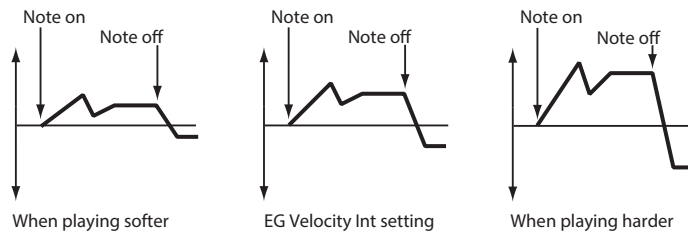
EG Velocity Int

Adjusts the depth at which the filter EG makes time-based changes to the cutoff frequency of filter A.

When set to a positive value, the harder you play, the greater the cutoff effect by the filter EG is.

When set to a negative value, the harder you play, the greater the cutoff change by the inverted filter EG is.

Changes in cutoff frequency (when set to a positive value)



LFO Int

Adjusts the depth at which the filter LFO modulates the cutoff frequency for filter A.

Negative settings invert the filter.

After Touch Int

The operation changes according to the filter you select in [“Filter type”](#).

For example, if you use a positive value with the LPE, the cutoff frequency rises when you press into the keys, creating a brighter sound.

If you use a negative value with the LPE, the cutoff frequency falls when you press into the keys, creating a darker sound.

Joystick (X) Int

If you use a positive value with the LPE, the cutoff frequency rises when you move the joystick to the right, creating a brighter sound.

If you use a negative value with the LPE, the cutoff frequency falls when you move the joystick to the right, creating a darker sound.

Source, Int

The “Source” controls what modulates the filter A cutoff frequency, and “Int” sets the depth of modulation.

This works almost the same as [“Source, Int”](#) for OSC 1/2 PITCH EG Time. Please refer to the explanation in question.

KEYTRACK HI/LO

This uses the position of the key you press to control the changes in cutoff frequency.

Set the note number (Breakpoint) where the keyboard tracking begins, as well as the depth of the effect (Ramp), and use “Ramp Int” for HI and LO to control the overall effect.

Breakpoint Note

This sets the note from which keyboard tracking is applied.

Use KEYTRACK HI to set the Ramp of keyboard tracking at the note range that’s above the note number.

Use KEYTRACK LO to set the Ramp of keyboard tracking at the note range that’s below the note number.

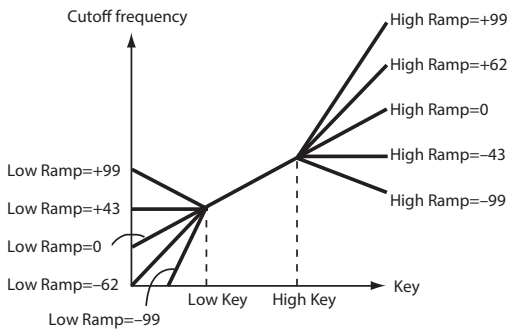
Within the range between KEYTRACK LO and HI, the cutoff frequency changes according to the pitch played on the keyboard.

Ramp Int

Sets the slope used for keyboard tracking.

When this is set to +62, the cutoff frequency slope is the same as the pitches played on the keyboard.

When this is set to -43, no cutoff frequency slope is applied. Use this setting when you do not want the cutoff frequency to change according to the keys you play.



OSC 1 FILTER A Resonance/OSC 2 FILTER A Resonance

Velocity Int

Uses velocity to control the amount of resonance for filter A.

When set to a positive value, the harder you play the keys, the closer you get to the effect set in “Resonance”; and the softer you play, the weaker the effect that’s set in “Resonance”.

When set to a negative value, the harder you play the keys, the weaker the effect that’s set in “Resonance”; and the softer you play, the closer you get to the effect set in “Resonance”.

OSC 1 FILTER B Cutoff/OSC 2 FILTER B Cutoff

This is the same as for [“OSC 1 FILTER A Cutoff/OSC 2 FILTER A Cutoff”](#).

OSC 1 FILTER B Resonance/OSC 2 FILTER B Resonance

This is the same as for [“OSC 1 FILTER A Resonance/OSC 2 FILTER A Resonance”](#).

OSC 1 FILTER LFO/OSC 2 FILTER LFO

Controls the filter LFO, which makes cyclical changes to the cutoff frequency of the filter.

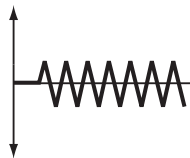
After Touch Int

The larger the value, the greater the filter LFO effect is when you press into the keyboard after playing a key.

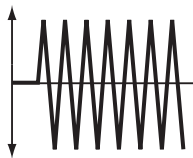
Joystick (-Y) Int

The larger the value, the greater the filter LFO effect is when you pull the joystick towards you.

Change in cutoff



When value is small



When value is large

Source, Int

This works almost the same as [“Source, Int”](#) for OSC 1 PITCH LFO Frequency and OSC 2 PITCH LFO Frequency. Please refer to the explanation in question.

OSC 1 FILTER EG Time/OSC 2 FILTER EG Time

Source, Int

The “Source” controls what modulates the filter EG time, and “Int” sets the depth of modulation.

This works almost the same as [“Source, Int”](#) for OSC 1/2 PITCH EG Time. Please refer to the explanation in question.

This can't be set for each time.

VELOCITY

This changes the filter EG times for “Attack Time”, “Decay Time”, “Slope Time” and “Release Time”.

For positive values, the harder you play, the shorter the EG time is.

For negative values, the harder you play, the longer the EG time is.

Attack Int

Adjusts the attack time.

Decay Int

Adjusts the decay time.

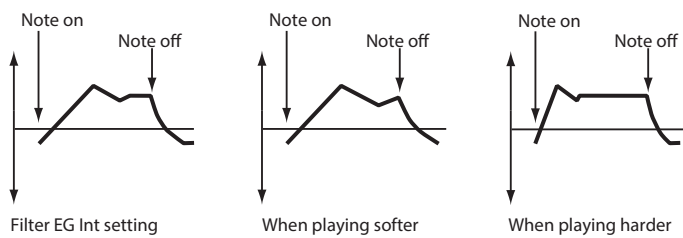
Slope Int

Adjusts the slope time.

Release Int

Adjusts the release time.

Changes in time (when all four values are positive)



KEYTRACK

This changes the filter EG times for “Attack Time”, “Decay Time”, “Slope Time” and “Release Time”.

For positive values, the higher the note you play past C4 on the keyboard, the shorter the EG time is.

For negative values, the higher the note you play past C4 on the keyboard, the longer the EG time is.

Attack Int

Adjusts the attack time.

Decay Int

Adjusts the decay time.

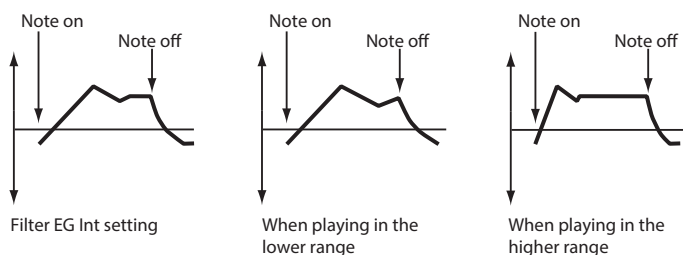
Slope Int

Adjusts the slope time.

Release Int

Adjusts the release time.

Changes in time (when all four values are positive)



OSC 1 FILTER EG Level/OSC 2 FILTER EG Level

Source, Int

The “Source” controls the filter EG level, and “Int” sets the depth of modulation.

This works almost the same as [“Source, Int”](#) for OSC 1/2 PITCH EG. Please refer to the explanation in question.

This can't be set for each level.

VELOCITY

This changes the filter EG times for “Start Level”, “Attack Level” and “Break Point Level”.

For positive values, the harder you play, the higher the EG level is.

For negative values, the harder you play, the lower the EG level is.

Start Int

Adjusts the start level.

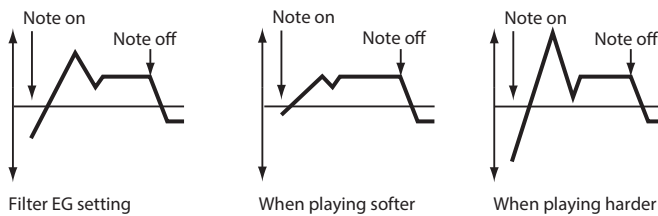
Attack Int

Adjusts the attack level.

Break Int

Adjusts the break point level.

Changes in Filter EG (when all four values are positive)



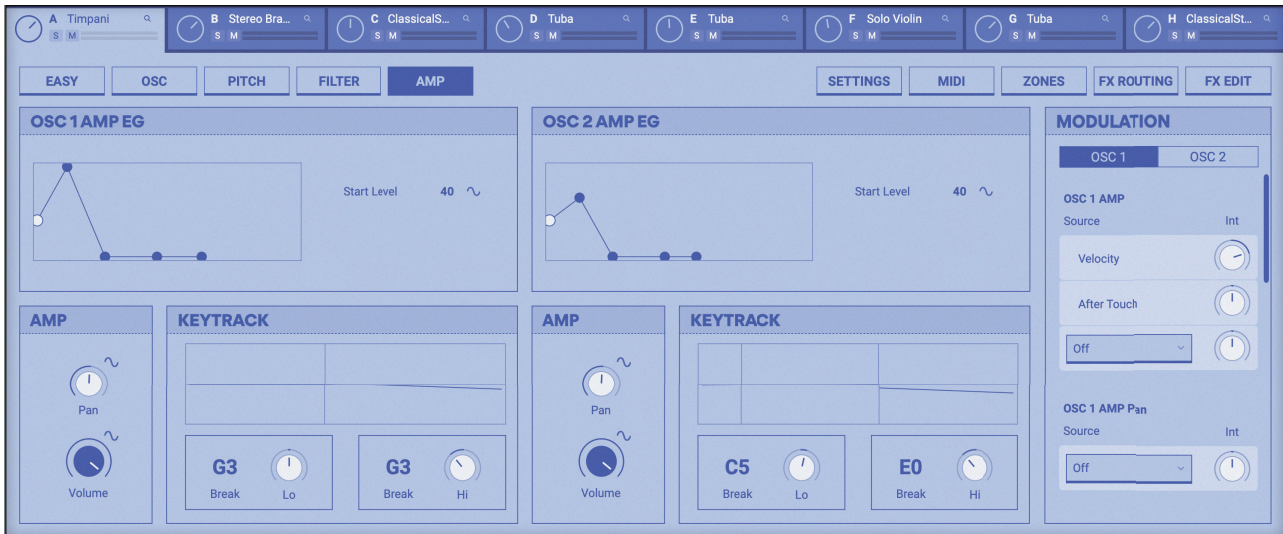
OSC 1 FILTER LFO Frequency/OSC 2 FILTER LFO Frequency

Source, Int

The “Source” controls the filter LFO speed, and “Int” sets the depth of modulation.

This works almost the same as [“Source, Int”](#) for OSC 1 PITCH LFO Frequency and OSC 2 PITCH LFO Frequency. Please refer to the explanation in question.

AMP page (COMBI, PROG)



OSC 1/OSC 2 AMP EG

This sets the time-based changes to the amp EG using levels and times.

Use this to configure the amp EG, which makes changes to the volume of oscillator 1 over time.

This is configured in the graphical editor.

Start Level

This is the note-on volume level.

If you want the sound to begin sharply, set this to a high value.

Attack Level

Sets the volume level after the attack time ends.

Attack Time

Sets how long it will take from note on until the attack level is reached.

When the start level is "0", this will be the time when the sound begins.

Break Level

Sets the volume level after the decay time ends.

Decay Time

Sets how long it will take from when the attack level is reached until the break point level.

Sustain Level

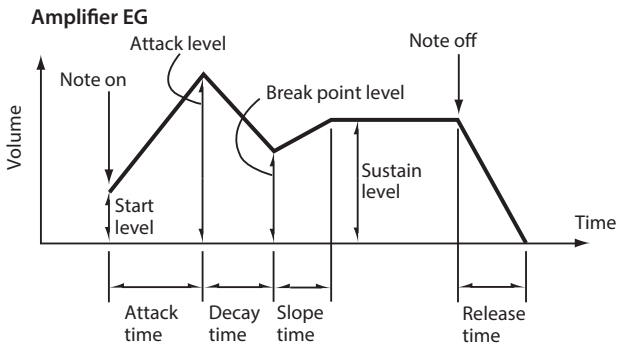
Sets the volume level from after the slope time ends until note off.

Slope Time

Sets how long it will take from when the break point level is reached until the sustain level.

Release Time

Sets how long it will take for the level to fall to zero from note off.



OSC 1/OSC 2 AMP

Pan

Sets the pan (sound position in the stereo field) when inputting to a bus.

L001 moves the sound all the way to the left side, C064 puts the sound directly in the center, and R127 moves the sound all the way to the right side. When this is "Off", no output is made to the bus.

Volume

Sets the basic volume of oscillator 1 or 2.

OSC 1/OSC 2 KEYTRACK

Specifies how the position of the key you press affects the volume.

With keyboard tracking, you can change the rate in a maximum of two places to create complex effects.

Break

Sets the change in volume when you play in the key range lower than the key specified by Lo.

Lo

When this is set to a positive value, pressing a key that's lower than the one specified here results in a softer volume.

When this is set to a negative value, pressing a key that's lower than the one specified here results in a louder volume.

Break

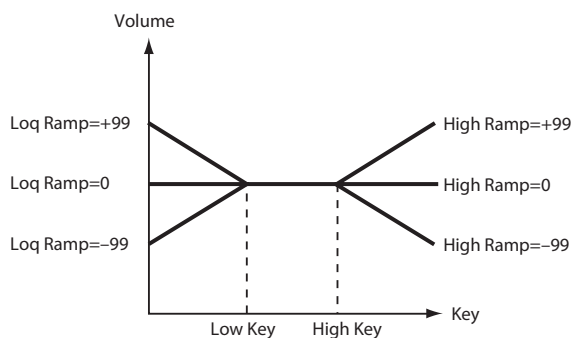
Sets the change in volume when you play in the key range higher than the key specified by Hi.

Hi

When this is set to a positive value, pressing a key that's higher than the one specified here results in a louder volume.

When this is set to a negative value, pressing a key that's lower than the one specified here results in a softer volume.

Changes in volume according to key position played and Ramp setting



MODULATION

This sets the modulation for the amp-related settings of oscillators 1 and 2.

OSC 1/OSC 2

Selects the OSC for which to set the modulation.

OSC 1/OSC 2 AMP

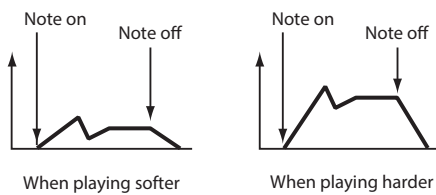
“Source” controls the volume of OSC 1 and 2.

Velocity Int

When this is set to a positive value, playing the keys harder makes the volume louder.

When this is set to a negative value, playing the keys harder makes the volume softer.

Changes in volume (for positive values)



After Touch Int

When this is set to a positive value, pressing into the keys makes the volume louder. Setting the value to “+99” makes the volume a maximum of eight times louder. However, if the volume is already at maximum, as specified by the EG settings and so on, the volume does not get any louder than this.

When this is set to a negative value, pressing into the keys makes the volume softer.

Source, Int

The “Source” selects what controls the amp, and “Int” sets the depth of modulation.

The volume is determined by multiplying the volume change from the amp to the “Int” setting. If each AMP EG level is small, the modulation via Source value will be small as well.

When “Source” is set to EG or LFO, the volume can be changed from zero all the way up to eight times the value.

The amplitude can be used to change the modulation depth up to the maximum. (The LFO can be adjusted for an even greater offset.)

When you want to control the volume with another EG (pitch EG or filter EG), set each amp EG level to maximum (99).

When “Source” is set to a controller, and “Int” is set to a positive value, the volume can be raised to a maximum of eight times the value. When “Int” is set to a negative value, the volume can be lowered to zero.

When “Source” is set to SW1 or SW2, the volume can be raised to a maximum of eight times the value.

When “Source” is set to Tempo and “Int” is set to +66, the volume doubles when the tempo doubles. However, if the volume is already at maximum, as specified by the EG settings and so on, the volume does not get any louder than this.

OSC 1/OSC 2 AMP Pan

Source, Int

The “Source” selects what changes the amp panning based on the pan settings, and “Int” sets the depth of modulation.

When “Source” is set to a controller, and “Int” is set to a positive value, the sound plays more to the right than the setting.

When “Int” is set to a negative value, the sound plays more to the left than the setting.

When “Source” is set to SW1 or SW2, and “Int” is set to a positive value, you can make the sounds that normally play on the left side play in the center or to the right. Conversely, when “Int” is set to a negative value, the sound can be played to the left. In either case, positive values move the sound to the right, and negative values move the sound to the left. When “Int” is 50, the amount of movement is 90°, and when “Int” is 99, the amount of movement is 180°.

AMP page (COMBI, PROG)

When “Source” is set to Tempo and “Int” is set to a positive value, the panning moves to the right as the tempo increases. Note that when the tempo is slower than 120 ($\downarrow=120$), the sound is panned to the left. When “Int” is set to a negative value, the panning works in reverse. For example, when the value is “+99” and the sound is panned to the left, the sound moves to the right when the tempo is doubled ($\downarrow=240$).

When “Source” is set to Note Number and “Int” is set to a positive value, the sound is panned to the right with higher note numbers (playing in a higher note range). For note numbers lower than C4, the sound is panned to the left. When “Int” is set to a negative value, this works in reverse. For example, when the value is “+99” and the sound is panned to the left, the sound moves to the right when you play a note two octaves higher (C6).

OSC 1/OSC 2 AMP EG Time

Source, Int

The “Source” selects what controls the amp EG times, and “Int” sets the depth of modulation.

This works almost the same as “[Source, Int](#)” for OSC 1/ 2 PITCH EG Time. Please refer to the explanation in question. This can't be set for each time.

VELOCITY

For positive values, the harder you play, the shorter the EG time is.

For negative values, the harder you play, the longer the EG time is.

Attack Int

Adjusts the attack time.

Decay Int

Adjusts the decay time.

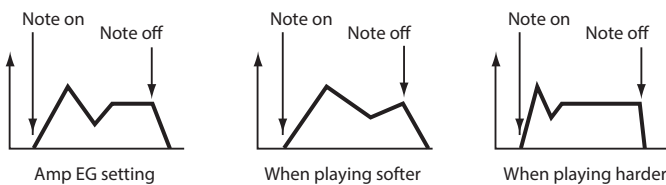
Slope Int

Adjusts the slope time.

Release Int

Adjusts the release time.

Changes in time (when all four are positive values)



KEYTRACK

For positive values, the higher the note you play past C4 on the keyboard, the shorter the EG time is.

For negative values, the higher the note you play past C4 on the keyboard, the longer the EG time is.

Attack Int

Adjusts the attack time.

Decay Int

Adjusts the decay time.

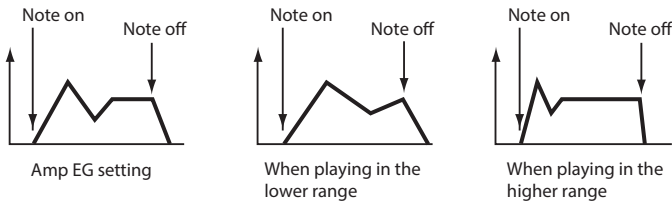
Slope Int

Adjusts the slope time.

Release Int

Adjusts the release time.

Changes in time (when all four are positive values)



OSC 1/OSC 2 AMP EG Level

This changes the amp EG level.

VELOCITY

This changes the amp EG levels for “Start Level”, “Attack Level” and “Break Point Level”.

For positive values, the harder you play, the higher the EG level is.

For negative values, the harder you play, the lower the EG level is.

A setting of 0 produces the volume set in [“OSC 1/OSC 2 AMP EG”](#).

Start Int

Adjusts the start level.

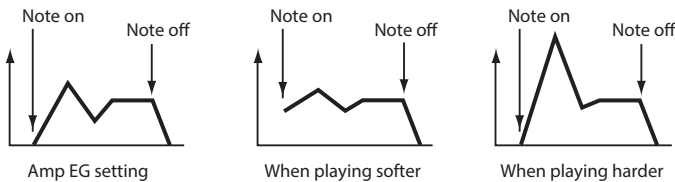
Attack Int

Adjusts the attack level.

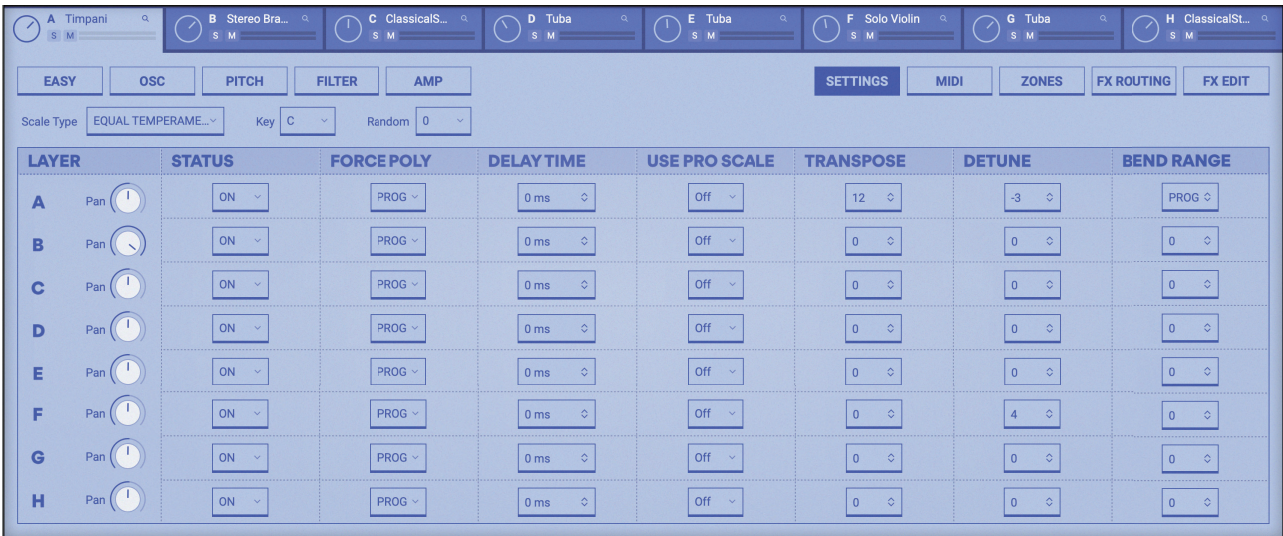
Break Int

Adjusts the break point level.

Changes in volume (when all three are positive values)



SETTINGS page (COMBI)



Scale Type

Selects the scale for the timbre. Refer to [“Type”](#).

Key

Selects the primary overtones for the scale you selected.

Random

Higher values make the pitches sound more irregular when played. Normally, this is set to 0.

Adjust this when you want to simulate an instrument with unstable pitch, such as a cassette tape organ or an acoustic instrument.

LAYER (A...H)

Pan

This sets the pan (position in the stereo field) for layer A–H.

L001...C064...R127: A setting of L001 pans the sound all the way to the left, and a setting of R127 pans the sound all the way to the right.

This setting is ignored when an insert effect is used. In this case, use the “PAN” setting on the IFX page to adjust the pan after the sound passes through the insert effect.

PROG: Follows the program’s pan setting.

STATUS (A...H)

This sets the status of MIDI for each layer and for the internal tone generator.

This instrument does not support MIDI OUT, so the INT and EXT statuses that were on the original TRINITY do not exist.

On: When this instrument is operated, the timbre will sound, and the instrument makes sounds in response to the MIDI messages received from external MIDI devices. MIDI data is not transmitted.

Off: The timbre will not sound, and MIDI data is not transmitted.

FORCE POLY (A...H)

This sets the key assignment for each layer.

PROG: Follows the program's key assignment setting.

POLY: Plays polyphonically, regardless of the program's setting.

MONO: Plays monophonically, regardless of the program's setting.

LEGATO: Plays monophonically in single trigger (legato) mode.

In MONO and LEGATO mode, the priority for triggering sounds follows the PRIORITY setting for the program.

DELAY TIME (A...H)

Sets the delay time that occurs from note on (when the key is pressed) to when the note actually sounds.

KEY OFF: The note sounds when the key is released (note off). At that time, the note does not fade out if the sustain level of the amp EG for the program being used is set to a value other than zero. This is used for harpsichords and similar sounds.

Normally, this is set to 0.

USE PRO SCALE (A...H)

This sets the scale used by each layer.

On: Uses the scale set by the program.

Off: Uses the scale set by the combination.

TRANSPOSE (A...H)

Adjusts the pitch of the layer in semitones. A value of "12" is equal to one octave.

DETUNE (A...H)

Adjusts the pitch from the reference pitch in cents.

0: The reference pitch is used.

Higher values make the pitch deviate from the reference pitch.

BEND RANGE (A...H)

This sets the range over which the pitch is changed when you operate the pitch bend lever, in semitones.

PROG: The range set in the program is used.

-24-24: The pitch bend operates with this setting, and the program's setting is not used.

MIDI page (COMBI)

LAYER	MIDI	CONTROL CHANGE	AFTER TOUCH	SUSTAIN PEDAL
A	Global	On	On	On
B	Global	On	On	On
C	Global	On	On	On
D	Global	On	On	On
E	Global	On	On	On
F	Global	On	On	On
G	Global	On	On	On
H	Global	On	On	On

MIDI (A...H)

Sets the MIDI receive channel for each layer.

Global: The global channel set is Open Global Settings is used.

CONTROL CHANGE (A...H)

Sets whether MIDI control change messages are received.

On: Messages are received.

Off: Messages are not received.

AFTER TOUCH (A...H)

Sets whether MIDI aftertouch messages are received.

On: Messages are received.

Off: Messages are not received.

SUSTAIN PEDAL (A...H)

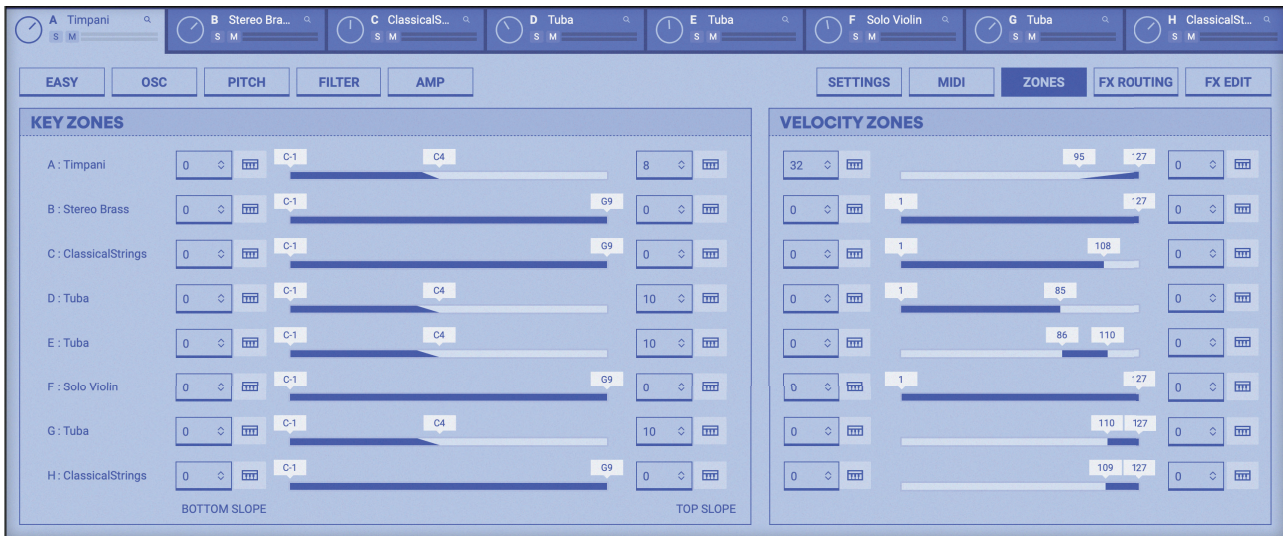
Sets whether MIDI CC#64 sustain pedal messages are received.

On: Messages are received.

Off: Messages are not received.

ZONES page (COMBI)

This page is for configuring the ranges over which the timbres play.



KEY ZONES (A...H)

The bottom key and top key set the note range within which the layer plays, and the bottom slope and top slope set the note range within which the volume changes.

When you set layers with different sounds to different and non-overlapping note ranges, you can make a “key split” that plays different sounds depending on which key you press.

On the other hand, when you set the sounds to overlap, you can make “layers”, in which multiple sounds play with each key you press.

If you set the slopes to overlap, you can create a “positional crossfade”, in which different sounds play with a single key press, and the degree of overlap is determined by which keys you press.

BOTTOM KEY

Sets the bottom key of the note range in which the layer plays.

When the  icon is on, you can input notes using the lower part of the keyboard.

BOTTOM SLOPE

Sets the key range from the bottom key, over which the sound plays at its original volume (12 equals one octave).

0: The sound plays at its original volume at the bottom key position.

12: The volume of the sound increases gradually as you play higher notes from the bottom key, so that the note that’s one octave higher plays at the original volume.

60: The volume of the sound increases gradually from the bottom key, so that the note that’s five octaves higher plays at the original volume.

TOP SLOPE

Sets the key range from the top key, over which the sound plays at its original volume (12 equals one octave).


0: The sound plays at its original volume at the top key position.

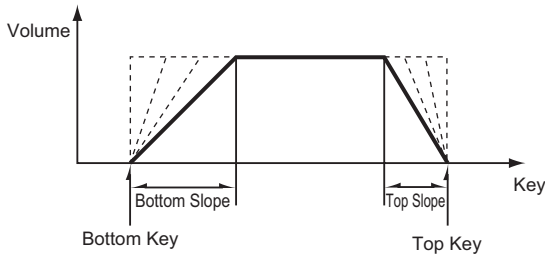
12: The volume of the sound increases gradually as you play lower notes from the top key, so that the note that’s one octave lower plays at the original volume.

60: The volume of the sound increases gradually as you play lower notes from the top key, so that the note that’s five octaves lower plays at the original volume.

TOP KEY

Sets the top key of the note range in which the layer plays.

When the  icon is on, you can input notes using the lower part of the keyboard.



VELOCITY ZONES (A...H)

Use the bottom velocity and top velocity to set the velocity range within which the layer plays, and use the bottom slope and top slope to set the note range within which the volume changes.

When you set layers with different sounds to different and non-overlapping velocity zones, you can make a “velocity switch” that plays different sounds depending on how hard you play the keyboard.

When you set the note range in which the sounds are played to overlap, you can make “layers”, in which multiple sounds play with each key you press.

If you set the slopes to overlap, you can create a “positional crossfade”, in which different sounds play with a single key press, and the degree of overlap is determined how hard you play the keys.

BOTTOM VELOCITY

Sets the minimum velocity at which the layer will sound.

When the  icon is turned on, you can input velocity on the keyboard below.

BOTTOM SLOPE

Sets the value at which the bottom velocity reaches the original volume.

0: The sound plays at its original volume at the bottom velocity.

120: The sound plays softer the closer you get to the bottom velocity.

TOP SLOPE

Sets the value at which the top velocity reaches the original volume.

0: The sound plays at its original volume at the top velocity.

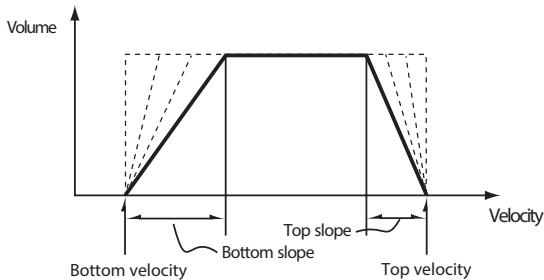
120: The sound plays softer the closer you get to the top velocity.

TOP VELOCITY

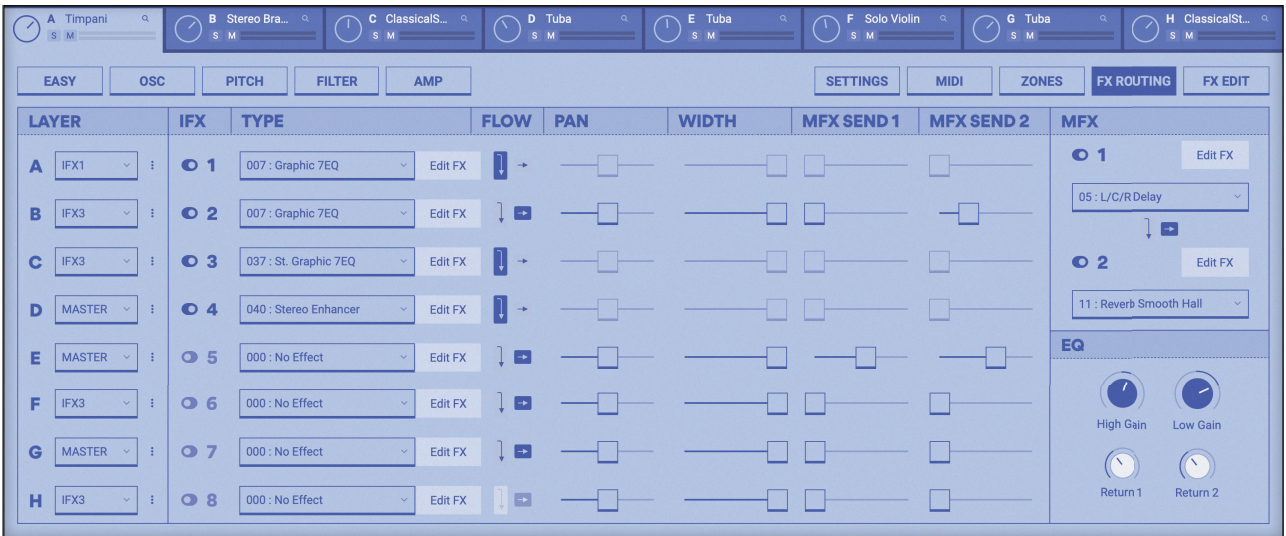
Sets the maximum velocity at which the layer will sound.

When the  icon is turned on, you can input velocity on the keyboard below.

Settings for change in volume according to velocity of key played

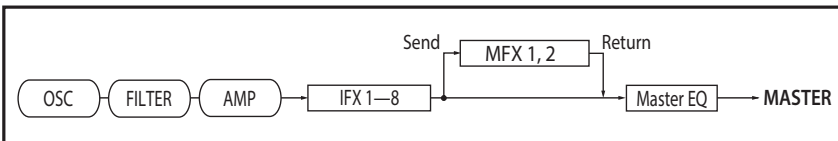


FX ROUTING page (COMBI, PROG)

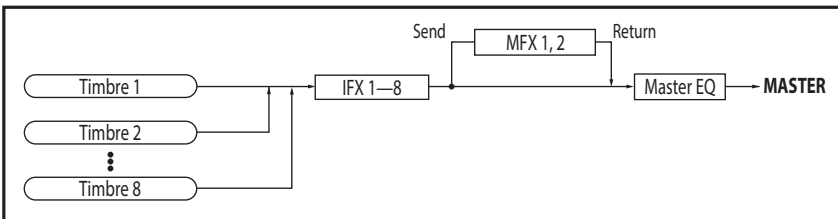


This page is for configuring the insert effects, master effect, the output destination for the master effect and so forth. As with the filter and amp, you can use the insert effect to create the sound for the oscillator (OSC) output. You can also use the master effect to apply spatial processing with reverb and so on, and use the shelving type master EQ that's placed just before the last stage in the signal chain to adjust the sound quality of the final output.

Program



Combination



LAYER A (PROG)



This sets the oscillator output bus for layer A.

You can select MASTER, IFX1–8 or 1–3.

MASTER: When insert effects are not used, set this to MASTER. The bus is directly connected to the master EQ.

Use DrumKit Settings

This is enabled when you select “DRUMS” on the OSC page.

On: Enables the bus settings for each key in the drum kit you selected. Enable this when you want to individually apply the insert effects for each instrument.

Off: Follows the FX BUS and MFX 1/2 Send settings. All drum instruments are sent to the bus you set.

OSC 1

Send 1, Send 2

Sets the send level to master effect 1 and 2 from oscillator 1. This is enabled when FX BUS is set to “MASTER” or “Off”.

The send level to master effects 1 and 2 when FX BUS is set to IFX1–8 is set using MFX SEND 1 and MFX SEND 2 in FX ROUTING.

OSC 2

Send 1, Send 2

Sets the send level to master effect 1 and 2 from oscillator 2.

LAYER (A...H) (COMBI)



Menu

This sets the oscillator output bus for layers A–H.

You can select either DRUMKIT, MASTER, IFX1–8 or OFF.

For DRUMKIT, MASTER and OFF, you can set the send level and so forth using the menu at right.

DRUMKIT

For DRUMKIT, the program you set can be selected if the DRUMS program ([“DRUMS”](#) on the OSC page) is enabled. The FX BUS for each key set in the drum kit will be enabled.

Menu



DRUM KIT INSERT FX

IFX1...8

Sets which effect that the drum samples assigned to the keys are output to.

MASTER: When insert effects are not used, set this to MASTER. The bus is directly connected to the master EQ.

OSC 1&2

TIMBRE Send 1, TIMBRE Send 2

Sets the send level to the timbre’s master effect.

OSC 1 Send 1, OSC 1 Send 2

Sets the send level to the Osc 1 master effect.

OSC 2 Send 1, OSC 2 Send 2

Sets the send level to the Osc 2 master effect.

MASTER, OFF

Menu



OSC 1&2

TIMBRE Send 1, TIMBRE Send 2

Sets the send level to the timbre's master effect.

OSC 1 Send 1, OSC 1 Send 2

Sets the send level to the Osc 1 master effect.

OSC 2 Send 1, OSC 2 Send 2

Sets the send level to the Osc 2 master effect.

IFX1...8

Selects the effect to which output is made.

IFX (1...8)

Turns the effects on and off.

Off: The effect is bypassed.

TYPE


Selects the insert effect. See the "Effect Guide" in the original documentation.

Edit FX

Switches to the FX EDIT page.

FLOW

This configures the insert effect chain.

: The connection is made to the next insert effect in series. The PAN, WIDTH, MFX SEND 1 and MFX SEND 2 settings of the last insert effect are used after the signal passes through the insert effect.

: The signal is input to PAN after passing through the insert effect.

PAN

Adjusts the pan after the signal passes through the insert effect.

WIDTH

Adjusts the spaciousness of the left-to-right sound after the signal passes through the insert effect.

Increasing the setting's value gives more left-to-right spaciousness to the sound.

MFX SEND 1, MFX SEND 2

Sets the send level of signal to the master effect.

MFX

1, 2

Turns the master effect on/off.

Edit FX

Switches to the FX EDIT page.


Type

Selects the master effect. See the “Effect Guide” in the original documentation.

Flow

Configures the master effect chain.

 : The connection is made in series to master effect 2.

 : The signal is input to EQ after passing the through master effect. When master effect 2 is on, the signals for both master effects 1 and 2 are input to the EQ.

EQ

This low/high type shelving EQ comes just before the final output stage, and is used to equalize (change the tonal character) the overall sound.

High Gain, Low Gain

Sets the High and Low gain.

Return 1, Return 2

Sets the return amount for the master effect.

FX EDIT page (COMBI, PROG)



IFX (1...8)

Turns the insert effects on/off.

TYPE

Selects the insert effect.

view

The insert effect settings are shown to the right.

MFX (1, 2)

Turns the master effect on/off.

TYPE

Selects the master effect.

view

The master effect settings are shown to the right.

FX settings

The effect name is shown here, and you can configure the parameters.

See the “Effect Guide” in the original documentation for details on each of the effect parameters.

Control Channel

This is shown when you are configuring an insert effect.

This specifies the control channel.

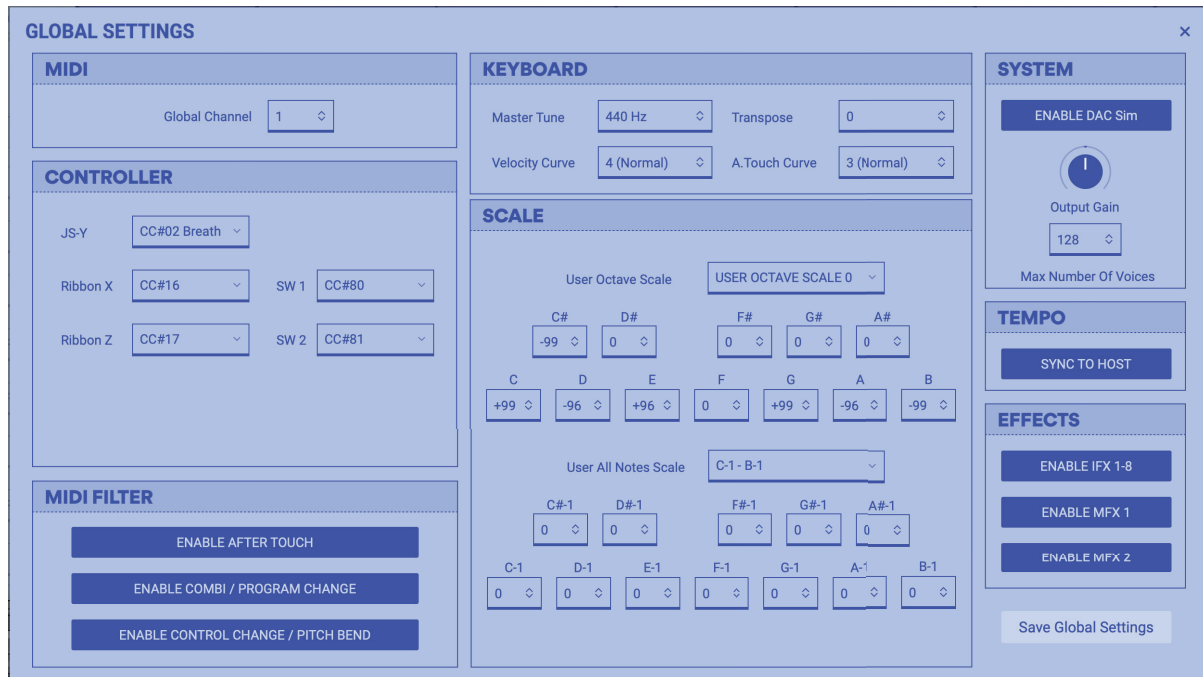
1 Ch...16 Ch: Set this when you want to control each insert effect with a different channel. If the MIDI channel settings for the routed timbres are different, here you can specify which channel is used for control.

Global: Controls using the global MIDI channel. Normally, this is set to “Global”.

All: This lets you control using all channel numbers for the timbres routed to the insert effect.

Global Settings

This dialog box opens when you select **Open Global Settings** in the main menu.



MIDI

Global Channel

Sets the global MIDI channel.

The global MIDI channel is used when transmitting and receiving performance data in PROG mode; when switching combinations using MIDI in combination mode; and when controlling timbres or effects set for the Gch (global channel) in each mode.

Receiving MIDI data

In PROG mode, MIDI data is received from the global MIDI channel.

In COMBI mode, the MIDI data that matches the MIDI channel set for each layer is received. Also, combinations are changed using the program change messages received through the global MIDI channel.

The global MIDI channel is used when turning on/off IFX1–8, MFX1 and MFX2 via MIDI. The pan, send 1/2, MFX1/2 and master EQ after the signal passes through the IFX are controlled using the global MIDI channel in PROG mode. In COMBI mode, these are controlled by the “CONTROL CH” (control channels) to which the IFX1–IFX8 are assigned. When CONTROL CH is set to “Global Ch,” the global MIDI channel is used for controlling these signals.

CONTROLLER

Sets the MIDI CC number used by the combination or program to control the controllers.

MIDI FILTER

ENABLE AFTERTOUCH

Sets whether aftertouch is received.

Off: Messages are received.

On: Messages are not received.

ENABLE COMBI/PROGRAM CHANGE

Sets whether combination and program changes are received.

Off: Messages are received.

On: Messages are not received.

ENABLE CONTROL CHANGE/PITCH BEND

Sets whether MIDI control change messages are received.

Off: Messages are received.

On: Messages are not received.

KEYBOARD

Master Tune

Sets the overall tuning in cents, within a range of ± 50 cents (one cent is 1/100 of a semitone).

When the value is "0" (the factory default setting), A4 = 440 Hz.

▲ The frequency used for the A4 value assumes that the equal temperament scale is being used. If you are using a different scale, the actual frequency of A4 may vary.

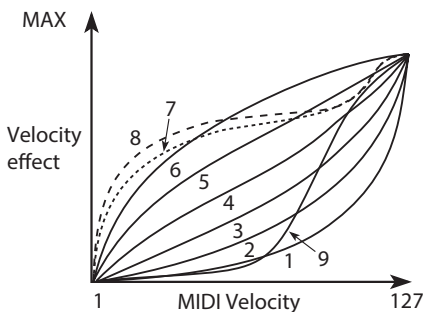
Transpose

Adjusts the pitch in semitones over a range of ± 2 octaves.

Velocity Curve

This controls how the volume and sound react according to changes in the dynamics (velocity) you use when playing the keyboard. You can select the curve that's optimum for the controllers you're using, the strength with which you play the keyboard, and your performance style.

Velocity curves

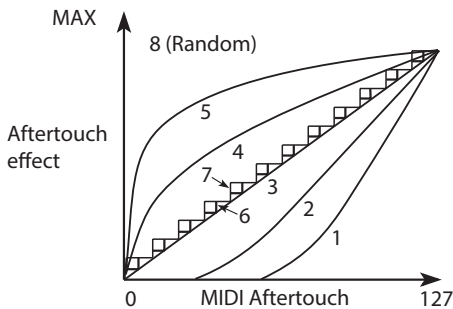


4 (Normal): This is the typical curve.

A. Touch Curve

This controls how the sound reacts to changes in the pressure you use when pressing into the keyboard after you play a key (aftertouch). You can select the curve that's optimum for the controllers you're using, the strength with which you play the keyboard, and your performance style.

Aftertouch curve



3 (Normal): This is the typical curve.

SCALE

Sets one of 16 User Octave scales and one User All Notes scale.

The user scale you set here can be selected for a program or for a combination.

User Octave Scale

Select the user Octave Scale by the combo box.

TYPE

Select the User Octave Scale to edit.

TUNE

Sets the scale over one octave. When one of the pitches is changed from C to B (in units of cents) within the octave, that tuning will be reflected throughout the entire tonal range. Equal temperament tuning is used as a standard.

-99: Lowers the pitch approximately one semitone.

+99: Raises the pitch approximately one semitone.

User All Notes Scale

Move the keyboard position indicated by the combo box.

TUNE

This lets you independently set the pitch for each of the 128 notes. Tune the pitch of the 128 keys (from C-1 to G9) in cents. Equal temperament tuning is used as a standard.

-99: Lowers the pitch approximately one semitone.

+99: Raises the pitch approximately one semitone.

SYSTEM

ENABLE DAC Sim

This lets you simulate the DAC component (DAC converter) to get closer to the sound of the TRINITY hardware, recreating the unique sonic texture of the hardware.

Off: DAC is not used.

On: DAC is used.

Output Gain

Sets the final output level.

Max Number Of Voices

Sets the maximum polyphony.

TEMPO

SYNC TO HOST

Enable this when you want to sync the tempo of the KORG Collection TRINITY with your DAW.

When this is “Off”, each combination and program will sound using their own tempo values.

EFFECTS

ENABLE IFX 1–8

ENABLE MFX 1

ENABLE MFX 2

Sets whether to operate each effect using a combination or a program.

When this is “Off”, the effect will be bypassed, even if the effect is used by the combination or program.

Save Global Settings

This saves the settings of the Global Settings page. This initializes the global data that’s used when launching the KORG Collection TRINITY.

The saved settings will take effect the next time the software is launched.

Troubleshooting

If you believe that the software is malfunctioning, first check the following items.

No sound

- The main level or other volume-related parameters might have been set to zero.
 - Is the sound configured for output from your computer?
 - If you're using Windows, open the Control Panel and check the audio device properties.
 - If you're using macOS, check the System Settings - Sound settings, and the audio device section in the Audio MIDI Setup app found in Applications - Utilities.
 - If you're using your computer's sound card, is the sound card set up correctly?
 - If your computer is connected to an audio device, is the audio device set up so that sound can be output from it?
-

Clicks, pops or noise in the sound, or high CPU usage

If your computer is under a high CPU load, you may hear clicks, pops or noise in the sound.

If you are having this type of problem, try the following.

- Close any other applications that may be running.
 - Reduce the maximum polyphony setting of the synthesizer you're using.
-

Delay between playing and hearing the sound

The latency is determined by the number of samples times the buffer size. If you are using this software as a plug-in, try adjusting the buffer size on your host application (DAW, etc.).

Can't control the software synth from a MIDI device

- Are your computer and MIDI device connected correctly?
- Is the connected MIDI device recognized by your computer?
- If you're using Windows, open the Control Panel and check the sound and audio device or hardware properties.
- If you're using macOS, open MIDI Studio in the Audio MIDI Settings app that's found in Applications - Utilities, and check whether your MIDI device is properly recognized.

Specifications

- Maximum polyphony: 256 notes (depending on the computer's CPU)
- Can operate standalone or as a VST3/AU/AAX Native plug-in instrument
- Real-time MIDI control, automation supported

Operating requirements

MacOS

- OS: macOS 11 (Big Sur) or later (with the latest updates)
- CPU: Apple M1 or better, or Intel Core i5 or better (at least Core i7 recommended)
- Memory: 8 GB RAM or more (at least 16 GB RAM recommended)
- Storage: At least 2 GB of free space (SSD recommended)
- Other: Internet connection
- Plug-in: AU, VST3, AAX (only 64-bit plug-in is supported)

Windows

- OS: Windows 11 or later, 64-bit (with the latest updates); 32-bit OS not supported
- CPU: Intel Core i5 or better (at least Core i7 recommended)
- Memory: 8 GB RAM or more (at least 16 GB RAM recommended)
- Storage: At least 2 GB of free space (SSD recommended)
- Other: Internet connection
- Plug-in: VST3, AAX (only 64-bit plug-in is supported)

Support and service

Before you contact us

- Before you contact us, check whether this manual or the KORG app Help Center (<https://support.korguser.net>) has an answer for your question.
- Please be aware that we cannot answer questions about products that are not made by Korg, such as basic operation of your hardware device, or general questions about creating songs or sounds.

Information to provide when contacting us

In order for us to help you, we'll need the following information, since product support and service cannot be provided without it:

- Your name
- The name and version of the product (the version can be checked by clicking on the icon with three dots and selecting the About command in the menu)
- The name of the device (computer) you are using, the OS name/number and version
- Your question (provide as much detail as possible)

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* Windows 11 is a trademark of Microsoft Corporation in the United States and other countries.

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KORG INC.

4015-2 Yanokuchi, Inagi-City, Tokyo 206-0812 JAPAN
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