Roland

GROOVEBOX

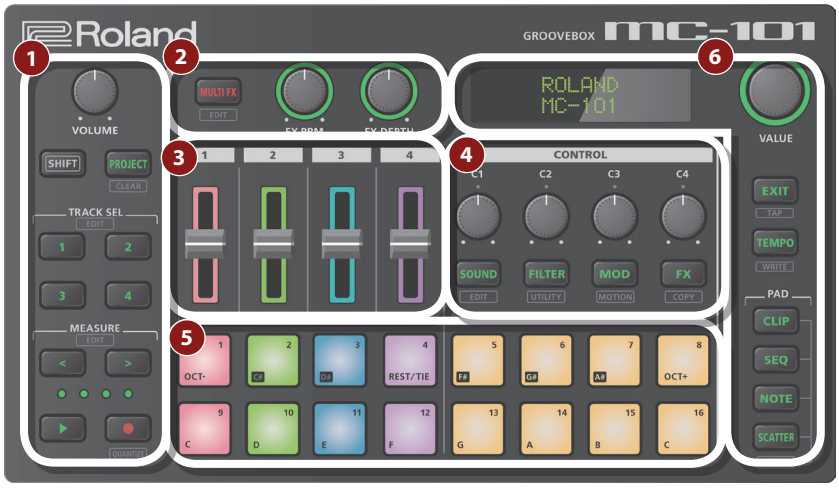
MC-101

Reference Manual

Contents

Panel Descriptions

Top Panel



1 Common Section 1

[VOLUME] knob

Adjusts the volume of the OUT jacks and PHONES jack.

[SHIFT] button

When you hold down the [SHIFT] button and press a button that's labeled with a function name (such as EDIT), that function is executed.

[PROJECT] button

Accesses the project menu screen.

Here you can load a project and make settings for it.

When used together with the [SHIFT] button, this functions as the [CLEAR] button.

By using the [CLEAR] button together with other buttons, you can clear the recorded contents of the step sequencer or the contents of a phrase.

TRACK SEL [1]–[4] button

Select tracks.

If you hold down the [SHIFT] button and press the [SEL] button, the track settings menu appears.

& For details, refer to **"Making Track Settings"** (p. 16).

MEASURE [<] [>] buttons

Move to the measure that you want to edit.

If you hold down the [SHIFT] button and press a MEASURE [<] [>] button, the measure length edit screen appears.

& For details, refer to**"Changing the Measure Settings"** (p. 21).

Measure display indicators

The four indicators show the measure that you're editing.

[►] (play/stop) button

Starts or stops playback.

[●] (record) button

Turns on/off recording of your performance using the pads.

If you hold down the [SHIFT] button and press the [●] (record) button, QUANTIZE setting screen appears.

& For details, refer to**"Recording"** (p. 25).

2 Total Effect Section

[MULTI FX] button

Turns on/off the total effect's multi-effect.

If you hold down the [SHIFT] button and press the [MULTI FX] button, the MULTI FX edit screen appears.

➡ For details, refer to **"MFX Parameters"** (p. 52).

[FX PRM] [FX DEPTH] knob

Adjust the effect depth.

3 Mixer Section

Level faders

Adjusts the track volume.

4 Control Section

[C1]–[C4] knobs

Necessary functions are assigned to these knobs depending on the operation.

[SOUND] button

Assigns the [C1]–[C4] knobs to control the SOUND parameter of track 1–4.

If you hold down the [SHIFT] button and press the [SOUND] button, the sound edit screen appears.

➡ For details, refer to **"Editing the TONE Track"** (p. 33), **"Editing the DRUM Track"** (p. 34), **"LOOPER Track"** (p. 35).

[FILTER] button

Assigns the [C1]–[C4] knobs to control the FILTER parameter of track 1–4.

If you hold down the [SHIFT] button and press the [FILTER] button, the UTILITY screen appears.

[MOD] button

Assigns the [C1]–[C4] knobs to control the MOD parameter of track 1–4.

If you hold down the [SHIFT] button and press the [MOD] button, the MOTION screen appears.

[FX] button

Assigns the [C1]–[C4] knobs to control the FX parameter of track 1–4.

If you hold down the [SHIFT] button and press the [FX] button, the COPY screen appears.

5 Pad Section

Pads (16 pads)

The operation of the pads depends on the pad mode that's selected.

6 Common Section 2

Display

Shows necessary information for various operations.

[VALUE] dial

Turn: Edits a value or scrolls the screen. The operation depends on what is shown in the screen.

Press: Confirms the editing value or executes the operation.

[EXIT] button

Returns to the previous screen.

In some screens, cancels the currently-executing function.

By holding down the [SHIFT] button and pressing the [EXIT] button, you can use it to set tap tempo.

[TEMPO] button

Adjusts the TEMPO.

& For details, refer to **"Tempo Settings"** (p. 39).

If you hold down the [SHIFT] button and press the [TEMPO] button, the WRITE screen appears.

PAD [CLIP] button

Switches the pads to CLIP mode. In CLIP mode, you can use the TRACK SEL [1]–[4] buttons to switch clips in the selected track.

If you hold down the [SHIFT] button and press the [CLIP] button, you can then make settings related to CLIP mode.

PAD [SEQ] button

Switches the pads to SEQ mode (p. 21, p. 23). In SEQ mode, you can use the lit pads to step-record a melody or step-record drums.

If you hold down the [SHIFT] button and press the [SEQ] button, setting screen FIRST/LAST STEP of appears.

PAD [NOTE] button

Switches the pads to NOTE mode (p. 17). In NOTE mode, you can use the lit pads to play a melody or drums.

If you hold down the [SHIFT] button and press the [NOTE] button, you can then make pad settings.

PAD [SCATTER] button

Switches the pads to SCATTER mode. In SCATTER mode, you can use the lit pads to apply the SCATTER effect.

If you hold down the [SHIFT] button and press the [SCATTER] button, you can then make settings related to SCATTER mode.

Bottom Panel

Installing the Batteries

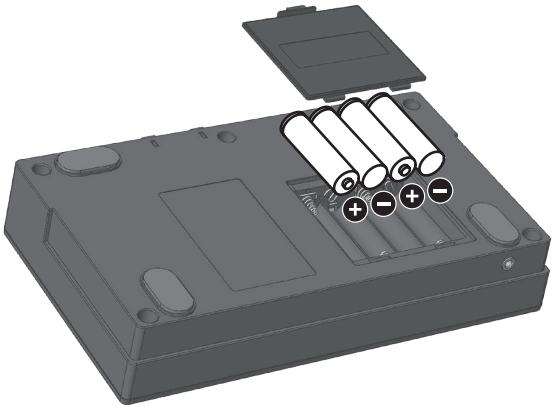
As an alternative to USB bus power, you can use commercially available AA nickel-metal hydride batteries or alkaline batteries to power the unit.

* **If USB bus power is being supplied, the unit uses USB bus power even if batteries are installed.**

1. Remove the battery cover.

* **When turning the unit over, be careful so as to protect the buttons and knobs from damage. Also, handle the unit carefully; do not drop it.**

2. Taking care to observe the correct orientation of the batteries, insert the batteries into the battery case.



3. Close the battery cover.

* **If you handle batteries improperly, you risk explosion and fluid leakage. Make sure that you carefully observe all of the items related to batteries that are listed in MC-101 Owner's Manual.**

Battery replacement indicator

When the batteries run low, an indication appears in the screen.

When this occurs, install new batteries.

Front Panel

A PHONES jack

You can connect a set of headphones here.

Rear Panel (Connecting Your Equipment)

* To prevent malfunction and equipment failure, always turn down the volume, and turn off all the units before making any connections.

B [POWER] switch

Turns the power on/off.

C (USB) port

Use a commercially available USB 2.0 cable (type B) to connect this port to your computer. It can be used to transfer USB MIDI and USB audio data. You must install the USB driver when connecting this unit to your computer. For details, refer to Readme.htm in the downloaded file.

➡ https://www.roland.com/support/

* **If USB bus power is being supplied, the unit operates on USB bus power.**

D SD card slot

With the factory settings, the SD card protector is fastened with the included SD card inserted. If you want to take out the SD card, remove the screws. The SD card contains various data (settings, sounds, samples, etc.) for this unit.

* **Never turn off the power or remove the SD card while the SD card is being accessed.**

* **Some memory card types or memory cards from some manufacturers may not record or play back properly on the unit.**

E MIDI port

Connect these to external MIDI equipment to transmit and receive MIDI messages.

F OUT L/MONO, R jacks

These are audio output jacks. Connect them to your amp or monitor speakers.

If you're outputting in mono, connect the L/MONO jack.

Introduction

Turning the MC-101 On

1. **Power-on your equipment in the order of MC-101 → connected equipment.**
2. **Power-on the connected equipment, and raise the volume to an appropriate level.**

* Before turning the unit on/off, always be sure to turn the volume down. Even with the volume turned down, you might hear some sound when switching the unit on/off. However, this is normal and does not indicate a malfunction.

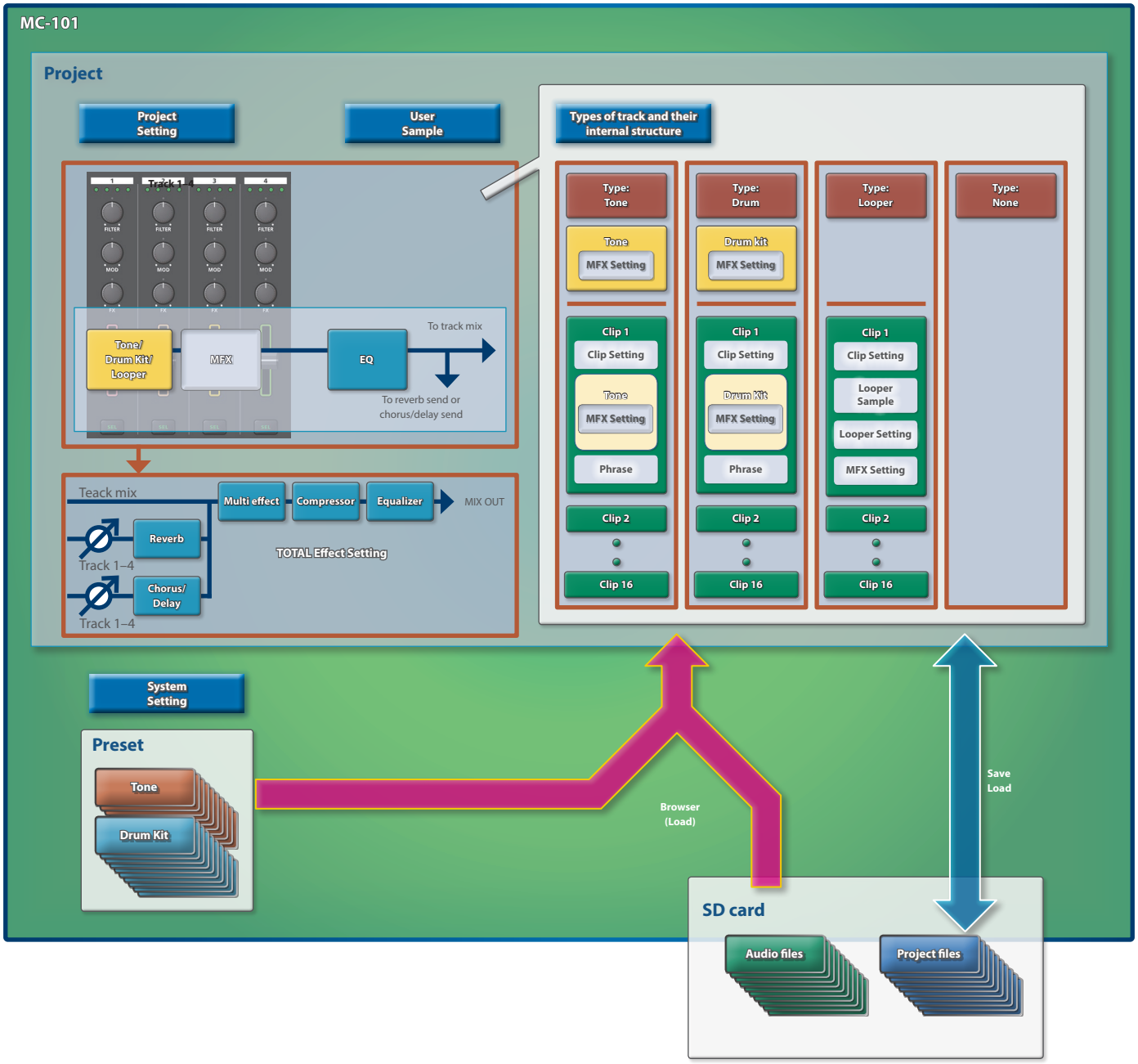
Turning Off the Power

1. **Power-off your equipment in the order of connected equipment → MC-101.**

An Overview of the MC-101

The MC-101 can simultaneously play back up to four independent tracks.

You can assign up to 16 clips to each track, and switch between these clips during playback.



What Is a Project?

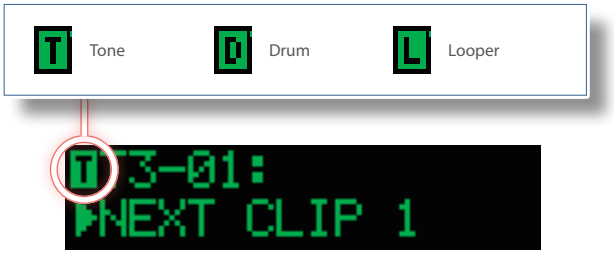
On the MC-101, data for one song is handled as a unit called a **"project."** Projects are saved on an SD card.

A project contains data for tracks, clips, tones, and the samples that are used.

If you want to keep the content that you edited, save the project.

What Is a Track?

There are three types of track.



Tone: A track that mainly handles clips that have pitch.

Drum: A track that handles drum and percussion clips.

Looper: A track that handles audio loops. You can import audio data from an SD card, or record sound from a track. Time stretch is also supported.

What Is a Clip?

A **"clip"** is a collection of data to be played back by a track. The data included in a clip differs depending on the type of track.

Track type: Tone

Clip setting: This contains the name of the clip, and information and settings for the clip.

Tone: This contains settings for the sound. It also includes effect (MFX) settings. (*1)

Phrase: This is performance data and data that creates changes in the sound (MOTION).

Track type: Drum

Clip setting: This contains the name of the clip, and information and settings for the clip.

Drum kit: This contains settings for the sound. It also includes effect (MFX) settings. (*1)

Phrase: This is performance data and data that creates changes in the sound (MOTION).

Track type: Looper

Clip setting: This contains the name of the clip, and information and settings for the clip.

Looper sample: This is the audio data played by the looper.

Looper setting: This contains settings that specify how the looper sample is played.

MFX: This contains effect (MFX) settings. (*1)

Phrase: This contains data that creates changes in the sound (MOTION).

*** 1** Alternatively, you can use the track's settings instead of the clip's settings.

What Is the Browser?

This lets you select the material that you need for the project that you're working on.

Selecting preset tones and drum kits

You can browse the preset tones and drum kits, and use them.

Selecting from projects on the SD card

You can browse clips, tones, and drum kits, and use them.

Selecting from audio files on the SD card

You can use these as looper samples to be played by a looper track.

You can also use them as user samples for a tone or drum kit.

Total FX Setting

The MC-101 is equipped with five master effects.

Settings for these effects are saved in the project.

- **Reverb**
  Adds reverberation to the sound.
- **Chorus/Delay**
  Gives the sound depth and spaciousness (Chorus), or delays the sound in an echo-like manner (Delay).
- **Compressor**
  Compresses loud peaks of the master output, making the volume more consistent.
- **Multi FX**
  Lets you select and use one of various effects such as filter or overdrive.
- **Equalizer**
  An equalizer with three frequency bands (low, mid, high).

USER SAMPLE

User samples used by tones and drum kits.

Audio files saved on an SD card can be imported into a project.

➡ **"Importing Clips (Clip Browser)"** (p. 19)

Basic Operation

Loading and Playing a Project

On the MC-101, data for one song is handled as a unit called a **"project."** Projects are saved on the SD card.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select the LOAD menu and press the [VALUE] dial to confirm.**
3. **Use the [VALUE] dial to select the Project that you want to load, and press the [VALUE] dial to confirm.**

   When the confirmation message appears, press the [VALUE] to confirm.
4. **Press the [►] (play/stop) button.**

   The project plays.

Changing the Clips that Play

1. **Press the TRACK SEL [1]–[4] button of the track containing the clip you want to play.**
2. **Press the [CLIP] button.**

   The pads are now in CLIP mode.
   You can choose the clips that are played by the pads.
3. **Press a pad and select a clip.**

Selecting a Tone or Drum Kit

1. **Press the TRACK SEL [1]–[4] button of the track containing the clip you want to play.**
2. **Press the PAD [NOTE] button.**

   The pads are assigned to NOTE mode.
3. **Press the [VALUE] dial.**

   The sound browser appears.
4. **Use the [VALUE] dial to select "PRESET," and press the [VALUE] dial.**

   The PRESET browser appears.
5. **Turn the [VALUE] dial to select the category that you want to view, and then press the [VALUE] dial.**

   The sounds are shown in numerical order or alphabetical order.
6. **Use the [VALUE] dial to select a sound.**

   You can use the pads to audition the sound.
7. **Press the [VALUE] dial to confirm the sound.**

MEMO

You can strike the pads to audition the sound of the selected tone or drum kit.

Loading a Clip from SD Card

1. **Stop the project playback.**

   Make sure that the [►] (play/stop) button is blinking.
   If the [►] (play/stop) button is lit, press the [►] (play/stop) button to stop playback.

2. **Press the TRACK SEL [1]–[4] button of the track containing the clip that you want to play.**

3. **Press the [PROJECT] button.**

4. **Use the [VALUE] dial to select clip "CLIP IMPORT," and press the [VALUE] dial.**

5. **Use the [VALUE] dial to select the project that contains the clip that you want to import, and press the [VALUE] dial.**

6. **Use the [VALUE] dial to select the clip that you want to import, and press the [VALUE] dial.**

7. **Use the [VALUE] dial to select the import-destination, and press the [VALUE] dial.**

Performing with the Pads (NOTE Mode)

By using the NOTE mode of the pads, you can perform using the illuminated pads.

1. **Press the TRACK SEL [1]–[4] button of the tracks that you want to play.**

2. **Press the [NOTE] button.**

   The pads are now in NOTE mode.
   You can perform using the illuminated pads.

Recording a Pad Performance

1. **Use the TRACK SEL [1]–[4] buttons to select a track.**

2. **Press the PAD [CLIP] button.**

3. **Press the [●] (record) button to make it light.**

4. **Press a pad to select the recording-destination clip.**

5. **Press the PAD [NOTE] button.**

6. **Press the [►] (play/stop) button to play back.**

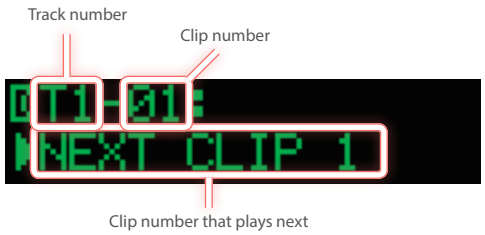
7. **Play the pads and record the performance.**

Reference Section

Selecting a Clip

1. **Press the PAD [CLIP] button.**
2. **Press the PAD to select a clip that you want to play.**

   If the sequencer is playing, playback starts at the timing specified by the master clock.



Use the [►] (play/stop) button to play or stop.

➡ **"Master Clock"** (p. 39)

Editing a Track or Clip

Creating a Clip (CREATE)

1. **Press the PAD [CLIP] button.**
2. **Select an unlit pad (empty clip), and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select "NEW CLIP," and then press the [VALUE] dial.**

   The clip is created.

MEMO

You can also create a clip by using the [●] (REC) button to newly record it.

Editing the Sound (SOUND)

You can edit the settings of the sound (tone, drum, or looper sample) that's used by the track or clip.

➡ For details, refer to **"Editing the TONE Track"** (p. 33), **"Editing the DRUM Track"** (p. 34), and **"LOOPER Track"** (p. 35).

Editing the Clip Settings (SETTING)

You can edit settings related to how the clip is played by the sequencer.

➡ For details, refer to **"Editing a Clip's Settings"** (p. 37)

Copying the Sound or Phrase of a Clip (COPY/PASTE)

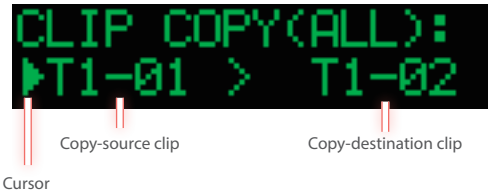
Here's how to duplicate the data of a clip or a sound.

1. **Hold down the [SHIFT] button and press the [FX] button.**

   The COPY menu appears.

2. **Use [VALUE] dial to select the content that will be copied, and then press the [VALUE] dial.**

Content	Explanation
CLIP ALL	Copies the sound and the phrase.
CLIP PHRASE	Copies only the phrase.
CLIP SOUND	Copies only the sound.



3. **Turn the [VALUE] dial to select the clip that you want to copy and then press the [VALUE] dial.**
4. **Turn the [VALUE] dial to select the copy-destination clip and then press the [VALUE] dial.**
5. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   The copy is completed.

Specifying a Sound for Each Clip

If you change the sound source to clip, you can specify a different sound for each clip.

1. **Hold down the [SHIFT] button and press the TRACK SEL [1]–[4] button.**

   The track setting screen appears.

2. **Use the [VALUE] dial to select "Sound Src," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select "CLIP," and then press the [VALUE] dial.**

   The sound source changes to clip, allowing you to specify a sound for each clip.

Copying a Track's Sound to a Clip

When you switch the sound source from track to clip, the clip's sound is initialized.

Using this function, the sound specified for a track can be copied to a clip.

1. **Hold down the [SHIFT] button and press the [FX] button.**

   The COPY menu appears.

2. **Use the [VALUE] dial to select "TRK TO CLIP SND," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   The sound specified for the track is copied to the clip.

Deleting (CLEAR)

Here's how to delete the selected clip.

1. **Press the PAD [CLIP] button.**
2. **While holding down the [SHIFT] button and the [PROJECT] button, press the pad for the clip that you want to delete.**
3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   The clip is deleted.

   If you decide to cancel, use the [VALUE] dial to select **"Cancel,"** and then press the [VALUE] dial.

Project Operations

What Is a Project?

On the MC-101, data for one song is handled as a unit called a **"project."** Projects are saved on the SD card.

A project contains data for tracks, clips, tones, and the samples that are used.

If you want to keep the results of editing, save the project.

➡ For details, refer to **"An Overview of the MC-101"** (p. 7).

Loading a Project

Here's how to load a project from the SD card.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "LOAD," and then press the [VALUE] dial to confirm.**

   The PROJECT LOAD screen appears.
3. **Use the value dial to select the project that you want to load, and then press the [VALUE] dial to confirm.**
4. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

* If you had edited the project, a confirmation message appears. Select [WRITE] if you want to save the current project, or select **"LOAD"** if you don't want to save it.

* When you create a new project, any unsaved content of the currently-open project is lost.

Managing Projects

Here's how to protect or delete project files on the SD card.

Locking a Project (LOCK)

Here's how to protect a project file on the SD card so that it cannot be overwritten.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "LOCK," and then press the [VALUE] dial.**

3. **Use the [VALUE] dial to select the project file that you want to protect, and then press the [VALUE] dial.**

* A lock symbol appears in the upper right of the screen, and the project can no longer be overwritten or deleted. If you select a file for which the lock symbol is shown, the lock is defeated (UNLOCK).

Deleting a Project (DELETE)

Here's how to delete a project file on the SD card. Once a file is deleted, it cannot be restored.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "DELETE," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select the project file that you want to delete, and then press the [VALUE] dial.**
4. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

* The project file is deleted.

* A locked project file cannot be deleted.

Creating a New Project

Here's how to create a new project.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "NEW," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   A new project is created.

* If you had edited the project, a confirmation message appears. Select [WRITE] if you want to save the current project, or select **"LOAD"** if you don't want to save it.

Making Project Settings

Here's how to make settings such as the project's volume and the pad illumination colors.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "SETTING," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select parameter, and then press the [VALUE] dial.**
4. **Use the [VALUE] dial to change the value, and then press the [VALUE] dial to confirm.**

COMMON

Here you can specify the volume, the reference pitch, and the scene that is recalled when the project is loaded.

Parameter	Value	Explanation
Proj Level	0–127	Specifies the volume of the overall project.
MstrTune	415.3Hz–466.2Hz	Specifies the reference pitch (master tune) for the project.
First Scene	1–8	Specifies the scene number that is recalled when the project is loaded.

PC IN

Here you can make settings for audio that is input from a USB connected computer to the PC IN port.

Parameter	Value	Explanation
PC Level	0–255	Specifies the input level from the USB PC IN port.
PC Pan	L128–127R	Specifies the pan of the USB PC IN port.

COLOR

Here you can specify the color of each pad mode.

➡ For details, refer to **"Pad Operations (PAD MODE)"** (p. 17).

Parameter	Value	Explanation
Note	*1	Specifies the color of pads used for PAD MODE NOTE performance.
Octave		Specifies the color of pads used for PAD MODE NOTE octave.
Play		Specifies the color of pads while a clip is playing for PAD MODE CLIP.
Stay		Specifies the color of pads while a clip is stopped for PAD MODE CLIP.
Stop		Specifies the color of pads that start/stop a track for PAD MODE MUTE.

*1 ORANGE, YELLOW, GREEN, BLUE, PURPLE, PINK, WHITE, SKYBLUE, P.YELLOW, P.BLUE, P.PINK, L.RED, L.ORANGE, L.YELLOW, L.GREEN, P.GREEN, L.SKYBLUE, L.BLUE, L.PURPLE

Deleting a Sample Loaded into the Project (SAMPLE DELETE)

Here's how to delete a user sample loaded into the project.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "SAMPLE DELETE," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to select a sample file, and then press the [VALUE] dial.**

* Samples for which the screen shows a [U] symbol are used in a clip or track.

4. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

The sample file is deleted.

Saving a Project

Here's how to save the project to the SD card.

1. **Press the [PROJECT] button.**
2. **Use the [VALUE] dial to select "WRITE," and then press the [VALUE] dial.**
3. **Use the [VALUE] dial to change the project name.**

The cursor blinks under the character.
The character at the cursor location changes.

Operation	Explanation
MEASURE [<] [>]	Selects the character to edit.
Turn the [VALUE] dial	Change the character.
[SHIFT] + MEASURE [>]	Inserts a space.
[SHIFT] + MEASURE [<]	Deletes a character.

4. **Press the [VALUE] dial.**

A confirmation message appears.
Use the [VALUE] dial to select **"OK,"** and then press the [VALUE] dial.
If you decide to cancel, use the [VALUE] dial to select **"Cancel,"** and then press the [VALUE] dial.

* **If there is a project of the same name, it is overwritten.**
* **Projects with a lock symbol are locked, and cannot be overwritten.**
* **If there is no project of the same name, the project is saved as a new project.**

Track Operations

Creating a Track

The MC-101 has four track types: TONE, DRUM, DRUM + COMP, and LOOPER.

Up to eight track types can be freely combined in each track.

Depending on the track type, there is a maximum number that can be used simultaneously.

1. Press the TRACK SEL [1]–[4] button of an empty track.

The CREATE TRACK menu appears

2. Use the [VALUE] dial to select type, and then press the [VALUE] dial.

The track is created.

Track type	Explanation
TONE	This is a synthesizer sound engine. It can also be used as a pitched sampler.
DRUM	This is a drum sound engine. It can also be used as a sampler.
DRUM + COMP	This is a drum sound engine with compressor (maximum one track).
LOOPER	This is a sampling looper that supports time stretch. It supports loading samples from SD card, and recording from a track.

Changing a Track to a Different Type

To change the type of a track, delete the track and then create a new track.

1. While holding down the [SHIFT] button and the [PROJECT] button, press the TRACK SEL [1]–[4] button of the track that you want to change.

A confirmation message appears.

2. Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.

The track is deleted, and the TRACK CREATE menu appears.

3. Use the [VALUE] dial to select the desired type, and then press the [VALUE] dial.

The track is created.

Making Track Settings

1. Hold down the [SHIFT] button and press the TRACK SEL [1]–[4] button of the track for which you want to make settings.

The setting screen appears.

2. Use the [VALUE] dial to select parameter, and then press the [VALUE] dial.

3. Use the [VALUE] dial to change the value, and then press the [VALUE] dial to confirm.

GEN

Parameter	Value	Explanation
Sound Src	TRACK, CLIP	Specifies whether the track's sound uses the settings of the track or of the clip. * **If this is TRACK, all sounds used in the same track will be in common.** * **If this is CLIP, different sounds can be used for each clip.** * **A looper track does not have this setting.**
Color	*1	Specifies the color shown for the level fader.

***1 RED, ORANGE, YELLOW, GREEN, BLUE, PURPLE, PINK, WHITE, SKYBLUE, P.YELLOW, P.BLUE, P.PINK, L.RED, L.ORANGE, L.YELLOW, L.GREEN, P.GREEN, L.SKYBLUE, L.BLUE, L.PURPLE**

EQ

These are the track EQ settings.

Parameter	Value	Explanation
EQ Switch	OFF, ON	Turns the equalizer on/off.
Input Gain	-24–+24 [dB]	Adjusts the amount of boost/cut for the input to the EQ.
Low Gain	-24–+24 [dB]	Gain of the low frequency range.
Low Freq	20–16000 [Hz]	Frequency of the low range.
Mid Gain	-24–+24 [dB]	Specifies the reference frequency of the mid-frequency range.
Mid Freq	20–16000 [Hz]	Adjusts the amount of mid-frequency boost/cut.
Mid Q	0.5–16.0	Specifies the width of the mid-frequency range. Set a higher value for Q to narrow the range to be affected.
High Gain	-24–+24 [dB]	Gain of the high frequency range.
HighFreq	20–16000 [Hz]	Frequency of the high range.

MIDI

Here you can switch on/off the output of MIDI messages from the sequencer to each port.

Parameter	Value	Explanation
TxMIDI Out	OFF, ON	Enables output to the rear panel MIDI OUT connector.
TxUSB MIDI	OFF, ON	Enables output to the rear panel USB port.

Pad Operations (PAD MODE)

Using Clip Mode

When you press the PAD MODE button CLIP, the pads switch to Clip mode.

Switching Clips

In Clip mode, the 16 clips of each track are assigned to pads [1]–[16].

1. Press the PAD [CLIP] button.

The pads are in Clip mode. You can select the clips that are played by the pads.

2. Press the pads to select clips.

The clips are switched.

Using SEQ Mode

➡ For details, refer to **"Tone Track"** (p. 21), **"Drum Track: TR-REC"** (p. 23).

Using Note Mode

This lets you perform or create phrases.

For details on how to create phrases, refer to **"Tone Track"** (p. 21).

1. Press the [NOTE] button.

The pads switch to Note mode.

Playing

TONE track

For a TONE track, you can play the pads as a keyboard.

[OCT-] [OCT+]: Shift octaves.

[REST/TIE]: Use to create phrases.

➡ For details, refer to**"Tone Track"** (p. 21).

DRUM track

For a DRUM track, you can use the pads to play the drum kit, or use the pads with TR-REC to create phrases.

In a drum kit, 16 instruments are assigned to the pads, one instrument to each pad.

By pressing the pads, you can switch the pad that you're editing.

➡ For details, refer to **"Drum Track: TR-REC"** (p. 23).

LOOPER track

For a LOOPER track, you can use the pads to change the pitch of the sample that's played.

You can use the [OCT-] [OCT+] buttons to shift the pitch in a range of -2–+2 octaves.

DRUM PAD MUTE

For a DRUM track, you can mute individual pads.

1. Press the PAD [NOTE] button.

The pads are in Note mode.

2. While holding down the TRACK SEL [1]–[4] button of the track that you want to mute, press the pad corresponding to the drum instrument that you want to mute.

The drum instrument is muted.

MEMO

You can combine this with a copy of the clip, and use it as a convenient function for creating a variation of the drum kit.

Making Note Mode Settings

1. Hold down the [SHIFT] button and press the [NOTE] button.

The NOTE MODE SETTING screen appears.

These are settings related to pad performance.

Parameter	Value	Explanation
Pad Velo	1–127	Specifies the velocity sensitivity of the pads. You can also specify a fixed value.
Octave	-5–+5	Specifies the octave for pad performance.
Transpose	-6–+6	Specifies the key transpose for pad performance.

Using Scatter Mode

You can use the pads to apply Scatter, and edit the effect.

1. Press the [SCATTER] button.

Scatter mode is selected.

Using the Pads to Apply the Effect

1. Press a pad

The effect is applied while you hold down the pad.
The effect differs for each pad.

2. When you take your hand off the pad, it returns to the previous state.

Using the [SCATTER] Button to Apply the Effect

1. While in Scatter mode, press the [SCATTER] button.

Step mode is selected.

While you hold down the [SCATTER] button, the effects specified for the steps are applied consecutively, starting from the first (momentary mode).
You can also make the effect continue even after you release the button (alternate mode).

➡ For details, refer to **"SCATTER"** (p. 31).

Making Scatter Settings

1. Hold down the [SHIFT] button and press the [SCATTER] button.

➡ For details, refer to **"SCATTER"** (p. 31).

Importing Clips (Clip Browser)

The clip browser lets you import clips from a project saved on the SD card.

On the MC-101, you can import a clip in either of two ways.

Importing from the Project Menu

1. **Press the [PROJECT] button.**

   The project menu appears.

2. **Use the [VALUE] dial to select "CLIP IMPORT," and then press the [VALUE] dial.**

   The project browser appears.

3. **Select the project file containing the clip that you want to import, and then press the [VALUE] dial.**

4. **Select the clip that you want to import, and then press the [VALUE] dial.**

5. **Select an empty clip that you want to import, and press the [VALUE] dial.**

   The clip is imported.

MEMO

If you select a clip that's not empty, the indication "NOT EMPTY" appears.

Importing When Creating a Clip

1. **Stop the sequencer, and press the PAD [CLIP] button.**

   The pads are in Clip mode.

2. **Press the pad of an empty clip.**

   The selected pad blinks white.

3. **Press the [VALUE] dial.**

4. **Use the [VALUE] dial to select "LOAD CLIP," and then press the [VALUE] dial.**

   The project browser appears.

5. **Select the project file containing the clip that you want to import, and then press the [VALUE] dial.**

6. **Select the clip that you want to import, and then press the [VALUE] dial.**

   The clip is loaded.

MEMO

- You can't import a clip of a different track type.
- If you want to use the sound of the import-source clip in a tone or drum track, specify the track mode as Clip.

  ➡ For details, refer to "Making Track Settings" (p. 16).

Selecting Sounds (Sound Browser)

The sound browser lets you load sounds or sample files into a project.

Loading a Preset Sound

Here's how internal sounds of the MC-101 unit can be loaded into a project.

1. **Use the TRACK SEL [1]–[4] buttons to select the track whose sound you want to change.**
2. **Press the PAD [NOTE] button.**

   The pads are in Note mode.
3. **Press the [VALUE] dial.**

   The browser menu appears.
4. **Use the [VALUE] dial to select "PRESET," and then press the [VALUE] dial.**

   The sound browser appears.
5. **Select a category, and then press the [VALUE] dial.**

   All Number displays the items in numerical order, and All Alphabet displays the items in alphabetical order.

   For a TONE track, you can specify an individual category of instrument such as Syn.Bass or Syn.Lead.
6. **Select a sound, and then press the [VALUE] dial.**

   The sound is imported, and you return to the Note mode screen.

* **If the sound source is Clip mode, the sound must be the currently-playing clip in order for you to audition it.**

Loading from a Project on the SD Card

Here's how a sound (TONE/DRUM/INST) or sample (LOOPER) can be loaded from a project saved on the SD card.

1. **Use the TRACK SEL [1]–[4] buttons to select the track whose sound you want to change.**
2. **Press the PAD [NOTE] button.**

   The pads are in Note mode.
3. **Press the [VALUE] dial.**

   The browser menu appears.
4. **Use the [VALUE] dial to select "PROJECT," and then press the [VALUE] dial.**

   The project browser appears.
5. **Select a project, and then press the [VALUE] dial.**
6. **Select the track or clip containing the sound that you want to load, and then press the [VALUE] dial.**

   The sound is imported, and you return to the Note mode screen.

Loading Samples from the SD Card

Here's how you can load samples that are saved on the SD card.

* **Samples that you want to load must be placed in the ROLAND/GROOVEBOX/SAMPLE folder of the SD card.**

1. **Use the TRACK SEL [1]–[4] buttons to select the track into which you want to load the sample.**
2. **Press the PAD [NOTE] button.**

   The pads are in Note mode.
3. **Press the [VALUE] dial.**

   The browser menu appears.

   To load a sample into a DRUM INST, hold down the [SHIFT] button and press the corresponding pad.
4. **Use the [VALUE] dial to select "WAVE FILE," and then press the [VALUE] dial.**

   The sample browser appears.
5. **Select a sample file, and then press the [VALUE] dial.**

   The sample is imported.

   By pressing the [SOUND] button you can preview the sample.

The content that can be loaded depends on the track type

	TONE track	DRUM track (kit)	DRUM track (INST)	LOOPER track
Loading a preset sound (PRESET)	✓	✓	✓	
Loading a sound from a project on the SD card (PROJECT)	✓	✓	✓	
Loading a sample from a project on the SD card (PROJECT)				✓
Loading a sample file from the SD card (WAVE FILE)	✓		✓	✓

Step-Recording a Phrase

You can step-record phrases by using Note mode and SEQ mode.

Tone Track

1. **Press the PAD [SEQ] button.**

   The pads are in SEQ mode.

2. **Press the pad of the step that you want to input.**

   The step edit screen appears, and the selected pad is brightly lit. The PAD [NOTE] button also blinks.

   * **The currently displayed measures are indicated by the MEASURE LEDs in the lower left.**

   You can use the MEASURE [<] [>] buttons to move between measures.

3. **Press the PAD [NOTE] button.**

   The pads are in Note mode. The screen shows the step number that is being edited.

4. **Press pads (keys) to enter notes.**

   The pad that you input is lit.

5. **Use the [VALUE] dial to select the step number that you want to input.**

6. **Repeat steps 4–5.**

7. **Press the [EXIT] button when you're finished editing.**

Inputting a Long Note (Inputting a Tie)

1. **Press the PAD [SEQ] button.**

   The pads are in SEQ mode.

2. **Press the pad of the step that you want to input.**

   The step edit screen appears, and the selected pad is brightly lit. The PAD [NOTE] button also blinks.

   * **The currently displayed measures are indicated by the MEASURE LEDs in the lower left.**

   You can use the MEASURE [<] [>] buttons to move between measures.

3. **Press the PAD [NOTE] button.**

   The pads are in Note mode. The screen shows the step number that is being edited.

4. **While holding down a pad (a key), press the pad [REST/TIE].**

   A tie of the specified pitch is input.

Changing the Measure Settings

1. **Hold down the [SHIFT] button and press the MEASURE [<] [>] button.**

   The MEASURE EDIT screen appears.

   In the MEASURE EDIT screen, you can make settings for the clip's notes.

Parameter	Value	Explanation
Step Length	1–128	Specifies the length of the clip.
Scale	1/8, 1/16, 1/32, 1/4T, 1/8T, 1/16T	Specifies the resolution of the clip. **1/8:** eighth notes **1/16:** sixteenth notes **1/32:** thirty-second notes **1/4T:** quarter note triplets **1/8T:** eight note triplets **1/16T:** sixteenth note triplets
Mode	FWD, REV, FWD+REV, INV, RND	Specifies how the clip will play back. **FWD:** Play forward from the first step. **REV:** Play in reverse from the last step. **FWD+REV:** Play forward from the first step, then play backward from the last step. **INV:** Play even-numbered and odd-numbered notes inverted. **RND:** Play randomly.
Shuffle	-50–+50	Specifies the amount of shuffle (bounce).

Automatically Advancing the Step During Input (Step Input Mode)

Step input mode automatically advances to the next step each time you press and release a pad. This is a convenient way to quickly enter an arpeggio pattern.

1. **Press the PAD [SEQ] button.**

2. **While holding down the [●] (record) button, press the pad of the step at which you want to begin input.**

   Step input mode is selected.

3. **Press the PAD [NOTE] button.**

4. **Press a pad (key) to input a note.**

   When you release the pad, the step advances.

   * **By pressing the [REST/TIE] button you can advance the step without inputting a step.**

Editing the Notes of Each Step

1. Press the PAD [SEQ] button.

The pads are in SEQ mode.

2. Press a pad for which a note is input (a pad that is lit red).

The STEP EDIT screen appears.
The notes of the selected step are shown.

3. Use the [VALUE] dial to select the note that you want to edit.

Knob	Explanation
C1	**NOTE:** Specifies the note.
C2	**VEL:** Adjusts the velocity.
C3	**STA:** Adjusts the start timing of the note.
C4	**LEN:** Specifies the length of the note. If the same note exists at the distance to which the note was extended, it cannot be extended further.

MEMO

In the STEP EDIT screen, you can make detailed adjustments to the value of each parameter by holding down the button located below each knob ([SOUND], [FILTER], [MOD], [FX]) and turning the [VALUE] dial.

In addition, you can make motion-related settings by pressing the [VALUE] dial.

Knob	Explanation
C1	**SND:** Adjusts the motion value of the parameter assigned to SOUND.
C2	**FLT:** Adjusts the motion value of the parameter assigned to FILTER.
C3	**MOD:** Adjusts the motion value of the parameter assigned to MOD.
C4	**FX:** Adjusts the motion value of the parameter assigned to FX.

Drum Track: TR-REC

1. Press the PAD [NOTE] button.

The pad mode is set to Note mode.

2. Press the pad corresponding to the instrument that you want to edit.

The selected pad is lit.

3. Press the PAD [SEQ] button.

The pads are in SEQ mode.

You can also use the [VALUE] dial to change the instrument that you're editing.

4. Press the pad of the step for which you want to input a note.

Notes are input.

If you once again press a pad that is lit, the note input is cancelled.

5. Repeat steps 1–4.

Changing the Measure Settings

Here's how to make measure-related settings for the clip.

1. Hold down the [SHIFT] button and press the MEASURE [<] [>] buttons.

The MEASURE EDIT screen appears.

Parameter	Value	Explanation
Step Length	1–128	Specifies the length of the clip.
Scale	1/8, 1/16, 1/32, 1/4T, 1/8T, 1/16T	Specifies the resolution of the clip. **1/8:** eighth notes **1/16:** sixteenth notes **1/32:** thirty-second notes **1/4T:** quarter note triplets **1/8T:** eight note triplets **1/16T:** sixteenth note triplets
Mode	FWD, REV, FWD+REV, INV, RND	Specifies how the clip will play back. **FWD:** Play forward from the first step. **REV:** Play in reverse from the last step. **FWD+REV:** Play forward from the first step, then play backward from the last step. **INV:** Play even-numbered and odd-numbered notes inverted. **RND:** Play randomly.
Shuffle	-50–+50	Specifies the amount of shuffle (bounce).

Editing the Steps

1. Press the PAD [NOTE] button.

The pads are in NOTE mode.

2. Press the pad corresponding to the instrument that you want to edit.

The selected pad is lit.

3. Press the PAD [SEQ] button.

The pads are in SEQ mode.

You can also use the [VALUE] dial to change the instrument that you're editing.

4. Hold down the [SHIFT] button and press the PAD.

The EDIT STEP screen appears.

Knob	Explanation
C1	**VEL:** Adjusts the velocity.
C2	**STA:** Adjusts the timing at which the start note begins.
C3	**MTE:** Adjusts the probability that a mute note will sound. With a setting of 0, the note sounds each time; higher values decrease the probability that the note will sound.
C4	**SUB:** Specifies a sub step. With a setting of 1/2 the note sounds twice in each step; with a setting of 1/3 the note sounds three times in each step.

In addition, you can make motion-related settings by pressing the [VALUE] dial.

Knob	Explanation
C1	**SND:** Adjusts the motion value of the parameter assigned to SOUND.
C2	**FLT:** Adjusts the motion value of the parameter assigned to FILTER.
C3	**MOD:** Adjusts the motion value of the parameter assigned to MOD.
C4	**FX:** Adjusts the motion value of the parameter assigned to FX.

Track Pad Mute

Here's how to specify drum pad muting for each track.

This function is useful during a live performance when you want to add development to your song by inserting and removing pads.

1. Press the PAD [NOTE] button.

2. While holding down the TRACK SEL [1]–[4] button of the currently selected drum track, press the pad that you want to mute.

The pad you specified is muted. This setting applies to the track, and is maintained even if you change clips.

3. While once again holding down the currently selected TRACK SEL [1]–[4] button, press the muted pad.

Muting is cleared.

Clip Pad Mute

Here's how to specify drum pad muting for each clip.

By preparing a clip of the same drum phrase and then muting the kick or snare, you can obtain more variations.

1. While holding down the PAD [NOTE] button, press the pad that you want to mute.

The specified pad is muted.

You can make settings individually for each clip.

2. Once again, hold down the PAD [NOTE] button and press the muted pad.

Muting is cleared.

Specifying the Last Step and First Step

Specifying the Last Step

By specifying the Last Step, you can make a mid-way step play as the last step.

1. **Hold down the [SHIFT] button and press the PAD [SEQ] button.**

   FIRST/LAST STEP Setting mode is selected.

2. **Press the pad that you want to specify as the Last Step.**

   The Last Step is specified, and the playback region is lit green.

   If you press the same pad once again, the setting is cancelled.

   If you want to make settings beyond 16 steps, use the MEASURE [<] [>] buttons to move the range of measures.

3. **Press the [EXIT] button.**

   You exit FIRST/LAST STEP Setting mode.

Specifying the First Step

By specifying the First Step, you can make a mid-way step play as the first step.

1. **Hold down the [SHIFT] button and press the PAD [SEQ] button.**

   FIRST/LAST STEP Setting mode is selected.

2. **Hold down the [SHIFT] button, and press the pad that you want to specify as the First Step.**

   The First Step is specified; the First Step is lit orange, and the playback region is lit green.

   To cancel the setting, once again hold down the [SHIFT] button and press the same pad.

   If you want to make settings beyond 16 steps, use the MEASURE [<] [>] buttons to move the range of measures.

3. **Press the [EXIT] button.**

   You exit FIRST/LAST STEP Setting mode.

Deleting the First Step and Last Step

1. **In the FIRST/LAST STEP Setting mode, hold down the [SHIFT] button and press the [PROJECT] button.**

   The First Step and Last Step are both deleted.

Recording

The MC-101 lets you save a performance or a sound as a clip.

Recording a Performance to a Tone or Drum Track

Creating a new clip and recording on it

1. **Press the PAD [CLIP] button.**
2. **Hold down the [SHIFT] button and press the [●] (record) button.**

   The Recording Setting screen appears.
3. **Use the [VALUE] dial to select "Rec Meas," and specify the length of the clip that you will record.**
4. **Press a pad whose clip is empty, and then press the [●] (record) button.**

   * **If playback is stopped, press the [►] (play/stop) button to start playback.**

   A clip is created at the specified location, and recording starts.
5. **Press the PAD [NOTE] button.**

   The pads are in NOTE mode.
6. **Play the pads.**
7. **To stop recording, press the [●] (record) button.**

   Recording ends.

Overwriting a clip (Overdub)

Here's how to add notes to an existing clip.

1. **Press the PAD [CLIP] button.**
2. **Press the pad that you want to overwrite, and then press the [●] (record) button.**

   Recording starts.

   * **If playback is stopped, press the [►] (play/stop) button to start playback.**
3. **Press the PAD [NOTE] button.**

   The pads are in NOTE mode.
4. **Play the pads.**
5. **To stop recording, press the [●] (record) button.**

   Recording ends.

Recording Audio on a Looper Track

Creating a new clip and recording

1. **Press the PAD [CLIP] button.**
2. **Hold down the [SHIFT] button and press the [●] (record) button.**

   The Recording Setting screen appears.
3. **Use the [VALUE] dial to select "Rec Meas," and specify the length of the clip that you will record.**
4. **Use the [VALUE] dial to select "RecSource," and select the sound source that you will record.**

Audio source to record	Explanation
PC	If the input from a USB-connected computer is assigned to the MC-101's PC IN, you can record from it. Switch the USB output port of the computer to PC (Ch3-4). * **The default USB output port is MIXOUT.**
TRK1-4	Record from a track.
MIXOUT	Record the overall sound. * **If the output port of the computer is MIX (Ch1-2) and USB Mix Select is POST T-FX, the audio output from the computer is not recorded.**

5. **Press a pad whose clip is empty, and then press the [●] (record) button.**

   The MC-101 is in record-standby mode.

   At the next timing cycle of the master clock (p. 39), a clip is created in the specified position and recording starts. Recording ends when the specified number of measures is reached.

   * **This does not support overwriting the clip.**
   * **The track being recorded stops producing sound.**
   * **If playback is stopped, press the [►] (play/stop) button to start playback.**
   * **When recording ends, the recorded clip plays.**

Quantize

Two types of quantization can be applied to tone tracks and drum tracks.

MEMO

Quantization cannot be applied to a looper track.

INPUT QUANTIZE

The timing of the performance is corrected (quantized) during recording.

If this setting is on, irregularities in the performance timing are not recorded.

SEQUENCER QUANTIZE

The timing of the performance is corrected (quantized) during playback.

Quantization can be specified in a range of 1–100%.

This setting is provided for each individual clip and also as a master setting (common to all clips). If the clip setting and the master setting are different, the larger number takes priority.

Enabling Quantize During Recording

1. **Hold down the [SHIFT] button and press the [●] (record) button.**

   The Recording Setting screen appears.

2. **Use the [VALUE] dial to select "Input Qtz," and turn it ON.**

Specifying Playback Quantization

1. **Hold down the [SHIFT] button and press the [●] (record) button.**

   The Recording Setting screen appears.

2. **Use the [VALUE] dial to select "S.Qtz Clip" or "S.Qtz Mstr," and specify a value of 1–100%.**

Parameter	Value	Explanation
Input Qtz (INPUT QUANTIZE)	OFF, ON	Specifies whether quantization is applied (ON) or not applied (OFF) when recording the performance.
S.Qtz Clip (SEQUENCER QUANTIZE CLIP)	OFF, 1–100%	Specifies the strength of quantization for the currently selected clip. Quantization is applied during playback.
S.Qtz Mstr (SEQUENCER QUANTIZE MASTER)	OFF, 1–100%	Specifies the strength of quantization common to all clips. Quantization is applied during playback.

Recording Knob Movement in Steps (MOTION)

Movements of the [SOUND], [FILTER], [MOD], and [FX] knobs (MOTION) can be recorded in a clip.

Turning Motion On/Off

For each clip, you can specify whether Motion is played back.

If the MOTION [ON] button is lit, the recorded movements (Motion) of the [SOUND], [FILTER], [MOD], and [FX] knobs are played back.

1. **Hold down the [SHIFT] button and press the [MOD] button.**

   The MOTION setting screen appears.

2. **Use the [VALUE] dial to select "Motion," and turn it ON.**

   Motion plays back.

3. **Use the [VALUE] dial to select "Motion," and turn it OFF.**

   Motion playback ends.

Recording Motion

When the [●] (record) button is lit, movements (Motion) of each track's [SOUND], [FILTER], [MOD], and [FX] knob are recorded in the currently playing step.

1. **Play back the clip.**

2. **While holding down the [SHIFT] button, press the [MOD] button to access the MOTION setting screen, and turn "Motion" ON.**

3. **Press the [●] (record) button to make it light.**

   Motion recording begins.

4. **Press one of the [SOUND], [FILTER], [MOD], or [FX] buttons, and operate the [C1]–[C4] knob for the track on which you want to record Motion data.**

   Knob operations are recorded at each step of each clip.

   The [C1] knob corresponds to track 1, the [C2] knob corresponds to track 2, etc.

5. **Press the [●] (record) button to make it go dark.**

   Motion recording ends.

Deleting Motion

1. **Hold down the [SHIFT] button and press the [MOD] button.**

   The MOTION setting screen appears.

2. **Use the [VALUE] dial to select "CLEAR ALL," and then press the [VALUE] dial.**

   To delete all Motion data, select **"CLEAR ALL."**

   To delete Motion data individually for the SOUND, FILTER, MOD, or FX parameters, select **"CLEAR SOUND," "CLEAR FILTER," "CLEAR MOD,"** or **"CLEAR FX"** respectively.

3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   The Motion is deleted.

   If you decide to cancel, choose **"Cancel"** and then press the [VALUE] dial.

Editing Motion

In the EDIT STEP screen, you can edit the Motion for each step.

1. **Select [SEQ] mode, then hold down the [SHIFT] button and use the MEASURE [<] [>] buttons and pads to select the step that you want to edit.**

   The EDIT STEP screen appears.

2. **Press the [VALUE] dial.**

   The EDIT MOTION STEP screen appears.

3. **Move the [C1]–[C4] knobs to edit the motion values.**

Parameter	Value	Explanation
SND (SOUND)	OFF, 0–127	Adjust the motion values of each knob.
FLT (FILTER)		
MOD		
FX		

4. **When you have finished editing, press the [EXIT] button.**

Deleting Motion from a step

1. **Select SEQ mode, then hold down the [SHIFT] button and press the pad that you want to edit.**

   The EDIT STEP screen appears.

2. **Press the [VALUE] dial.**

   The EDIT MOTION STEP screen appears.

3. **Hold down the [SHIFT] button and turn a [C1]–[C4] knob to select the knob that you want to delete.**

   By holding down the [SHIFT] button and turning a [C1]–[C4] knob, you can change the object of the Motion parameter without affecting the value.

4. **While holding down the [SHIFT] button and the [PROJECT] button, press the pad that you want to delete.**

   The Motion is deleted.

5. **When you have finished editing, press the [EXIT] button.**

Inputting smooth Motion (MOTION DESIGNER)

By using MOTION DESIGNER, you can input Motion data that changes smoothly in time.

This function is a convenient way to create effects such as ducking (side-chain).

1. **Hold down the [SHIFT] button and press the [MOD] button.**

   The MOTION setting screen appears.

2. **Use the [VALUE] dial to select "MOTION DESIGNER," and then press the [VALUE] dial.**

   The CREATE MOTION screen appears.

3. **Use the [VALUE] dial to edit the parameter that you want to input.**

Parameter	Explanation
FORM TYPE	Selects the waveform of the time-varying change.
STEP LEN	Specifies the number of steps from beginning to end.
MIN VALUE	Specifies the minimum value of the waveform.
MAX VALUE	Specifies the maximum value of the waveform.
DEST KNOB	Specifies the knob to which the Motion is applied.

4. **Use the [VALUE] dial to select ">>EXEC," and then press the [VALUE] dial.**

   Time-varying values are written as Motion for the specified knob.

5. **When you are finished editing, press the [EXIT] button to return to the home screen.**

Saving and Recalling a Scene

By using the Scene function you can recall a combination of clips to play back.

A project can store eight scenes.

Recalling a Scene

Here's how to recall a stored combination of playback clips.

The scene is applied at the next timing interval of the master clock.

1. **Hold down the PAD [CLIP] button and press a PAD [1]–[8].**

   You can recall SCENE 1–8.

Storing a Scene

Here's how to store the current combination of playback clips.

1. **Hold down the PAD [CLIP] button and long-press a PAD [1]–[8].**

   You can store to SCENE 1–8.

Total Effects

The MC-101 is equipped with five **"total effects."** Settings for these effects are saved in the project.

➡ For details, refer to **"Parameter List"** (p. 45).

Reverb

Adds reverberation to the sound.

Chorus/Delay

Gives the sound depth and spaciousness (Chorus), or delays the sound in an echo-like manner (Delay).

Multi FX

Lets you select and use one of various effects such as filter or overdrive.

Compressor

Compresses loud peaks of the master output, making the volume more consistent.

Equalizer

An equalizer with three frequency bands (low, mid, high).

Turning Multi FX On/Off

When you press the [MULTI FX] button to make it light, multi FX turns on. Press the button again (unlit) to turn it off.

Turning Reverb/Delay/Comp/EQ On/Off

1. **Hold down the [SHIFT] button and press the [MULTI FX] button.**

   The FX EDIT MENU screen appears.

2. **Use the [VALUE] dial to select the effect that you want to turn on/off, and then press the [VALUE] dial.**

3. **Use the [VALUE] dial to select "Switch," and turn it on/off.**

Editing MFX/COMP/EQ/REVERB/DELAY

1. **Hold down the [SHIFT] button and press the [MULTI FX] button.**

   The FX EDIT MENU screen appears.

2. **Use the [VALUE] dial to select the effect that you want to edit, and then press the [VALUE] dial.**

3. **Use the [VALUE] dial to select the parameter that you want to edit, and then edit the value.**

   ➡ For details, refer to **"Effect Parameters"** (p. 48)

Changing the Knob Assignments

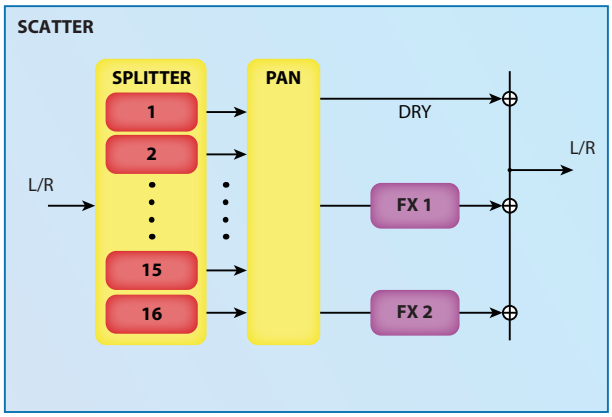
By holding down the [MULTI FX] button for one second or longer, and moving the [FX PRM] or [FX DEPTH] knob, you can change the parameter that's assigned to the knob.

SCATTER

"Scatter" adds a digital-feeling groove to the loop playback by exchanging individual steps within the loop playback and also by changing the playback direction or gate length.

You can apply the effect by pressing the pads, or sequence the effect and apply it to audio input.

Signal flow



Applying the Scatter Effect

Using the Pads to Apply the Effect

By pressing pads, you can apply the effect that is assigned to each pad.

1. Press the PAD [SCATTER] button.

The [SCATTER] button is lit, and the pads are in Scatter mode.

2. Press a pad.

The scatter effect specified for each pad is applied.

MEMO

- **Depending on the settings of the pad, the effect is applied in one of two ways: applied as long as you hold down the pad, or applied cyclically.**
- **If the SIZE or HOLD is set to a value greater than 1, the effect is applied cyclically only to the step at the moment you press the pad.**

Pressing the [SCATTER] Button to Apply the Effect

You can press the [SCATTER] button to apply the effect that is specified for the step.

1. Press the PAD [SCATTER] button.

The pads are in Scatter mode.

2. While in Scatter mode, press the [SCATTER] button.

The [SCATTER] button blinks, and the effect specified for each step is applied.

MOMENTARY mode: The effect is applied only while you hold down the [SCATTER] button.

ALTERNATE mode: The effect turns on/off each time you press the [SCATTER] button.

➡ **"Mode"** (p. 32)

Editing the Scatter Effect

1. Hold down the [SHIFT] button and press the PAD [SCATTER] button.

The SCATTER EDIT MENU screen appears.

2. Use the [VALUE] dial to select the object that you want to edit, and then press the [VALUE] dial.

PAD

Parameter	Value	Explanation
Color	ORANGE, YELLOW, GREEN, BLUE, PURPLE, PINK, WHITE, SKYBLUE, P.YELLOW, P.BLUE, P.PINK, L.RED, L.ORANGE, L.YELLOW, L.GREEN, P.GREEN, L.SKYBLUE, L.BLUE, L.PURPLE	Specifies the color of the pads.
Mask	OFF, ON	Specifies whether playback of another step will overlap during playback. If you raise Size or Hold to extend the playback time of the step, and do not want it to overlap the playback of another step, you can turn this ON so that the step whose timing overlaps is muted. However, the step for which this is turned ON is not muted.
Size	1–16	Specifies the range of steps to which the effect is applied.
Mute	OFF, ON	Mutes the sound.
Reverse	OFF, ON	Plays in reverse.
Retrig	1–32	Repeatedly plays the sound for the specified number of times within the range of steps specified by SIZE.
RetrigGlide	1/32–OFF–32, Inf	Gradually applies change to the sound specified by Retrig. This is effective when you want the glitch effect to change over time. You can also produce change over a longer time by raising Hold. By setting this in the opposite direction than a paired parameter, you can create large change.
Hold	OFF, x1–x16	Repeatedly plays the range of steps specified by SIZE for the specified number of times. If this is OFF, playback continues to the end of the steps available, regardless of the step range.
Chromatic	-24 (-2oct) 0 (Original) +24 (+2oct)	Specifies the pitch in semitone units.
Pitch Fine	-100cent–0cent–+100cent	Finely adjusts the pitch.
Pitch Bend	1%–100%–400%	Smoothly varies the pitch across a wide range.
Pitch Glide	-400%–400%	Applies gradual change to the specified pitch.
Pan	L128–0–127R	Specifies the panning of the sound.
Level	0–255	Adjusts the volume.
Level Glide	-255–0–+255	Applies gradual change to the sound specified by LEVEL.
MFX1 Send	0–255	Specifies the send amount of Scatter to MFX1.
MFX2 Send	0–255	Specifies the send amount of Scatter to MFX2.
Dry Level	0–255	Specifies the volume of sound that does not pass through the effect.

Parameter	Value	Explanation
Attack	0ms–1000ms	Specifies the speed at which the volume is gradually raised when the effect starts being applied. With a setting of 0ms this has no effect.
Decay	0ms–1000ms	Specifies the speed at which the volume is gradually lowered when the effect stops being applied. With a setting of 0ms this has no effect. In some cases, an extremely high setting of DCY TIME could overlap with the operation of ATK TIME, resulting in silence.
Grain	Default, 1–16	Lets you change the grains played back by each step.

SETTING

Parameter	Value	Explanation
Position	PC, TRK1–4, MIXOUT	Selects the position at which Scatter is inserted. **PC:** Input from the USB PC-IN port **TRACK 1-8:** Output of tracks 1–8 **MIXOUT:** Before the compressor
Split	1/1, 1/2, 1/3, 1/4, 1/5, 1/6, 1/7, 1/8, 1/9, 1/10, 1/11, 1/12, 1/13, 1/14, 1/15, 1/16	Specifies the width of the divisions when dividing the clip. For example, if SCALE: 1/16, LENGTH: 16, and MEASURE: 1, then SPLIT: 1/16 → sixteenth notes SPLIT: 1/12 → eighth note triplets SPLIT: 1/8 → eighth notes * **Step numbers beyond the number of divisions specified by SPLIT are ignored.**
Loop Hold	OFF, ON	This lets you loop the playback while holding the audio that is loaded into Scatter. If you change the tempo, the playback speed and pitch will change simultaneously.
Scale	1/8, 1/16, 1/32, 1/4T, 1/8T, 1/16T	Specifies the beat that is the basis of the measure.
Length	1–16	Specifies the basic number of beats (SCALE) in a measure.
Measure	1–8	Specifies the number of measures used by Scatter.
Mode	MOMENTARY, ALTERNATE	Use the [SCATTER] button to switch this on/off. You can use the [C4] knob to switch between ALTERNATE mode and MOMENTARY mode. **MOMENTARY:** Press the [SCATTER] button to turn it on, release the button to turn it off. **ALTERNATE:** The effect alternates on/off each time you press the [SCATTER] button.

MFX 1, 2

Parameter	Value	Explanation
Switch	OFF, ON	Turns the effect on/off.
Type	Switches the type of effect. ➡ **"MFX Parameters"** (p. 52)	
Parameter	The displayed parameters depend on the effect type that is selected. ➡ **"MFX Parameters"** (p. 52)	

Editing the TONE Track

A tone track is a track that provides PCM/VA synthesis and sample playback functionality.

Use a tone track when you want to play pitched phrases.

Sound Editing

1. **Press the TRACK SEL [1]–[4] button of the TONE track whose sound you want to edit.**
2. **Hold down the [SHIFT] button and press the [SOUND] button.**

   The TONE EDIT MENU screen appears.
3. **Use the [VALUE] dial to select "SETTING," and then press the [VALUE] dial.**
4. **Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.**

   ➡ **"Parameter List"** (p. 45)

Editing the Effect of the Sound

1. **Press the TRACK SEL [1]–[4] button of the TONE track whose sound you want to edit.**
2. **Hold down the [SHIFT] button and press the [SOUND] button.**

   The TONE EDIT MENU screen appears.
3. **Use the [VALUE] dial to select "MULTI FX," and then press the [VALUE] dial.**
4. **Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.**

   ➡ **"Effect Parameters"** (p. 48)

Editing the DRUM Track

A drum track is a track that provides PCM synthesis and sample playback functionality.

Sound Editing

1. **Press the TRACK SEL [1]–[4] button of the DRUM track whose sound you want to edit.**
2. **Hold down the [SHIFT] button and press the [SOUND] button.**

   The KIT EDIT MENU screen appears.
3. **Use the [VALUE] dial to select the pad number that you want to edit, and then press the [VALUE] dial.**
4. **Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.**

   ➡ **"Parameter List"** (p. 45)

Editing the Effect of the Sound

1. **Press the TRACK SEL [1]–[4] button of the TONE track whose sound you want to edit.**
2. **Hold down the [SHIFT] button and press the [SOUND] button.**

   The KIT EDIT MENU screen appears.
3. **Use the [VALUE] dial to select "MULTI FX," and then press the [VALUE] dial.**

   COMP can be selected if the track type is DRUM + COMP.
4. **Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.**

   ➡ **"Effect Parameters"** (p. 48)

Changing the Pad's Sound (Instrument)

(INST SELECT)

1. **Press the TRACK SEL [1]–[4] button of the DRUM track whose instrument you want to change.**
2. **Press the PAD [NOTE] button.**
3. **Hold down the [SHIFT] button and press the pad that you want to edit.**

   The DRUM INSTRUMENT browser appears.

   In the DRUM INSTRUMENT browser, instruments or sample files can be loaded into a kit.

   - **PRESET:** Load an instrument or kit from the MC-101's presets
   - **PROJECT:** Load an instrument from a project saved on the SD card
   - **WAVE FILE:** Load a sample file from the SD card

LOOPER Track

This is a track that can play back audio files, or record and play back audio from the input of a track or USB-connected computer.

To load a sample into a looper track

➡ **"Selecting Sounds (Sound Browser)"** (p. 20)

➡ **"Importing Clips (Clip Browser)"** (p. 19)

Making Looper Settings

1. Hold down the [SHIFT] button and press the [SOUND] button.

The LOOPER MENU screen appears.

Playback Settings

Here's how to make playback-related settings for a Looper track.

1. Press the TRACK SEL [1]–[4] button of the LOOPER track whose settings you want to edit.

2. Hold down the [SHIFT] button and press the [SOUND] button.

The LOOPER MENU screen appears.

3. Use the [VALUE] dial to select "SETTING," and then press the [VALUE] dial.

4. Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.

Parameter	Value	Explanation
Level	0–127	Specifies the volume at which the sample plays.
Pan	L63–63R	Specifies the pan of the sound.
Delay Send	0–127	Adjusts the amount sent to the total effect delay.
Reverb Send	0–127	Adjusts the amount sent to the total effect reverb.
Pitch Chrom	-24–+24	Specifies the pitch in semitone steps (maximum ±2 octaves). This setting can also be made in PAD MODE NOTE.
Pitch Fine	-100–+100	Finely adjusts the pitch.
Pitch Shift	0%–400%	Smoothly modifies the pitch in a wide range.
PitchStrch	OFF, TYPE1, TYPE2	Selects the pitch shift / time stretch method. **OFF:** Time stretch is not used; the sample is lengthened by changing its pitch. * **If OFF is selected, the settings in the PITCH tab are ignored (pitch shift is not applied).** **TYPE1:** Time stretch optimized for melodic material is applied. **TYPE2:** Time stretch optimized for rhythm material is applied.
Str Window	1.0, 0.75, 0.5, 0.375, 0.25	This parameter applies to time stretch. Higher values improve the audio quality. If an unnatural impression results when pitch shift or time stretch is used to create a large amount of change, lowering this value might improve the result.
Reverse	OFF, ON	**OFF:** The sample plays forward. **ON:** The sample plays backward.

Editing the Effect of the Sound

1. Press the TRACK SEL [1]–[4] button of the LOOPER track whose sound you want to edit.

2. Hold down the [SHIFT] button and press the [SOUND] button.

The LOOPER MENU screen appears.

3. Use the [VALUE] dial to select "EFFECT," and then press the [VALUE] dial.

4. Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.

➡ **"Effect Parameters"** (p. 48)

Editing the Sample's Waveform

(Playback Region and Time Stretch Settings)

Here you can specify the playback region of the sample, and make settings for time stretch.

MEMO

About time stretch

Looper tracks support time stretch, so that a sample's playback speed can match the BPM without changing its pitch.

1. Press the TRACK SEL [1]–[4] button of the LOOPER track whose settings you want to edit.

2. Hold down the [SHIFT] button and press the [SOUND] button.

The LOOPER MENU screen appears.

3. Use the [VALUE] dial to select "SAMPLE EDIT," and then press the [VALUE] dial.

4. Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.

Parameter	Value	Explanation
Start	0–8388607	Specifies the position at which the sample starts playing.
End	0–-8388607	Specifies the position at which the sample stop playing.
Measure	1–8	Specifies the number of measures that the sample plays. If STRETCH is specified as ENDPOINT, the playback speed changes to match the number of measures.
Scale	1/8, 1/16, 1/8T	Specifies the step resolution on which MEASURE is based.
Length	1–16	Specifies the number of steps on which MEASURE is based.
Strtch	END POINT, ORG BPM	Specifies how to set the tempo that is the reference for time stretch. **END POINT:** The tempo (BPM) is automatically specified according to the END POINT, START POINT, MEASURE, and SCALE. **ORG BPM:** The tempo (BPM) is specified manually.
Org BPM	20.00–250.00	If STRETCH is set to ORG BPM, this specifies the BPM of the sample before it was stretched.

MFX Editing

1. **Press the TRACK SEL [1]–[4] button of the LOOPER track whose settings you want to edit.**
2. **Hold down the [SHIFT] button and press the [SOUND] button.**

   The LOOPER MENU screen appears.
3. **Use the [VALUE] dial to select "EFFECT," and then press the [VALUE] dial.**
4. **Use the [VALUE] dial to select the parameter that you want to edit, and edit the value.**

Parameter	Value/Explanation	
Switch	Switches the effect on/off. OFF, ON	
Type	Turns MFX on/off, and selects the type of MFX to use. ➡ **"MFX Parameters"** (p. 52)	
MFX parameters	Edit the parameters of the selected MFX. ➡ **"MFX Parameters"** (p. 52)	
Level	0–127	Specifies the MFX output volume. Specifies the MFX depth when applying MFX, or specifies the volume of the original sound when not applying MFX.
Delay Send	0–127	Specifies the level of the signal sent to delay.
Reverb Send	0–127	Specifies the level of the signal sent to reverb.

Editing a Clip's Settings

Here's how to specify a clip's length and playback method.

Tone Tracks or Drum Tracks

Making sequencer settings

1. Hold down the [SHIFT] button and press the [MEASURE] button.

The MEAS EDIT screen appears.

2. Use the [VALUE] dial to select a parameter, and edit the value.

Parameter	Value	Explanation
Step Length	1–128	Specifies the length of the clip.
Scale	1/8, 1/16, 1/32, 1/4T, 1/8T, 1/16T	Specifies the step resolution. **1/8:** eighth notes **1/16:** sixteenth notes **1/32:** thirty-second notes **1/4T:** quarter note triplets **1/8T:** eighth note triplets **1/16T:** sixteenth note triplets
Mode	FWD, REV, FWD+REV, INV, RND	Specifies how the sequence plays. **FWD:** Play forward from the first step. **REV:** Play backward from the last step. **FWD+REV:** Play forward from the first step, and after reaching the last step, play backward. **INV:** Play even numbers and odd numbers inverted. **RND:** Play randomly.
Shuffle	-50–+50	Adjusts the strength of shuffle (bounce) for the playback timing. This can be set individually for each clip.

Editing the settings of a clip

1. Hold down the [SHIFT] button and press the [CLIP] button.

The CLIP EDIT screen appears.

2. Use the [VALUE] dial to select a parameter, and edit the value.

Parameter	Value	Explanation
Shuffle	-50–+50	Adjusts the strength of shuffle (bounce) for the playback timing. This can be set individually for each clip.
Step Length	1–128	Specifies the length of the clip.
Scale	1/8, 1/16, 1/32, 1/4T, 1/8T, 1/16T	Specifies the step resolution. **1/8:** eighth notes **1/16:** sixteenth notes **1/32:** thirty-second notes **1/4T:** quarter note triplets **1/8T:** eighth note triplets **1/16T:** sixteenth notes triplets
Mode	FWD, REV, FWD+REV, INV, RND	Specifies how the sequence plays. **FWD:** Play forward from the first step. **REV:** Play backward from the last step. **FWD+REV:** Play forward from the first step, and after reaching the last step, play backward. **INV:** Play even numbers and odd numbers inverted. **RND:** Play randomly.
Transpose	-12–+12	Shifts the playback transposition (Tone only).
Bend Mute	OFF, MUTE	Disables bend (Tone only).

LOOPER

Specifying the playback method

1. Hold down the [SHIFT] button and press the [MEASURE] button.

The MEAS EDIT screen appears.

Parameter	Value	Explanation
Step Length	1–128	Specifies the length of the clip. * **The same setting can also be made in the CLIP settings screen ([SHIFT] + [CLIP]).**
Reverse	OFF, ON	Specifies the sample playback method. * **The same setting can also be made in the CLIP settings screen ([SHIFT] + [CLIP]).**

Editing the settings of a clip

1. Hold down the [SHIFT] button and press the [CLIP] button.

The CLIP EDIT screen appears.

2. Use the [VALUE] dial to select a parameter, and edit the value.

Parameter	Value	Explanation
Step Length	1–128	Specifies the length of the clip. * **The same setting can also be made in the MEASURE setting screen ([SHIFT] + [MEASURE]).**
Reverse	OFF, ON	Specifies the sample playback method. * **The same setting can also be made in the MEASURE setting screen ([SHIFT] + [MEASURE]).**

Assigning Parameters to the Knobs (KNOB ASSIGN)

You can assign the desired parameters to each track's [SOUND], [FILTER], [MOD], and [FX] knobs, and use the knobs to control those parameters.

Operating the Unit

1. While holding down one of the [SOUND], [FILTER], [MOD], or [FX] buttons for one second or longer, turn the [C1]–[C4] knob corresponding to the track.

When you turn a knob, the name of the parameter to be assigned appears in the screen, and is changed.

Knob	Track
C1	Track 1
C2	Track 2
C3	Track 3
C4	Track 4

Parameter list

MEMO

The parameters differ depending on the track type.

Parameter	Explanation
No Assign	No assignment.
Level	Adjusts volume.
Pan	Adjusts pan.
Coarse Tune (Tone, Drum only)	Shifts the pitch in units of a semitone.
Fine Tune (Tone, Drum only)	Finely adjusts the pitch in units of one cent.
Portament (Tone only)	Specifies whether portamento is applied. Specify "ON" to apply portamento, or "OFF" if not.
Porta Time (Tone only)	Specifies the time over which the pitch changes when using portamento. Larger values lengthen the time over which the pitch moves to the next note.
Cutoff (Tone, Drum only)	Adjusts how far the filter is open. Increasing this value makes the sound brighter, and decreasing it makes the sound darker.
Resonance (Tone, Drum only)	Emphasizes the portion of the sound in the region of the cutoff frequency, adding character to the sound. Excessively high settings can produce oscillation, causing the sound to distort. Increasing this value strengthens the character, and decreasing it weakens the character.
Attack (Tone, Drum only)	Adjusts the time over which the sound reaches its maximum volume after you press the key. Larger settings of this value make the attack gentler, and smaller settings make the attack sharper.
Decay (Tone, Drum only)	Adjusts the time over which the volume decreases from its maximum value. Larger settings of this value make the decay longer, and smaller settings make the decay shorter.
Release (Tone, Drum only)	The time it takes after the key is released for a sound to become inaudible. Larger settings of this value make the sound linger, and smaller settings make the sound end more sharply.
Vib Rate (Tone only)	Adjusts the vibrato rate (the speed at which pitch is modulated). Larger values modulate the pitch more rapidly, and smaller values modulate it more slowly.
Vib Depth (Tone only)	Adjusts the vibrato depth (the depth at which pitch is modulated). Larger values modulate the pitch more widely, and smaller values modulate the pitch less widely.
Vib Delay (Tone only)	Adjusts the time until vibrato (pitch modulation) starts to be applied. Larger values lengthen the time until vibrato starts to be applied, and smaller values shorten the time.
Oct Shift (Tone only)	Shifts the pitch in units of one octave.
Delay Send	Specifies the send level of the total effect to the delay.
Reverb Send	Specifies the send level of the total effect to the reverb.
Pitch Bend (Tone only)	Uses the FILTER, MOD, or FX knob as pitch bender.
Pitch Chrom (Looper only)	Specifies the pitch in semitone steps (maximum ±2 octaves).
Pitch Fine (Looper only)	Finely adjusts the pitch.
Pitch Shift (Looper only)	Smoothly modifies the pitch in a wide range.
Reverse (Looper only)	**OFF:** The sample plays forward. **ON:** The sample plays backward.
SYS-Ctrl1–4	Connects to a parameter specified by MATRIX CONTROL in SOUND EDIT. ➡ For details, refer to **"Parameter List"** (p. 45)

Tempo Settings

Master Clock

Clip switching and play/stop occurs at intervals of the master clock.

This means that the performances of each track can be synchronized regardless of the timing of operation.

The cycle of the master clock is specified by **"SCALE"** and **"STEP LENGTH."**

Master Clock Settings

1. Press the [TEMPO] button.

The TEMPO screen appears.

2. Use the [VALUE] dial to select the parameter that you want to edit, and specify the value.

Parameter	Value	Explanation
BPM	40.00–300.00	This is the tempo of the entire project. In this page, you can also use the VALUE dial to change the tempo.
MstrScale	1/8, 1/16, 1/32, 1/4T, 1/8T, 1/16T	Specifies the resolution. **1/8:** eighth notes **1/16:** sixteenth notes **1/32:** thirty-second notes **1/4T:** quarter note triplets **1/8T:** eighth note triplets **1/16T:** sixteenth note triplets
MstrStepLen	2–128	Specifies the cycle.

Tap Tempo

1. Holding down the [SHIFT] button and pressing the [EXIT] button three or more times.

The tempo is specified as average timing at which you press the button.

System Settings (SYSTEM)

Here you can specify how the pads, MIDI, and the knobs operate.

These settings are saved in the MC-101 unit.

1. **Hold down the [SHIFT] button and press the [FILTER] button.**

   The UTILITY MENU screen appears.

2. **Use the [VALUE] dial to select "SYSTEM," and then press the [VALUE] dial.**

   The SYSTEM SETTING screen appears.

3. **Use the [VALUE] dial to select the parameter that you want to edit, and specify the value.**

CTRL

Make settings for the pads and knobs.

Parameter	Value	Explanation
Knob Mode	DIRECT, CATCH	**DIRECT:** When a knob is moved, control data of the corresponding position is always output. **CATCH:** Control data is output after the knob passes through the current value of the parameter.
Pad Trg Sens	10–200	Adjusts the sensitivity of the pads to repeated strikes. With lower values, the pads will accept repeated strikes at a shorter time interval. Increase this value if you don't want repeated strikes to be accepted inadvertently.
USBMix	PRE T-FX, POST T-FX	Specifies whether sound that is input via the USB-connected MIX OUT port is input before or after TOTAL FX. ➡ "Block Diagram" (p. 89)
Load Proj	LAST, INIT	**LAST:** At startup, the project that was last saved will be loaded. **INIT:** At startup, a project will not be loaded. A new project will be created.

MIDI

Parameter	Value	Explanation
Sync Src	AUTO, INT, MIDI, USB	Specifies the tempo source. If this is "AUTO," the tempo automatically synchronizes to MIDI clock if MIDI clock is being input via the MIDI IN connector or the USB port. If this is "INT," the tempo specified on the MC-101 is used.
Sync Out	OFF, ON	Specifies whether clock, start, and stop messages are transmitted (ON) or are not transmitted (OFF) to the devices connected to the corresponding MIDI port.
SyncOut USB	OFF, ON	Specifies whether clock, start, and stop messages are transmitted (ON) or are not transmitted (OFF) to the USB-connected device.
RX Start Stop	OFF, ON	When synchronized to external MIDI clock, this setting specifies whether the step sequencer's start/stop is controlled from the device connected to the corresponding MIDI port (ON) or is not controlled (OFF).
RX Start USB	OFF, ON	When synchronized to external MIDI clock, this setting specifies whether step sequencer's start/stop is controlled from the USB-connected device (ON) or is not controlled (OFF).
Track1–4 Ch	1–16	Specifies the MIDI channel of each track.
Device ID	17–32	When transmitting and receiving system exclusive messages, the device ID numbers of both devices must match.
Soft Thru	OFF, ON	If this is ON, MIDI messages that are input from the MIDI IN connector are re-transmitted without change from the MIDI OUT connector.
USB Thru	OFF, ON	Specifies whether MIDI messages received at the USB port or MIDI IN port are retransmitted without change from the MIDI OUT connector and USB port (ON) or not (OFF). If this is ON, MIDI messages received at the USB port are sent to the internal sound engine and to the MIDI OUT connector, and MIDI messages received at the MIDI IN connector are sent together with messages from the internal sound engine to the USB port.
Edit Note	OFF, ON	Specifies whether note messages from an external MIDI device will enter steps or execute editing (ON) or not (OFF).

DISPLAY

Parameter	Value	Explanation
Contrast	1–10	Adjusts the contrast of the display screen.
Backlight	1–10	Adjusts the brightness of the display backlight.
LED Bright	1–10	Specifies the brightness of the fader and button LEDs.
LED Glow	1–10	Adjusts the brightness when a button LED is dimly lit.
Demo Mode	OFF, 1min–10min	Specifies the time (minutes) until the LED demo is shown.

Initializing a New SD Card (FORMAT)

1. **Hold down the [SHIFT] button and press the [FILTER] button.**

   The UTILITY MENU screen appears.

2. **Use the [VALUE] dial to select "SD CARD FORMAT," and then press the [VALUE] dial.**

3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   The SD card is initialized.

   If you decide to cancel, use the [VALUE] dial to select **"Cancel,"** and then press the [VALUE] dial.

Returning to the Factory Settings (FACTORY RESET)

This returns the system settings to their factory-set state.

NOTE

If necessary, be sure to save the project before you execute FACTORY RESET.

1. **Hold down the [SHIFT] button and press the [FILTER] button.**

   The UTILITY MENU screen appears.

2. **Use the [VALUE] dial to select "FACTORY RESET," and then press the [VALUE] dial.**

3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   The system settings return to their factory-set state.

   If you decide to cancel, use the [VALUE] dial to select **"Cancel,"** and then press the [VALUE] dial.

Optimizing the Internal Memory (LOOPER OPTIMIZE)

As samples are loaded into the looper and then deleted, the free space in memory can become fragmented, so that the available space cannot be used efficiently.

By using Looper Optimize, you can optimize the internal memory usage and increase the storage that is available for recording.

1. **Hold down the [SHIFT] button and press the [FILTER] button.**

   The UTILITY MENU screen appears.

2. **Use the [VALUE] dial to select "LOOPER OPTIMIZE," and then press the [VALUE] dial.**

3. **Use the [VALUE] dial to select "OK," and then press the [VALUE] dial.**

   Memory optimization is executed.

   If you decide to cancel, use the [VALUE] dial to select **"Cancel,"** and then press the [VALUE] dial.

Using a Connected Computer to Manage the SD Card

By USB-connecting the MC-101 in Storage mode to your computer, you can use the computer to manage the contents of the SD card in the MC-101.

* **Other operations cannot be performed while in Storage mode.**

1. **Make sure that the MC-101 is powered-off, and that no USB cable is connected.**

2. **While holding down the [PROJECT] button, power-on the MC-101.**

   The MC-101 starts in Storage mode.

3. **Insert the USB cable, and connect it to your computer.**

   Your computer shows the SD card folder.

4. **Before disconnecting, use your computer to perform the appropriate operation for safely removing the external device.**

5. **Power-off the MC-101.**

List of Shortcut Keys

Switching Screens and Modes

Operation	Operation	
To access the quantize edit screen	Hold down the [SHIFT] button and	Press the [●] (record) button.
To access the sound edit screen		Press the [SOUND] button.
To access the UTILITY screen		Press the [FILTER] button.
To access the FIRST/LAST STEP screen		Press the PAD [SEQ] button.
To access the CLIP setting screen		Press the PAD [CLIP] button.
To access the NOTE mode setting screen		Press the PAD [NOTE] button.
To access the SCATTER setting screen		Press the PAD [SCATTER] button.
To edit the total effect Multi-Effect		Press the [MULTI FX] button.
To access the track setting screen		Press the TRACK SEL [1]–[4] button.
To access the COPY menu screen		Press the [FX] button.
To access the MOTION menu screen		Press the [MOD] button.
To access the MEASURE setting screen		Press the MEASURE [<] [>] button.

Phrase Editing

Operation	Operation	
To step-record (Tone track only)	When in SEQ mode,	Hold down the [●] (record) button and press the pad corresponding to the step that you want to record.
To enter weak drum beats (DRUM TRACK)		Hold down the TRACK SEL [1]–[4] button of a DRUM track and press a pad.
To mute the drum part (for each clip)	When in Note mode,	Hold down the PAD [NOTE] button and press the pad.
To delete a track	Hold down the [SHIFT] button and [PROJECT] button and	Press the TRACK SEL [1]–[4] button.
To specify the transposition of a clip's phrase	Select a TONE track, and in Note mode,	Hold down the [SHIFT] button and press the pad.

Performance

Operation	Operation	
To mute a drum part (for each track)	When in Note mode,	Hold down the TRACK SEL [1]–[4] button and press the pad.
To forcibly return to the beginning of the pattern during pattern playback	During playback	Hold down the [SHIFT] button and press the [►] (play/stop) button.
To silence sound that continues after stopping	While stopped	
To stop/play the currently-playing clip	During playback	Hold down the [CLIP] button and press theTRACK SEL [1]–[4] button.
To cancel First/Last Step	When in the First/Last Step setting screen,	Hold down the [SHIFT] button and press the [PROJECT] button.

Controller Values and Parameter Editing

Operation	Operation	
To specify the parameter operated by the total effect knobs	Hold down the [MULTI FX] button and	Turn the [FX PRM] or [FX DEPTH] knob.
To view the value of a knob	Hold down the [SHIFT] button and	Turn the [C1]–[C4] knob.
To specify tap tempo		Press the [EXIT] button three or more times.
To clear the Scatter pad parameters	When in SCATTER mode, Hold down the [SHIFT] button and [PROJECT] button and	Press the pad.
To specify the transposition of the keyboard (TONE track only)	Hold down the PAD [NOTE] button and	Press the pad.

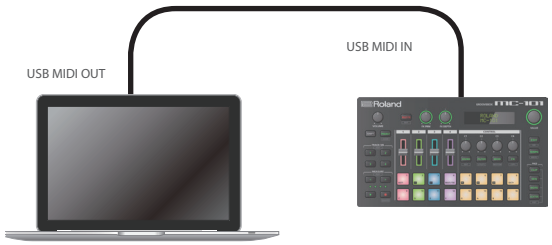
Error Message List

Display	Explanation	Action/Explanation
Now Playing	This operation cannot be executed because playback is occurring.	Stop playback, and then execute.
Locked Proj File	This operation cannot be executed because the project is locked.	Unlock the project.
Memory Full!	This operation cannot be executed because there is insufficient memory.	Delete unneeded looper clips.
Clip Not Found!	This operation cannot be executed because the clip does not exist.	Select a clip in which a phrase is recorded.
Wrong TrackType!	This operation cannot be executed because the track type is wrong.	Check the track type.
Clip Is Exist!	This operation cannot be executed because a clip exists.	Select an empty clip.
Optimize Error!	Failed to optimize memory.	
No SD CARD	No SD card is inserted. Alternatively, it is incompletely inserted.	Turn off the power, and securely insert the SD card.
Track Not Found!	This operation cannot be executed because no track exists.	Select a project in which tracks exist.
Too Many Looper!	This operation cannot be executed because you have reached the maximum number of LOOPER tracks that can be created.	Delete unneeded LOOPER tracks.

Interoperation with Other Devices

Synchronizing with a DAW

The MC-101 can transmit and receive MIDI clock (F8) to synchronize its tempo.



Computer MC-101

Synchronizing with a TR-8S

The MC-101 can synchronize with a TR-8s by connecting the units via a commercially available MIDI cable.

MC-101 TR-8S

Parameter List

Part Parameter (KNOB CTRL)

Parameters with the "ASSIGN" showing can be assigned to the knob.

Parameter	Value	Explanation
Level ASSIGN	0–127	Adjusts the volume of each part.
Pan ASSIGN	L64–0–63R	Specifies the panning of each part's sound when using stereo output.
Delay Send (Delay Send Level) ASSIGN	0–127	Specifies the send level to delay.
Reverb Send (Reverb Send Level) ASSIGN	0–127	Specifies the send level to reverb.
Coarse Tune ASSIGN	-48–+48	Shifts the pitch in units of a semitone.
Fine Tune ASSIGN	-50–+50	Finely adjusts the pitch in units of one cent.
Mono/Poly	MONO, POLY, TONE	Choose MONO if you want the tone assigned to the part to play monophonically; choose POLY if you want to play it polyphonically. Choose TONE if you want to use the setting specified by the tone.
Legato (Legato Switch)	OFF, ON, TONE	If you play monophonically, you can apply legato. "Legato" is a performance technique that smoothly connects one note to the next. This produces an effect similar to hammering-on or pulling-off when playing a guitar. Choose "ON" to apply legato, or "OFF" if you don't want to apply it. Choose "TONE" if you want to use the setting specified by the tone.
Bend Range	0–24, TONE	Specifies the amount of pitch change in semitone units (maximum two octaves) that occurs when you move a controller when pitch bend is assigned to that controller. Choose TONE if you want to use the setting specified by the tone.
Portament (Portamento Switch) ASSIGN	OFF, ON, TONE	Specifies whether portamento is applied. Select ON to apply portamento, or OFF if you don't want to apply portamento. Choose TONE if you want to use the setting specified by the tone.
Porta Time (Portamento Time) ASSIGN	0–127, TONE	When portamento is used, this specifies the time over which the pitch will change. Higher settings will cause the pitch change to the next note to take more time. Choose TONE if you want to use the setting specified by the tone.
Cutoff (Cutoff Offset) ASSIGN	-64–+63	Adjusts how far the filter is open. Increasing this value makes the sound brighter, and decreasing it makes the sound darker.
Resonance (Resonance Offset) ASSIGN	-64–+63	Emphasizes the portion of the sound in the region of the cutoff frequency, adding character to the sound. Excessively high settings can produce oscillation, causing the sound to distort. Increasing this value strengthens the character, and decreasing it weakens the character.
Attack (Attack Time Offset) ASSIGN	-64–+63	Adjusts the time over which the sound reaches its maximum volume after you press the key. Larger settings of this value make the attack gentler, and smaller settings make the attack sharper.
Decay (Decay Time Offset) ASSIGN	-64–+63	Adjusts the time over which the volume decreases from its maximum value. Larger settings of this value make the decay longer, and smaller settings make the decay shorter.
Release (Release Time Offset) ASSIGN	-64–+63	Adjusts the time over which the sound decays to silence after you release the key. Larger settings of this value make the sound linger, and smaller settings make the sound end more sharply.
Vib Rate (Vibrato Rate) ASSIGN	-64–+63	Adjust the vibrato speed (the rate at which the pitch is modulated). The pitch will be modulated more rapidly for higher settings, and more slowly with lower settings.
Vib Depth (Vibrato Depth) ASSIGN	-64–+63	This adjusts the depth of the vibrato effect (the depth at which the pitch is modulated). The pitch will be modulated more greatly for higher settings, and less with lower settings.
Vib Delay (Vibrato Delay) ASSIGN	-64–+63	Adjusts the time until vibrato (pitch modulation) starts to apply. Higher settings will produce a longer delay time before vibrato begins, while lower settings produce a shorter time.
Oct Shift (Octave Shift) ASSIGN	-3–+3	Shifts the pitch of the keyboard in units of one octave.
Velo Sens (Velocity Sens Offset)	-63–+63	Adjusts the velocity sensitivity. Larger settings raise the sensitivity.
VoiceAsgn (Voice Assign Mode)	Sets the way sounds are played when the same key is pressed a number of times.	
	SINGLE	Only one note of the same key is played at a time. If a sound with a long sustain is played repeatedly, the sound of the previous note is silenced before the next note is heard.
	LIMIT	Notes played on the same key are layered. If a sound with a long sustain is played repeatedly, the previous sounds are silenced after a certain number of notes accumulate.
	FULL	Notes played on the same key are layered. Even if a sound with a long sustain is played repeatedly, the notes are unrestrictedly layered without silencing the previous sounds.
Bend Mode	Specifies what occurs when you operate a controller when pitch bend is assigned to it.	
	NORMAL	The conventional pitch bend effect occurs.
	C+L (CATCH + LAST)	The pitch bend effect applies only to the last-played note. If a note-on occurs while pitch bend is already applied, the new note sounds at the center pitch. The pitch starts changing only after the controller passes through the center position.
	TONE	The tone's settings are used.
Unison Sw (Unison Switch)	OFF, ON, TONE	This layers a single sound. Choose "ON" if you want to use unison, or "OFF" if you don't. Choose "TONE" if you want to use the setting specified by the tone. Parts whose Unison Switch is On will be MONO.
SYS-Ctrl1–4 ASSIGN	0–127	Specifies the values of SYS-Ctrl 1–4. By connecting SYS-Ctrl 1–4 with tone parameters, you can use the knobs to control values other than part parameters.
Pitch Bend ASSIGN	-8192–+8191	Specifies the Pitch Bend.

MFX

Parameter	Value	Explanation
Switch	OFF, ON	Switches the MFX on/off.
Type	Selects the MFX type.	
Dly Send	0–127	Adjusts the amount of chorus. If you don't want to add the chorus effect, set it to 0.
Rev Send	0–127	Adjusts the amount of reverb. If you don't want to add the reverb effect, set it to 0.

Parameter	Value	Explanation
MFX parameters	Edit the parameters for the selected MFX. The available parameters differ depending on the type of the effects you selected in MFX Type. ➡ **"MFX Parameters"** (p. 52)	

MFX CTRL

Parameter	Value	Explanation
Src1–4	Specifies the MIDI message that will control the corresponding MFX CONTROL parameter.	
	OFF	MFX will not be used.
	CC01–31	Controller number 1–31
	CC33–95	Controller number 33–95
	BEND	Pitch Bend
	AFT	Aftertouch
	SYS-CTRL1–4	Use the controller that is assigned by the System Control Source 1–4 (or Tone Control Source 1–4).
Asgn1–4		Specifies which of the multi-effect parameters are controlled using MFX CONTROL. The multi-effects parameters available for control will depend on the multi-effects type.
Sens1–4	-63–+63	Specifies the depth of MFX CONTROL. Specify a positive "+" value if you want to change the value of the assigned destination in a positive direction (larger, toward the right, faster, etc.), or specify a negative value "-" if you want to change the value in a negative direction (smaller, toward the left, slower, etc.). Larger values will allow a greater amount of control.

Controlling a MFX via MIDI (MFX CONTROL)

You can use MIDI messages such as control change messages to control the principal MFX parameters. This capability is called "MFX CONTROL (multi-effects control)."

The editable parameters are pre-determined according to the MFX type. You can specify up to four parameters for multi-effect control.

To use MFX CONTROL, you'll need to specify which MIDI message (Source) will affect which parameter (Destination), and how greatly (Sens).

Drum Kit Tone Parameters (Drum)

MFX

Parameter	Value	Explanation
Switch	OFF, ON	Switches the MFX on/off.
Type	Selects the MFX type.	
Delay Send	0–127	Adjusts the amount of delay. If you don't want to add the delay effect, set it to 0.
Reverb Send	0–127	Adjusts the amount of reverb. If you don't want to add the reverb effect, set it to 0.
MFX parameters	Edit the parameters for the selected MFX. The available parameters differ depending on the type of the effects you selected in MFX Type. ➡ **"MFX Parameters"** (p. 52)	

KIT MFX CTRL

Parameter	Value	Explanation
Src1–4	Specifies the MIDI message that will control the corresponding MFX CONTROL parameter.	
	OFF	MFX will not be used.
	CC01–31	Controller number 1–31
	CC33–95	Controller number 33–95
	BEND	Pitch Bend
	AFT	Aftertouch
	SYS-CTRL1–4	Use the controller that is assigned by the System Control Source 1–4.
Asgn1–4		Specifies which of the multi-effect parameters are controlled using MFX CONTROL. The multi-effects parameters available for control will depend on the multi-effects type.
Sens1–4	-63–+63	Specifies the depth of MFX CONTROL. Specify a positive "+" value if you want to change the value of the assigned destination in a positive direction (larger, toward the right, faster, etc.), or specify a negative value "-" if you want to change the value in a negative direction (smaller, toward the left, slower, etc.). Larger values will allow a greater amount of control.

DRUM COMP1–6

* **Only a drum track with compressors can use KIT COMP.**

Parameter	Value	Explanation
Switch	OFF, ON	Compressor on/off
Attack	0.1–100 [ms]	Time from when the input exceeds the threshold until compression begins
Release	10–1000 [ms]	Time from when the input falls below the threshold until compression is turned off
Thres	-60–0 [dB]	Level at which compression is applied
Ratio	1: 1–inf: 1	Compression ratio
Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than Threshold. Higher values produce a smoother transition.
Gain	-24–+24 [dB]	Level of the output sound
Out Asgn	DRY, MFX	Specifies the compressor output destination.

PAD CTRL

Parameter	Value	Explanation
Level	0–127	Adjusts the volume of the key.
Pan	L64–0–63R	Adjusts the stereo location of the key.
Delay Send	0–127	Adjusts the amount of delay for each key.
Reverb Send	0–127	Adjusts the amount of reverb for each key.
Mute Grp	OFF, 1–31	On an actual acoustic drum set, an open hi-hat and a closed hi-hat sound can never occur simultaneously. To reproduce the reality of this situation, you can set up a Mute Group. The Mute Group function allows you to designate two or more keys that are not allowed to sound simultaneously. Up to 31 Mute Groups can be used. Keys that are not belong to any such group should be set to "OFF."
Out Assign	DRY, MFX, COMP1–6	Specifies the output destination for each key.
Key Offset	-24–+24	Shifts the pitch in units of a semitone.
Fine Ofst	-50–+50 [cent]	Finely adjusts the pitch in units of one cent.
Cutoff Ofst	-100–+100	Adjusts how far the filter is open. Increasing this value makes the sound brighter, and decreasing it makes the sound darker.
Reso Ofst	-100–+100	Emphasizes the portion of the sound in the region of the cutoff frequency, adding character to the sound. Excessively high settings can produce oscillation, causing the sound to distort. Increasing this value strengthens the character, and decreasing it weakens the character.
Attack Ofst	-100–+100	Adjusts the time over which the sound reaches its maximum volume after you press the key. Larger settings of this value make the attack gentler, and smaller settings make the attack sharper.
Decay Ofst	-100–+100	Adjusts the time over which the volume decreases from its maximum value. Larger settings of this value make the decay longer, and smaller settings make the decay shorter.
ReleaseOfst	-100–+100	The time it takes after the key is released for a sound to become inaudible. If Envelope Mode is NO-SUS, this is the time until the sounded note becomes inaudible. Larger settings of this value make the sound linger, and smaller settings make the sound end more sharply.

PAD EQ

Parameter	Value	Explanation
EQ Switch	OFF, ON	Turns the equalizer on/off for each key.
Low Gain	-24.0–+24.0 [dB]	Gain of the low frequency range.
Mid Gain	-24.0–+24.0 [dB]	Specifies the reference frequency of the mid-frequency range.
HighGain	-24.0–+24.0 [dB]	Gain of the high frequency range.
Low Freq	20–16000 [Hz]	Frequency of the low range.
Mid Freq	20–16000 [Hz]	Adjusts the amount of mid-frequency boost/cut.
HighFreq	20–16000 [Hz]	Frequency of the high range.
Mid Q	0.5–16.0 (0.1step)	Specifies the width of the mid-frequency range. Set a higher value for Q to narrow the range to be affected.

Effect Parameters

Total Effect Parameters

COMP

Parameter	Value	Explanation
Switch	OFF, ON	Specifies whether the master COMP (a compressor applied to the entire sound generator of the MC-101) is used (ON) or not used (OFF).
Low Attack Time	0.1–100 [ms]	Specifies the time from when the input exceeds Low Thres until compression is applied to the volume of the low-frequency band.
Low Release Time	10–1000 [ms]	In a state when compression is already being applied, this specifies the time from when the input decreases below Low Thres until the low-frequency band stops being compressed.
Low Threshold	-60–0 [dB]	Specifies the volume level at which compression starts for the low-frequency band.
Low Ratio	1: 1, 2: 1, 3: 1, 4: 1, 8: 1, 16: 1, 32: 1, INF: 1	Specifies the compression ratio for the low-frequency band.
Low Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than Low Thres. Higher values produce a smoother transition.
Low Output Gain	-24.0–+24.0 [dB]	Specifies the output volume of the low-frequency band.
Mid Attack Time	0.1–100 [ms]	Specifies the time from when the input exceeds Mid Thres until compression is applied to the volume of the mid-frequency band.
Mid Release Time	10–1000 [ms]	In a state when compression is already being applied, this specifies the time from when the input decreases below Mid Thres until the mid-frequency band stops being compressed.
Mid Threshold	-60–0 [dB]	Specifies the volume level at which compression starts for the mid-frequency band.
Mid Ratio	1: 1, 2: 1, 3: 1, 4: 1, 8: 1, 16: 1, 32: 1, INF: 1	Specifies the compression ratio for the mid-frequency band.
Mid Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than Mid Thres. Higher values produce a smoother transition.
Mid Output Gain	-24.0–+24.0 [dB]	Specifies the output volume of the mid-frequency band.
HighAttack Time	0.1–100 [ms]	Specifies the time from when the input exceeds High Thres until compression is applied to the volume of the high-frequency band.
High Release Time	10–1000 [ms]	In a state when compression is already being applied, this specifies the time from when the input decreases below High Thres until the high-frequency band stops being compressed.
High Threshold	-60–0 [dB]	Specifies the volume level at which compression starts for the high-frequency band.
High Ratio	1: 1, 2: 1, 3: 1, 4: 1, 8: 1, 16: 1, 32: 1, INF: 1	Specifies the compression ratio for the high-frequency band.
High Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than High Thres. Higher values produce a smoother transition.
High Output Gain	-24.0–+24.0 [dB]	Specifies the output volume of the high-frequency band.
Split Freq Low	16–16000 [Hz]	Specifies the frequency at which the low-frequency band (LOW) and mid-frequency band (MID) are divided.
Split Freq Hi		Specifies the frequency at which the high-frequency band (HIGH) and mid-frequency band (MID) are divided.

EQ

Parameter	Value	Explanation
Switch	OFF, ON	Specifies whether the master EQ (an equalizer applied to the entire sound generator of the MC-101) is used (ON) or not used (OFF).
EQ Input Gain	-24–+24 [dB]	Adjusts the amount of boost/cut for the input to the EQ.
Low Gain	-24–+24 [dB]	Gain of the low frequency range.
Low Freq	20–16000 [Hz]	Frequency of the low range.
Mid1 Gain	-24–+24 [dB]	Gain of the middle frequency range 1.
Mid1Freq	20–16000 [Hz]	Frequency of the middle range 1.
Mid1 Q	0.5–16.0	Width of the middle frequency range 1.Set a higher value for Q to narrow the range to be affected.
Mid2 Gain	-24–+24 [dB]	Gain of the middle frequency range 2.
Mid2Freq	20–16000 [Hz]	Frequency of the middle range 2.
Mid2 Q	0.5–16.0	Width of the middle frequency range 2.Set a higher value for Q to narrow the range to be affected.
Mid3 Gain	-24–+24 [dB]	Gain of the middle frequency range 3.
Mid3 Freq	20–16000 [Hz]	Frequency of the middle range 3.
Mid3 Q	0.5–16.0	Width of the middle frequency range 3.Set a higher value for Q to narrow the range to be affected.
High Gain	-24–+24 [dB]	Gain of the high frequency range.
HighFreq	20–16000 [Hz]	Frequency of the high range.

MFX

Parameter	Value	Explanation
Switch	OFF, ON	Turns the effect on/off.
MFX parameters	(Shows the parameters of the selected MFX.)	
Delay Send	0–127	Specifies the delay send level of the sound after MFX is applied.
Reverb Send	0–127	Specifies the reverb send level of the sound after MFX is applied.
MFX CTRL Src1–4 (MFX CtrlSrc 1–4)	Specifies the MIDI message that will control the corresponding MFX CONTROL parameter.	
	OFF	MFX will not be used.
	MOD: CC01–31	Controller number 1–31
	CC33–PHASR: CC95	Controller number 33–95
	BEND	Pitch Bend
	AFT	Aftertouch
	SYS-CTRL1–SYS-CTRL4	The controllers assigned by the system parameters SysCtrlSrc1–4 Source are used.
MFX CTRL Dst1–4 (MFX CtrlDst 1–4)	Specifies which of the multi-effect parameters are controlled using MFX CONTROL. The multi-effects parameters available for control will depend on the multi-effects type.	
MFX CTRL Sens1–4 (MFX CtrlSens 1–4)	-63–+63	Specifies the depth of MFX CONTROL. Specify a positive "+" value if you want to change the value of the assigned destination in a positive direction (larger, toward the right, faster, etc.), or specify a negative value "-" if you want to change the value in a negative direction (smaller, toward the left, slower, etc.). Larger values will allow a greater amount of control.

Controlling a MFX via MIDI (MFX CONTROL)

You can use MIDI messages such as control change messages to control the principal MFX parameters. This capability is called "MFX CONTROL (multi-effects control)."

The editable parameters are pre-determined according to the MFX type. You can specify up to four parameters for multi-effect control.

To use MFX CONTROL, you'll need to specify which MIDI message (Source) will affect which parameter (Destination), and how greatly (Sens).

EQ (Part 1–4)

Parameter	Value	Explanation
Switch	OFF, ON	Turns the equalizer (EQ) on/off.
In Gain (Input Gain)	-24–+24 [dB]	Specifies the amount of boost/cut for the input sound.
Low Gain (Low Gain)	-24–+24 [dB]	Specifies the amount of boost/cut for the low-frequency region.
Low Freq (Low Frequency)	20–16000 [Hz]	Frequency of the low range.
Mid Gain (Mid Gain)	-24–+24 [dB]	Specifies the amount of boost/cut for the mid-frequency region.
Mid Freq (Mid Frequency)	20–16000 [Hz]	Adjusts the amount of mid-frequency boost/cut.
Mid Q (Mid Q)	0.5–16.0	Specifies the width of mid-frequency region. Set a higher value for Q to narrow the range to be affected.
High Gain (High Gain)	-24–+24 [dB]	Specifies the amount of boost/cut for the high-frequency region.
HighFreq (High Frequency)	20–16000 [Hz]	Frequency of the high range.

DELAY

Parameter	Value	Explanation
Chorus Type	Selects the types of delay.	
Chorus Switch	OFF, ON	Switches the delay on/off.
Chorus Level	0–127	Specifies the output level of the sound with delay applied.
Reverb Send	0–127	Specifies the send level to reverb.
Delay Parameters	Edit the parameters of the selected delay type. The available parameters differ depending on the type of chorus you selected in Chorus Type.	

Delay Parameters

CHORUS

This is a stereo chorus.

Parameter	Value	Explanation
Rate	0–127	Frequency of modulation
Depth	0–127	Depth of modulation
Feedback	0–127	Level at which chorus sound is returned to the input

CE-1

This models the classic BOSS CE-1 chorus effect unit.

It provides a chorus sound with a distinctively analog warmth.

Parameter	Value	Explanation
Intensity	0–127	Chorus depth

SDD-320

This models Roland's DIMENSION D (SDD-320). It provides a clear chorus sound.

Parameter	Value	Explanation
Mode	1–4, 1+4, 2+4, 3+4	Switches the mode.

JUNO-106 CHORUS

This models the chorus effects of the Roland JUNO-106.

Parameter	Value	Explanation
Mode	I, II, I+II, JX I, JX II	Type of Chorus
Noise Level	0–127	Volume of the noise produced by chorus

DELAY

This is a stereo delay.

Parameter	Value	Explanation
Delay (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
Delay (msec) Delay (note)	1–1300 [msec] Note ➡ **"Note"** (p. 88)	Adjusts the delay time from the direct sound until the delay sound is heard.
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don't want to filter out any high frequencies, set this parameter to BYPASS.

T-CTRL DELAY

A stereo delay in which the delay time can be varied smoothly.

Parameter	Value	Explanation
Delay (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
Delay (msec) Delay (note)	1–1300 [msec] Note ➡ **"Note"** (p. 88)	Adjusts the delay time from the direct sound until the delay sound is heard.
Acceleration	0–15	When you change the delay time, this specifies the time over which the current delay time changes to the specified delay time. This affects the speed of pitch change as well as the delay time.
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don't want to filter out any high frequencies, set this parameter to BYPASS.

DELAY → TREMOLO

Tremolo is applied to the delay sound.

Parameter	Value	Explanation
Input Mode	MONAURAL	The input is mono-mixed.
	STEREO	The sound is input in stereo.
Delay (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
Delay (msec) Delay (note)	1–1300 [msec] Note ➡ **"Note"** (p. 88)	Adjusts the delay time from the direct sound until the delay sound is heard.
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don't want to filter out any high frequencies, set this parameter to BYPASS.
Tremolo Switch	OFF, ON	Switches the tremolo effect on/off
Tremolo Mod Wave	Modulation Wave (panning)	
	TRI	Triangle wave
	SQR	Square wave
	SIN	Sine wave
	SAW1	Sawtooth wave
	SAW2	
	TRP	Trapezoidal wave

Parameter	Value	Explanation
Tremolo Rate (sync sw)	OFF, ON	If this is on, the tremolo synchronizes with the tempo.
Tremolo Rate (Hz)	0.05–10.00 [Hz]	Tremolo rate
Tremolo Rate (note)	Note ➡ **"Note"** (p. 88)	
Tremolo Depth	0–127	Tremolo depth

2TAP PAN DELAY

Delay sound is heard in the two locations you specify.

Parameter	Value	Explanation
Delay (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
Delay (msec)	1–1300 [msec]	Adjusts the time until the second delay sound is heard.
Delay (note)	Note ➡ **"Note"** (p. 88)	
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don't want to filter out any high frequencies, set this parameter to BYPASS.
Delay 1 Pan	L64–63R	Stereo location of Delay 1
Delay 2 Pan	L64–63R	Stereo location of Delay 2
Delay 1 Level	0–127	Volume of delay 1
Delay 2 Level	0–127	Volume of delay 2

3TAP PAN DELAY

Delay sound is heard in the three locations you specify.

Parameter	Value	Explanation
Delay (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
Delay (msec)	1–2600 [msec]	Delay time of the third delay sound after the original sound is heard.
Delay (note)	Note ➡ **"Note"** (p. 88)	
Delay1 Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200–8000 [Hz], BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you don't want to filter out any high frequencies, set this parameter to BYPASS.
Delay 1 Pan	L64–63R	Stereo location of Delay 1
Delay 2 Pan	L64–63R	Stereo location of Delay 2
Delay 3 Pan	L64–63R	Stereo location of Delay 3
Delay 1 Level	0–127	Volume of delay 1
Delay 2 Level	0–127	Volume of delay 2
Delay 3 Level	0–127	Volume of delay 3

REVERB

Parameter	Value	Explanation
Reverb Type	Selects the types of reverb.	
Reverb Switch	OFF, ON	Switches the reverb on/off.
Reverb Level	0–127	Specifies the output level of the sound with reverb applied.
Reverb Parameters	Edit the parameters of the selected reverb type. The available parameters differ depending on the type of reverb you selected in Reverb Type.	

Reverb Parameters

INTEGRA

Parameter	Value	Explanation
Type	**01:** ROOM1 **02:** ROOM2 **03:** HALL1 **04:** HALL2 **05:** PLATE	Selects the types of reverb. **OFF:** Reverb is not used **Room 1/2:** Room **Hall 1/2:** Hall **Plate:** Plate
Pre Delay	0–100 [msec]	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	0.1–10.0 [sec]	Adjusts the decay length of the reverb sound.
Density	0–127	Density of reverb
Diffusion	0–127	Adjusts the change in the density of the reverb over time. The higher the value, the more the density increases with time. (The effect of this setting is most pronounced with long reverb times.)
LF Damp	0–100	Adjusts the low-frequency portion of the reverb.
HF Damp	0–100	Adjusts the high-frequency portion of the reverb.
Spread	0–127	Reverb spread
Tone	0–127	Tonal character of the reverb

WARM HALL

Parameter	Value	Explanation
Pre Delay	0–100 [msec]	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	0.3–30 [sec]	Adjusts the decay length of the reverb sound.
Pre LPF	16–15000 [Hz], Bypass	Frequency above which to cut the high-frequency portion of the sound entering the reverb
Pre HPF	16–15000 [Hz], Bypass	Frequency below which to cut the low-frequency portion of the sound entering the reverb
PreLoop LPF	16–15000 [Hz], Bypass	Frequency above which to cut the high-frequency portion of the extended reverberation
Diffusion	0–127	Adjusts the change in the density of the reverb over time.
HF Damp Freq	1000–8000 [Hz]	Frequency above which to cut the high-frequency portion of the reverb
HF Damp Ratio	0.1–1.0	Amount by which to attenuate the high-frequency portion of the reverb

HALL

Parameter	Value	Explanation
Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	0–127	Adjusts the decay length of the reverb sound.
Size	1–8	Size of room/hall
High Cut	160–12500 [Hz], BYPASS	Frequency above which the high-frequency portion of the final output sound is cut (BYPASS: no cut)

Parameter	Value	Explanation
Density	0–127	Density of reverb
Diffusion	0–127	Adjusts how reverb density increases over time. (This effect is especially noticeable with long reverb times.)
LF Damp Freq	50–4000 [Hz]	Frequency below which the low-frequency portion of the reverb sound is cut.
LF Damp Gain	-36–0 [dB]	LF damp attenuation amount (0: no effect)
HF Damp Freq	4000–12500 [Hz]	Frequency above which the high-frequency portion of the reverb sound is cut
HF Damp Gain	-36–0 [dB]	HF damp attenuation amount (0: no effect)

GS

Parameter	Value	Explanation
Character	ROOM1–3, HALL1–2, PLATE, DELAY, PAN-DELAY	Type of reverb
Pre-LPF	0–7	Amount of high-frequency attenuation for the sound being input to the reverb
Time	0–127	Adjusts the decay length of the reverb sound.
Delay Feedback	0–127	Level at which the reverb sound is returned to the input

SRV2000

Parameter	Value	Explanation
Selection	Selects the type of reverb offered by the Roland SRV-2000 digital reverb.	
	Pre Delay	Room reverb. Higher values increase the size of the room.
	Time	Hall reverb. Higher values increase the size of the concert hall.
	HF Damp	Plate reverb. A more flamboyant reverb sound than P-A.
	Density	Plate reverb.
Pre Delay	0–160	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	1–990 [msec]	Adjusts the decay length of the reverb sound.
HF Damp	0.05–1.00	Adjusts the high-frequency portion of the reverb.
Density	0–9	Adjusts the density of the late reverberation.
Attack Gain	0–9	Adjusts the gain of the early reflections.
Attack Time	0–9	Adjusts the time of the early reflections.
ER Density	0–9	Adjusts the density of the early reflections.
ER Level	0–99	Adjusts the volume of the early reflections.
EQ Low Freq	0.04–1.00 [kHz]	Frequency of the low range.
EQ Low Gain	-24–+12 [dB]	Gain of the low frequency range.
EQ Mid Freq	0.25–9.99 [kHz]	Adjusts the amount of mid-frequency boost/cut.
EQ Mid Gain	-24–+12 [dB]	Specifies the reference frequency of the mid-frequency range.
EQ Mid Q	0.2–9.0	Specifies the width of the mid-frequency range. Set a higher value for Q to narrow the range to be affected.
EQ Hi Freq	0.80–9.99 [kHz]	Frequency of the high range.
EQ Hi Gain	-24–+12 [dB]	Gain of the high frequency range.
EQ Hi Q	0.2–9.0	Specifies the width of the high-frequency range. Set a higher value for Q to narrow the range to be affected.

SRV2000 (NON-LINEAR)

Parameter	Value	Explanation
Pre Delay	0–160	Adjusts the delay time from the direct sound until the reverb sound is heard.
Reverb Time	1–990 [msec]	Adjusts the decay length of the reverb sound.
Gate Time	10–450 [msec]	Adjusts the decay length of the reverb sound.
HF Damp	0.05–1.00	Adjusts the high-frequency portion of the reverb.
EQ Low Freq	0.04–1.00 [kHz]	Frequency of the low range.
EQ Low Gain	-24–+12 [dB]	Gain of the low frequency range.
EQ Mid Freq	0.25–9.99 [kHz]	Adjusts the amount of mid-frequency boost/cut.
EQ Mid Gain	-24–+12 [dB]	Specifies the reference frequency of the mid-frequency range.
EQ Mid Q	0.2–9.0	Specifies the width of the mid-frequency range. Set a higher value for Q to narrow the range to be affected.
EQ Hi Freq	0.80–9.99 [kHz]	Frequency of the high range.
EQ Hi Gain	-24–+12 [dB]	Gain of the high frequency range.
EQ Hi Q	0.2–9.0	Specifies the width of the high-frequency range. Set a higher value for Q to narrow the range to be affected.

GM2 REVERB

Parameter	Value	Explanation
Character	0–5	Type of reverb
Time	0–127	Adjusts the decay length of the reverb sound.

MFX Parameters

00 Thru

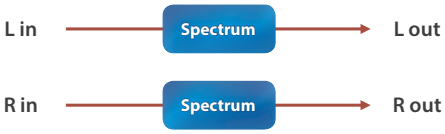
01 Equalizer

This is a four-band stereo equalizer (low, mid x 2, high).

Parameter	Value	Explanation
Low Freq (Low Frequency)	20, 25, 31, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400 [Hz]	Frequency of the low range
Low Gain	-15–+15 [dB]	Gain of the low range
Mid1 Freq (Mid1 Frequency)	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 1
Mid1 Gain	-15–+15 [dB]	Gain of the middle range 1
Mid1 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 1 Set a higher value to narrow the range to be affected.
Mid2 Freq (Mid2 Frequency)	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 2
Mid2 Gain	-15–+15 [dB]	Gain of the middle range 2
Mid2 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 2 Set a higher value to narrow the range to be affected.
High Freq (High Frequency)	2000, 2500, 3150, 4000, 5000, 6300, 8000, 10000, 12500, 16000 [Hz]	Frequency of the high range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

02 Spectrum

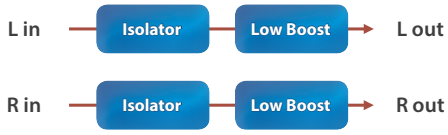
This is a stereo spectrum. Spectrum is a type of filter which modifies the timbre by boosting or cutting the level at specific frequencies.



Parameter	Value	Explanation
Band1 (250 Hz)	-15–+15 [dB]	Gain of each frequency band
Band2 (500 Hz)		
Band3 (1000 Hz)		
Band4 (1250 Hz)		
Band5 (2000 Hz)		
Band6 (3150 Hz)		
Band7 (4000 Hz)		
Band8 (8000 Hz)		
Q	0.5, 1.0, 2.0, 4.0, 8.0	Simultaneously adjusts the width of the adjusted ranges for all the frequency bands.
Level	0–127	Output Level

03 Isolator

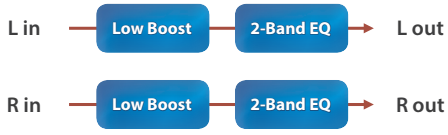
This is an equalizer which cuts the volume greatly, allowing you to add a special effect to the sound by cutting the volume in varying ranges.



Parameter	Value	Explanation
Boost/Cut Low	-60–+4 [dB]	These boost and cut each of the High, Middle, and Low frequency ranges.
Boost/Cut Mid	-60–+4 [dB]	At -60 dB, the sound becomes inaudible. 0 dB is equivalent to the input level of the sound.
Boost/Cut High	-60–+4 [dB]	
Anti Phase Low Sw	OFF, ON	Turns the Anti-Phase function on and off for the Low frequency ranges. When turned on, the counter-channel of stereo sound is inverted and added to the signal.
Anti Phase Low Level	0–127	Level of the Anti-Phase function for the Low frequency ranges. Adjusting this level for certain frequencies allows you to lend emphasis to specific parts. (This is effective only for stereo source.)
Anti Phase Mid Sw	OFF, ON	Settings of the Anti-Phase function for the Middle frequency ranges. The parameters are the same as for the Low frequency ranges.
Anti Phase Mid Level	0–127	
Low Boost Sw	OFF, ON	Turns Low Booster on/off. This emphasizes the bottom to create a heavy bass sound.
Low Boost Level	0–127	Increasing this value gives you a heavier low end. Depending on the Isolator and filter settings this effect may be hard to distinguish.
Level	0–127	Output Level

04 Low Boost

Boosts the volume of the lower range, creating powerful lows.



Parameter	Value	Explanation
Boost Frequency	50, 56, 63, 71, 80, 90, 100, 112, 125 [Hz]	Center frequency at which the lower range will be boosted
Boost Gain	0–+12 [dB]	Center frequency at which the lower range will be boosted
Boost Width	WIDE, MID, NARROW	Width of the lower range that will be boosted
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

05 Super Filter

This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically.

Parameter	Value	Explanation
Filter Type	LPF, BPF, HPF, NOTCH	Type of filter Frequency range that will pass through each filter **LPF:** frequencies below the cutoff **BPF:** frequencies in the region of the cutoff **HPF:** frequencies above the cutoff **NOTCH:** frequencies other than the region of the cutoff
Filter Slope	-12, -24, -36 [dB]	Amount of attenuation per octave **-12 dB:** Gentle, **-24 dB:** Steep, **-36 dB:** Extremely steep
Filter Cutoff	0–127	Cutoff frequency of the filter Increasing this value will raise the cutoff frequency.
Filter Resonance	0–100	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
Filter Gain	0–+12 [dB]	Amount of boost for the filter output
Modulation Sw	OFF, ON	On/off switch for cyclic change
Modulation Wave	TRI, SQR, SIN, SAW1, SAW2	How the cutoff frequency will be modulated **TRI:** Triangle wave **SQR:** Square wave **SIN:** Sine wave **SAW1:** Sawtooth wave (upward) **SAW2:** Sawtooth wave (downward)
	SAW1 SAW2 	
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Attack	0–127	Speed at which the cutoff frequency will change This is effective if Modulation Wave is SQR, SAW1, or SAW2.
Level	0–127	Output Level

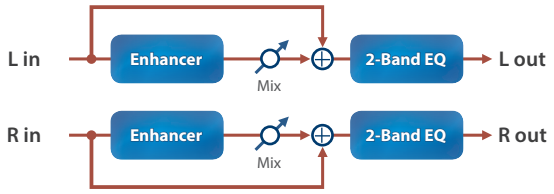
06 Step Filter

This is a filter whose cutoff frequency can be modulated in steps. You can specify the pattern by which the cutoff frequency will change.

Parameter	Value	Explanation
Step 01–16	0–127	Cutoff frequency at each step
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Attack	0–127	Speed at which the cutoff frequency changes between steps
Filter Type	LPF, BPF, HPF, NOTCH	Type of filter Frequency range that will pass through each filter **LPF:** frequencies below the cutoff **BPF:** frequencies in the region of the cutoff **HPF:** frequencies above the cutoff **NOTCH:** frequencies other than the region of the cutoff
Filter Slope	-12, -24, -36 dB	Amount of attenuation per octave **-12 dB:** Gentle, **-24 dB:** Steep, **-36 dB:** Extremely steep
Filter Resonance	0–127	Filter resonance level Increasing this value will emphasize the region near the cutoff frequency.
Filter Gain	0–+12 [dB]	Amount of boost for the filter output
Level	0–127	Output Level

07 Enhancer

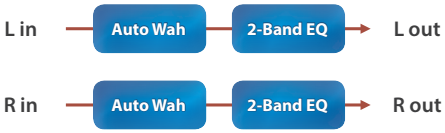
Controls the overtone structure of the high frequencies, adding sparkle and tightness to the sound.



Parameter	Value	Explanation
Sens	0–127	Sensitivity of the enhancer
Mix	0–127	Level of the overtones generated by the enhancer
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

08 Auto Wah

Cyclically controls a filter to create cyclic change in timbre.



Parameter	Value	Explanation
Filter Type	LPF, BPF	Type of filter **LPF:** Produces a wah effect in a broad frequency range. **BPF:** Produces a wah effect in a narrow frequency range.
Manual	0–127	Center frequency at which the wah effect is applied
Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
Sens	0–127	Adjusts the sensitivity with which the filter is controlled.
Polarity	UP, DOWN	Direction in which the filter will move **UP:** The filter will change toward a higher frequency. **DOWN:** The filter will change toward a lower frequency.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Modulation frequency of the wah effect
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Phase	0–180 [deg]	Adjusts the degree of phase shift of the left and right sounds when the wah effect is applied.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

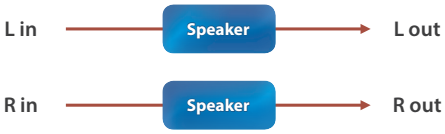
09 Humanizer

Adds a vowel character to the sound, making it similar to a human voice.

Parameter	Value	Explanation
Drive Sw	OFF, ON	Overdrive on/off
Drive	0–127	Degree of distortion Also changes the volume.
Vowel1	a, e, i, o, u	Selects the vowel.
Vowel2	a, e, i, o, u	Vowel2
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency at which the two vowels switch
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of the effect
Input Sync Sw	OFF, ON	LFO reset on/off If this is ON, the LFO for switching the vowels is reset by the input signal.
Input Sync Threshold	0–127	Volume level at which reset is applied
Manual	0–100	Point at which Vowel 1/2 switch **0–49:** Vowel 1 will have a longer duration. **50:** Vowel 1 and 2 will be of equal duration. **51–100:** Vowel 2 will have a longer duration.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Pan	L64–63R	Stereo location of the output sound
Level	0–127	Output Level

10 Speaker Simulator

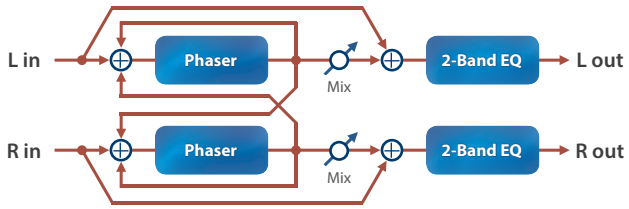
Simulates the speaker type and microphone settings used to record the speaker sound.



Parameter	Value	Explanation		
		Cabinet	Diameter (in inches) and number of the speaker	Microphone
Speaker Type	SMALL 1	Small open-back enclosure	10	Dynamic
	SMALL 2	Small open-back enclosure	10	Dynamic
	MIDDLE	Open back enclosure	12 x 1	Dynamic
	JC-120	Open back enclosure	12 x 2	Dynamic
	BUILT-IN 1	Open back enclosure	12 x 2	Dynamic
	BUILT-IN 2	Open back enclosure	12 x 2	Condenser
	BUILT-IN 3	Open back enclosure	12 x 2	Condenser
	BUILT-IN 4	Open back enclosure	12 x 2	Condenser
	BUILT-IN 5	Open back enclosure	12 x 2	Condenser
	BG STACK 1	Sealed enclosure	12 x 2	Condenser
	BG STACK 2	Large sealed enclosure	12 x 2	Condenser
	MS STACK 1	Large sealed enclosure	12 x 4	Condenser
	MS STACK 2	Large sealed enclosure	12 x 4	Condenser
	METAL STACK	Large double stack	12 x 4	Condenser
	2-STACK	Large double stack	12 x 4	Condenser
	3-STACK	Large triple stack	12 x 4	Condenser
Mic Setting	1, 2, 3	Adjusts the location of the microphone that is recording the sound of the speaker. This can be adjusted in three steps, with the microphone becoming more distant in the order of 1, 2, and 3.		
Mic Level	0–127	Volume of the microphone		
Direct Level	0–127	Volume of the direct sound		
Level	0–127	Output Level		

11 Phaser 1

This is a stereo phaser. A phase-shifted sound is added to the original sound and modulated.

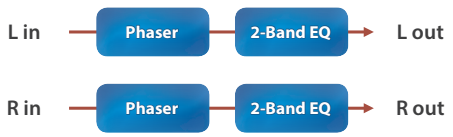


Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual	0–127	Center frequency at which the sound is modulated
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Modulation rate
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Polarity	INVERSE, SYNCHRO	Selects whether the left and right phase of the modulation will be the same or the opposite. **INVERSE:** The left and right phase will be opposite. When using a mono source, this spreads the sound. **SYNCHRO:** The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback
Cross Feedback	-98–+98 [%]	Adjusts the proportion of the phaser sound that is fed back into the effect. Negative (-) settings will invert the phase.
Mix	0–127	Level of the phase-shifted sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

12 Phaser 2

This simulates an analog phaser of the past.

It is particularly suitable for electric piano.

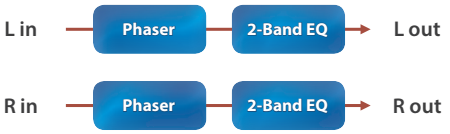


Parameter	Value	Explanation
Rate	0–100	Modulation rate
Color	1, 2	Modulation character
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

13 Phaser 3

This simulates a different analog phaser than Phaser 2.

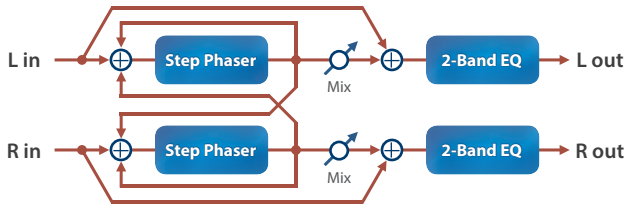
It is particularly suitable for electric piano.



Parameter	Value	Explanation
Speed	0–100	Speed of modulation
Depth	0–127	Depth of modulation
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

14 Step Phaser

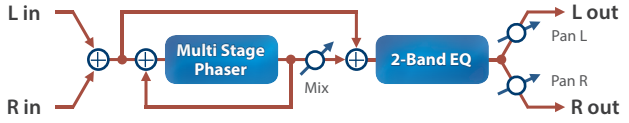
This is a stereo phaser. The phaser effect will be varied gradually.



Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual	0–127	Center frequency at which the sound is modulated
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Modulation rate
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Polarity	INVERSE, SYNCHRO	Selects whether the left and right phase of the modulation will be the same or the opposite. **INVERSE:** The left and right phase will be opposite. When using a mono source, this spreads the sound. **SYNCHRO:** The left and right phase will be the same. Select this when inputting a stereo source.
Resonance	0–127	Amount of feedback
Cross Feedback	-98–+98 [%]	Adjusts the proportion of the phaser sound that is fed back into the effect. Negative (-) settings will invert the phase.
Step Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Step Rate (Hz)	0.10–20.00 [Hz]	Rate of the step-wise change in the phaser effect
Step Rate (note)	Note ➡ **"Note"** (p. 88)	
Mix	0–127	Level of the phase-shifted sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

15 Multi Stage Phaser

Extremely high settings of the phase difference produce a deep phaser effect.



Parameter	Value	Explanation
Mode	4-STAGE, 8-STAGE, 12-STAGE, 16-STAGE, 20-STAGE, 24-STAGE	Number of stages in the phaser
Manual	0–127	Center frequency at which the sound is modulated
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Modulation rate
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Resonance	0–127	Amount of feedback
Mix	0–127	Level of the phase-shifted sound
Pan	L64–63R	Stereo location of the output sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

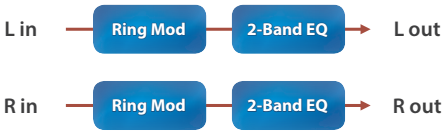
16 Infinite Phaser

A phaser that continues raising/lowering the frequency at which the sound is modulated.

Parameter	Value	Explanation
Mode	1, 2, 3, 4	Higher values will produce a deeper phaser effect.
Speed	-100–100	Speed at which to raise or lower the frequency at which the sound is modulated (+: upward / -: downward)
Resonance	0–127	Amount of feedback
Mix	0–127	Level of the phase-shifted sound
Pan	L64–63R	Stereo location of the output sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

17 Ring Modulator

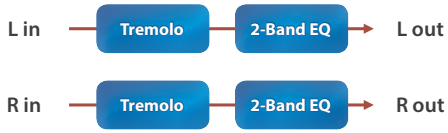
This is an effect that applies amplitude modulation (AM) to the input signal, producing bell-like sounds. You can also change the modulation frequency in response to changes in the volume of the sound sent into the effect.



Parameter	Value	Explanation
Frequency	0–127	Adjusts the frequency at which modulation is applied.
Sens	0–127	Adjusts the amount of frequency modulation applied.
Polarity	UP, DOWN	Determines whether the frequency modulation moves towards higher frequencies or lower frequencies. **UP:** The filter will change toward a higher frequency. **DOWN:** The filter will change toward a lower frequency.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output Level

18 Tremolo

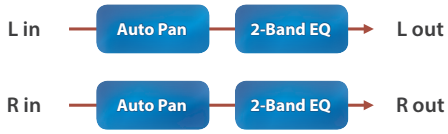
Cyclically changes the volume.



Parameter	Value	Explanation
Mod Wave	TRI, SQR, SIN, SAW1, SAW2, TRP	Modulation wave **TRI:** Triangle wave **SQR:** Square wave **SIN:** Sine wave **SAW1/2:** Sawtooth wave **TRP:** Trapezoidal wave
	SAW1 SAW2 	
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of the change
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth to which the effect is applied
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

19 Auto Pan

Cyclically modulates the stereo location of the sound.



Parameter	Value	Explanation
Mod Wave	TRI, SQR, SIN, SAW1, SAW2, TRP	How the pan changes **TRI:** Triangle wave **SQR:** Square wave **SIN:** Sine wave **SAW1/2:** Sawtooth wave **TRP:** Trapezoidal wave
	SAW1 SAW2 R R L L 	
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of the change
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth to which the effect is applied
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

20 Slicer

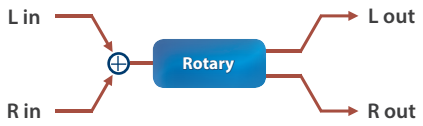
By applying successive cuts to the sound, this effect turns a conventional sound into a sound that appears to be played as a backing phrase. This is especially effective when applied to sustain-type sounds.

Parameter	Value	Explanation
Step 01–16	0–127	Level at each step
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Rate at which the 16-step sequence will cycle
Rate (note)	Note ➡ **"Note"** (p. 88)	
Attack	0–127	Speed at which the level changes between steps
Input Sync Sw	OFF, ON	Specifies whether an input note will cause the sequence to resume from the first step of the sequence (ON) or not (OFF)
Input Sync Threshold	0–127	Volume at which an input note will be detected
Mode	LEGATO, SLASH	Sets the manner in which the volume changes as one step progresses to the next. **LEGATO:** The change in volume from one step's level to the next remains unaltered. If the level of a following step is the same as the one preceding it, there is no change in volume. **SLASH:** The level is momentarily set to 0 before progressing to the level of the next step. This change in volume occurs even if the level of the following step is the same as the preceding step.
Shuffle	0–127	Timing of volume changes in levels for even-numbered steps (step 2, step 4, step 6...). The higher the value, the later the beat progresses.
Level	0–127	Output Level

21 Rotary

This simulates a classic rotary speaker of the past.

Since the operation of the high-frequency and low-frequency rotors can be specified independently, the distinctive modulation can be reproduced realistically. This is most effective on organ patches.

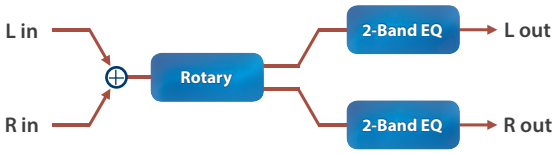


Parameter	Value	Explanation
Speed	SLOW, FAST	Simultaneously switch the rotational speed of the low frequency rotor and high frequency rotor. **SLOW:** Slows down the rotation to the Slow Rate. **FAST:** Speeds up the rotation to the Fast Rate.
Woofer Slow Speed	0.05–10.00 [Hz]	Slow speed (SLOW) of the low frequency rotor
Woofer Fast Speed	0.05–10.00 [Hz]	Fast speed (FAST) of the low frequency rotor
Woofer Acceleration	0–15	Adjusts the time it takes the low frequency rotor to reach the newly selected speed when switching from fast to slow (or slow to fast) speed.
Woofer Level	0–127	Volume of the low frequency rotor
Tweeter Slow Speed	0.05–10.00 [Hz]	Settings of the high frequency rotor The parameters are the same as for the low frequency rotor
Tweeter Fast Speed	0.05–10.00 [Hz]	
Tweeter Acceleration	0–15	
Tweeter Level	0–127	
Separation	0–127	Spatial dispersion of the sound
Level	0–127	Output Level

22 VK Rotary

This type provides modified response for the rotary speaker, with the low end boosted further.

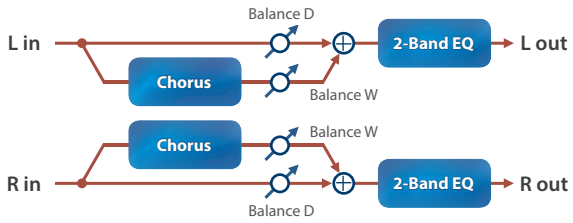
This effect features the same specifications as the VK-7's built-in rotary speaker.



Parameter	Value	Explanation
Speed	SLOW, FAST	Rotational speed of the rotating speaker **SLOW:** Slow **FAST:** Fast
Brake	OFF, ON	Switches the rotation of the rotary speaker. When this is turned on, the rotation will gradually stop. When it is turned off, the rotation will gradually resume.
Woofer Slow Speed	0.05–10.00 [Hz]	Low-speed rotation speed of the woofer
Woofer Fast Speed	0.05–10.00 [Hz]	High-speed rotation speed of the woofer
Woofer Trans Up	0–127	Adjusts the rate at which the woofer rotation speeds up when the rotation is switched from Slow to Fast.
Woofer Trans Down	0–127	Adjusts the rate at which the woofer rotation speeds up when the rotation is switched from Fast to Slow.
Woofer Level	0–127	Volume of the woofer
Tweeter Slow Speed	0.05–10.00 [Hz]	Settings of the tweeter The parameters are the same as for the woofer.
Tweeter Fast Speed	0.05–10.00 [Hz]	
Tweeter Trans Up	0–127	
Tweeter Trans Down	0–127	
Tweeter Level	0–127	
Spread	0–10	Sets the rotary speaker stereo image.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level
OD Switch	OFF, ON	Overdrive on/off
OD Gain	0–127	Overdrive input level Higher values will increase the distortion.
OD Drive	0–127	Degree of distortion
OD Level	0–127	Volume of the overdrive

23 Chorus

This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound.



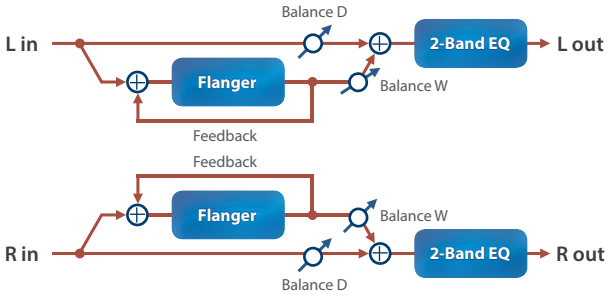
Parameter	Value	Explanation
Filter Type	OFF, LPF, HPF	Type of filter **OFF:** No filter is used. **LPF:** Cuts the frequency range above the Cutoff Freq **HPF:** Cuts the frequency range below the Cutoff Freq
Cutoff Freq	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Basic frequency of the filter
Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Phase	0–180 [deg]	Spatial spread of the sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Level	0–127	Output Level

24 Flanger

This is a stereo flanger (The LFO has the same phase for left and right.).

It produces a metallic resonance that rises and falls like a jet airplane taking off or landing.

A filter is provided so that you can adjust the timbre of the flanged sound.

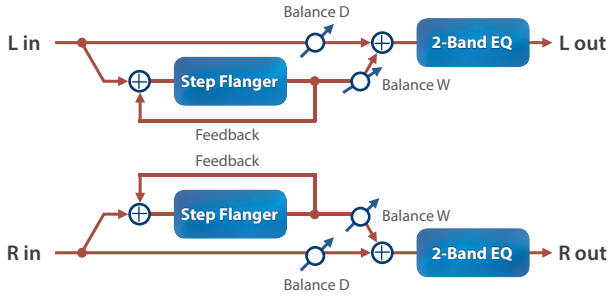


Parameter	Value	Explanation
Filter Type	OFF, LPF, HPF	Type of filter **OFF:** No filter is used. **LPF:** Cuts the frequency range above the Cutoff Freq **HPF:** Cuts the frequency range below the Cutoff Freq
Cutoff Freq	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Basic frequency of the filter
Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Phase	0–180 [deg]	Spatial spread of the sound
Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the flanger sound (W)
Level	0–127	Output Level

25 Step Flanger

This is a flanger in which the flanger pitch changes in steps.

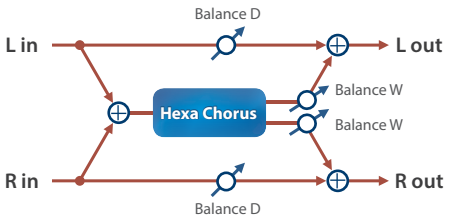
The speed at which the pitch changes can also be specified in terms of a note-value of a specified tempo.



Parameter	Value	Explanation
Filter Type	OFF, LPF, HPF	Type of filter **OFF:** No filter is used. **LPF:** Cuts the frequency range above the Cutoff Freq **HPF:** Cuts the frequency range below the Cutoff Freq
Cutoff Freq	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Basic frequency of the filter
Pre Delay	0.0–100.0 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Phase	0–180 [deg]	Spatial spread of the sound
Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Step Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Step Rate (Hz)	0.10–20.00 [Hz]	Rate (period) of pitch change
Step Rate (note)	Note ➡ **"Note"** (p. 88)	
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the flanger sound (W)
Level	0–127	Output Level

26 Hexa-Chorus

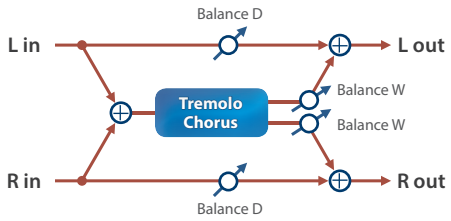
Uses a six-phase chorus (six layers of chorused sound) to give richness and spatial spread to the sound.



Parameter	Value	Explanation
Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Pre Delay Deviation	0–20	Adjusts the differences in Pre Delay between each chorus sound.
Depth Deviation	-20–20	Adjusts the difference in modulation depth between each chorus sound.
Pan Deviation	0–20	Adjusts the difference in stereo location between each chorus sound. **0:** All chorus sounds will be in the center. **20:** Each chorus sound will be spaced at 60 degree intervals relative to the center.
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Level	0–127	Output Level

27 Tremolo Chorus

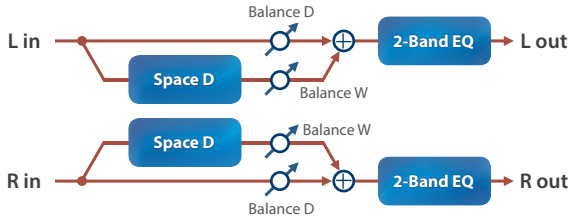
This is a chorus effect with added Tremolo (cyclic modulation of volume).



Parameter	Value	Explanation
Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Modulation frequency of the chorus effect
Cho Note (Chorus Rate (note))	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Modulation depth of the chorus effect
Tremolo Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Tremolo Rate (Hz)	0.05–10.00 [Hz]	Modulation frequency of the tremolo effect
Tremolo Rate (note)	Note ➡ **"Note"** (p. 88)	
Tremolo Separation	0–127	Depth of the tremolo effect
Tremolo Phase	0–180 [deg]	Spread of the tremolo effect
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the tremolo chorus sound (W)
Level	0–127	Output Level

28 Space-D

This is a multiple chorus that applies two-phase modulation in stereo. It gives no impression of modulation, but produces a transparent chorus effect.



Parameter	Value	Explanation
Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Phase	0–180 [deg]	Spatial spread of the sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Level	0–127	Output Level

29 Overdrive

This is an overdrive that provides heavy distortion.

Parameter	Value	Explanation
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Sw	OFF, ON	Turns the Amp Simulator on/off.
Amp Type	SMALL, BUILT-IN, 2-STACK, 3-STACK	Type of guitar amp **SMALL:** Small amp **BUILT-IN:** Single-unit type amp **2-STACK:** Large double stack amp **3-STACK:** Large triple stack amp
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Pan	L64–63R	Stereo location of the output sound
Level	0–127	Output Level

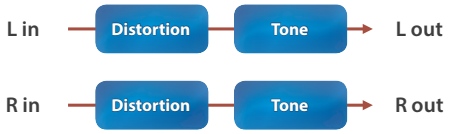
30 Distortion

This is a distortion effect that provides heavy distortion.

Parameter	Value	Explanation
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Sw	OFF, ON	Turns the Amp Simulator on/off.
Amp Type	SMALL, BUILT-IN, 2-STACK, 3-STACK	Type of guitar amp **SMALL:** Small amp **BUILT-IN:** Single-unit type amp **2-STACK:** Large double stack amp **3-STACK:** Large triple stack amp
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Pan	L64–63R	Stereo location of the output sound
Level	0–127	Output Level

31 T-Scream

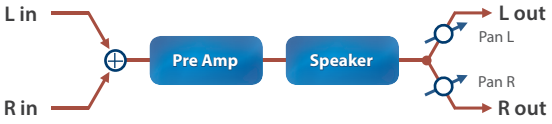
This models a classic analog overdrive. It is distinctive in adding an appropriate amount of overtones without muddying the sound.



Parameter	Value	Explanation
Distortion	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Tonal character of the overdrive
Level	0–127	Output Level

32 Guitar Amp Simulator

This is an effect that simulates the sound of a guitar amplifier.

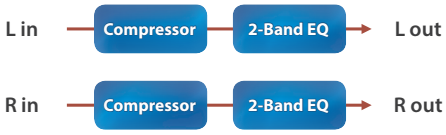


Parameter	Value	Explanation
Pre Amp Sw	OFF, ON	Turns the amp switch on/off.
Pre Amp Type		Type of guitar amp
	JC-120	This models the sound of the Roland JC-120.
	CLEAN TWIN	This models a Fender Twin Reverb.
	MATCH DRIVE	This models the sound input to left input on a Matchless D/C-30. A simulation of the latest tube amp widely used in styles from blues and rock.
	BG LEAD	This models the lead sound of the MESA/Boogie combo amp. The sound of a tube amp typical of the late ‘70s to ‘80s.
	MS1959I	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
	MS1959II	This models the sound input to Input II on a Marshall 1959.
	MS1959I+II	This models the sound of connecting inputs I and II on a Marshall 1959 in parallel. It creates a sound with a stronger low end than I.
	SLDN LEAD	This models a Soldano SLO-100. This is the typical sound of the eighties.
	METAL 5150	This models the lead channel of a Peavey EVH5150.
	METAL LEAD	This is distortion sound that is ideal for performances of heavy riffs.
	OD-1	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.
	OD-2 TURBO	This is the high-gain overdrive sound of the BOSS OD-2.
	DISTORTION	This gives a basic, traditional distortion sound.
	FUZZ	A fuzz sound with rich harmonic content.
Pre Amp Volume	0–127	Volume and amount of distortion of the amp
Pre Amp Master	0–127	Volume of the entire pre-amp
Pre Amp Gain	LOW, MIDDLE, HIGH	Amount of pre-amp distortion
Pre Amp Bass	0–127	Tone of the bass/mid/treble frequency range
Pre Amp Middle		
Pre Amp Treble		
Pre Amp Presence	0–127	Tone for the ultra-high frequency range
Pre Amp Bright	OFF, ON	Turning this “On” produces a sharper and brighter sound. * **This parameter applies to the “JC-120,” “CLEAN TWIN,” “MATCH DRIVE,” and “BG LEAD” Pre Amp Types.**

Parameter	Value	Explanation		
Speaker Sw	OFF, ON	Determines whether the signal passes through the speaker (ON), or not (OFF).		
Speaker Type		Cabinet	Diameter (in inches) and number of the speaker	Microphone
	SMALL 1	Small open-back enclosure	10	Dynamic
	SMALL 2	Small open-back enclosure	10	Dynamic
	MIDDLE	Open back enclosure	12 x 1	Dynamic
	JC-120	Open back enclosure	12 x 2	Dynamic
	BUILT-IN 1	Open back enclosure	12 x 2	Dynamic
	BUILT-IN 2	Open back enclosure	12 x 2	Condenser
	BUILT-IN 3	Open back enclosure	12 x 2	Condenser
	BUILT-IN 4	Open back enclosure	12 x 2	Condenser
	BUILT-IN 5	Open back enclosure	12 x 2	Condenser
	BG STACK1	Sealed enclosure	12 x 2	Condenser
	BG STACK2	Large sealed enclosure	12 x 2	Condenser
	MS STACK1	Large sealed enclosure	12 x 4	Condenser
	MS STACK2	Large sealed enclosure	12 x 4	Condenser
	MTL STACK	Large double stack	12 x 4	Condenser
	2-STACK	Large double stack	12 x 4	Condenser
	3-STACK	Large triple stack	12 x 4	Condenser
Mic Setting	1, 2, 3	Adjusts the location of the microphone that is recording the sound of the speaker. This can be adjusted in three steps, with the microphone becoming more distant in the order of 1, 2, and 3.		
Mic Level	0–127	Volume of the microphone		
Direct Level	0–127	Volume of the direct sound		
Pan	L64–63R	Stereo location of the output sound		
Level	0–127	Output Level		

33 Compressor

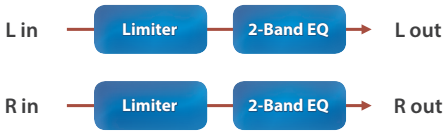
Flattens out high levels and boosts low levels, smoothing out fluctuations in volume.



Parameter	Value	Explanation
Attack	0–124	Sets the time from when the input exceeds the Threshold until the volume starts being compressed
Release	0–124	Adjusts the time after the signal volume falls below the Threshold Level until compression is no longer applied.
Threshold	-60–0 [dB]	Adjusts the volume at which compression begins
Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than Threshold. Higher values produce a smoother transition.
Ratio	1:1, 1.5:1, 2:1, 4:1, 16:1, INF:1	Compression ratio
Post Gain	0–+18 [dB]	Adjusts the output gain.
Level	0–127	Output Level

34 Limiter

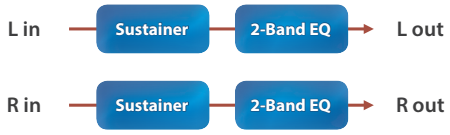
Compresses signals that exceed a specified volume level, preventing distortion from occurring.



Parameter	Value	Explanation
Release	0–127	Adjusts the time after the signal volume falls below the Threshold Level until compression is no longer applied.
Threshold	0–127	Adjusts the volume at which compression begins
Ratio	1.5:1, 2:1, 4:1, 100:1	Compression ratio
Post Gain	0–+18 [dB]	Adjusts the output gain.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

35 Sustainer

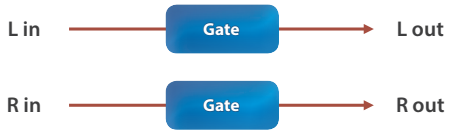
By compressing loud input and boosting low input, this effect keeps the volume consistent to produce a sustain effect without distortion.



Parameter	Value	Explanation
Sustain	0–127	Adjusts the range in which a low input signal is boosted to a consistent volume. Higher values produce longer sustain.
Attack	0–127	Time until the volume is compressed
Release	0–127	Time until compression is removed
Post Gain	-15–+15 [dB]	Adjusts the output gain.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

36 Gate

Cuts the reverb's delay according to the volume of the sound sent into the effect. Use this when you want to create an artificial-sounding decrease in the reverb's decay.

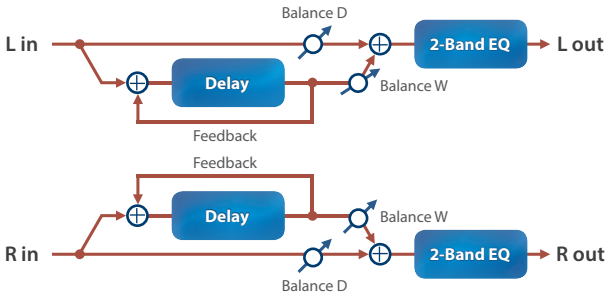


Parameter	Value	Explanation
Threshold	0–127	Volume level at which the gate begins to close
Mode	GATE, DUCK	Type of gate **GATE:** The gate will close when the volume of the original sound decreases, cutting the original sound. **DUCK (Duking):** The gate will close when the volume of the original sound increases, cutting the original sound.
Attack	0–127	Adjusts the time it takes for the gate to fully open after being triggered.
Hold	0–127	Adjusts the time it takes for the gate to start closing after the source sound falls beneath the Threshold.
Release	0–127	Adjusts the time it takes the gate to fully close after the hold time.
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output Level

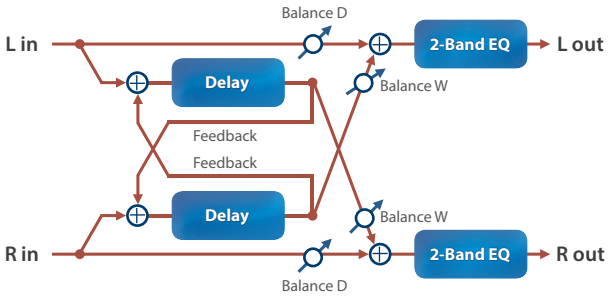
37 Delay

This is a stereo delay.

When Feedback Mode is NORMAL:



When Feedback Mode is CROSS:

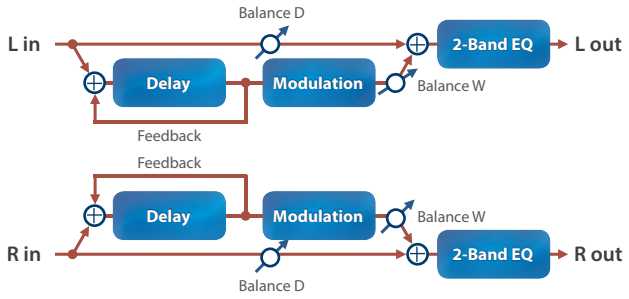


Parameter	Value	Explanation
Delay Left (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Left (msec)	1–1300 [msec]	Adjusts the time until the left delay sound is heard.
Delay Left (note)	Note ➡ **"Note"** (p. 88)	
Delay Right (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Right (msec)	1–1300 [msec]	Adjusts the time until the right delay sound is heard.
Delay Right (note)	Note ➡ **"Note"** (p. 88)	
Phase Left	NORMAL, INVERSE	Phase of left and right delay sound **NORMAL:** Non-inverted **INVERT:** Inverted
Phase Right		
Feedback Mode	NORMAL, CROSS	Selects the way in which delay sound is fed back into the effect. (See the figures above.)
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output Level

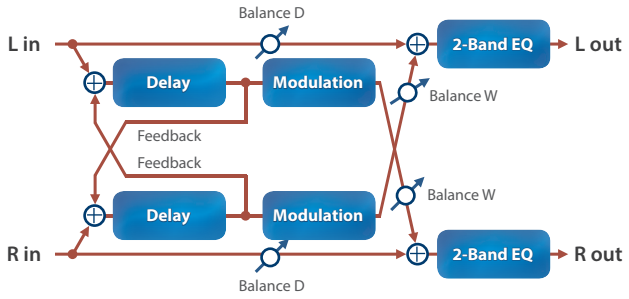
38 Modulation Delay

Adds modulation to the delayed sound.

When Feedback Mode is NORMAL:



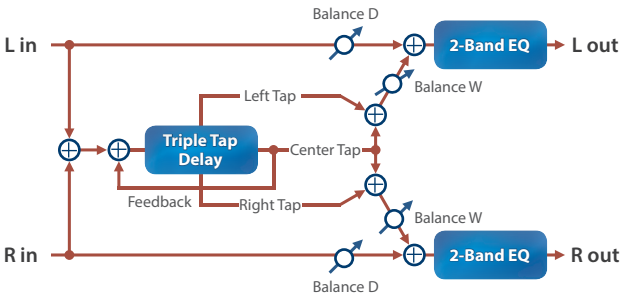
When Feedback Mode is CROSS:



Parameter	Value	Explanation
Delay Left (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Left (msec)	1–1300 [msec]	Adjusts the time until the left delay sound is heard.
Delay Left (note)	Note ➡ **"Note"** (p. 88)	
Delay Right (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Right (msec)	1–1300 [msec]	Adjusts the time until the right delay sound is heard.
Delay Right (note)	Note ➡ **"Note"** (p. 88)	
Feedback Mode	NORMAL, CROSS	Selects the way in which delay sound is fed back into the effect. (See the figures above.)
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Depth of modulation
Phase	0–180 [deg]	Spatial spread of the sound
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output Level

39 3Tap Pan Delay

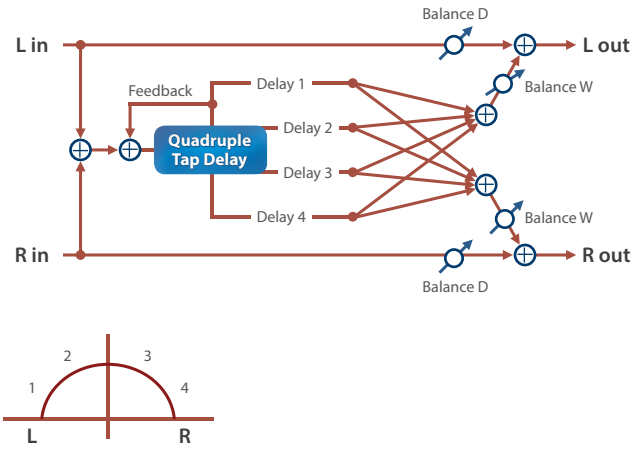
Produces three delay sounds; center, left and right.



Parameter	Value	Explanation
Delay Left (sync switch)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Left (msec)	1–2600 [msec]	Adjusts the time until the left delay sound is heard.
Delay Left (note)	Note ➡ **"Note"** (p. 88)	
Delay Right (sync switch)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Right (msec)	1–2600 [msec]	Adjusts the time until the right delay sound is heard.
Delay Right (note)	Note ➡ **"Note"** (p. 88)	
Delay Center (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Center (msec)	1–2600 [msec]	Adjusts the time until the center delay sound is heard.
Delay Center (note)	Note ➡ **"Note"** (p. 88)	
Center Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Left Level	0–127	Volume of each delay sound
Right Level	0–127	
Center Level	0–127	
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output Level

40 4Tap Pan Delay

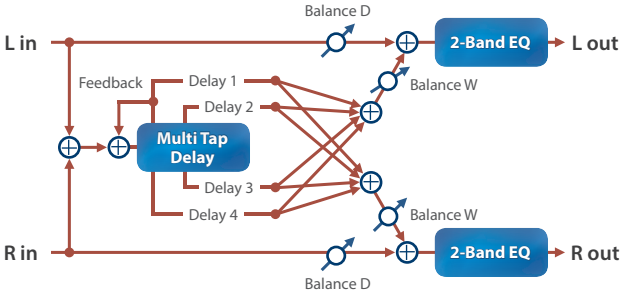
This effect has four delays.



Parameter	Value	Explanation
Delay 1 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 1 Time (msec)	1–2600 [msec]	Adjusts the time until Delay 1 is heard.
Delay 1 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 2 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 2 Time (msec)	1–2600 [msec]	Adjusts the time until Delay 2 is heard.
Delay 2 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 3 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 3 Time (msec)	1–2600 [msec]	Adjusts the time until Delay 3 is heard.
Delay 3 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 4 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 4 Time (msec)	1–2600 [msec]	Adjusts the time from the original sound until Delay 4 is heard.
Delay 4 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 1 Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay 1 Level	0–127	Output level of Delays 1–4
Delay 2 Level		
Delay 3 Level		
Delay 4 Level		
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output Level

41 Multi Tap Delay

This effect has four delays. Each of the Delay Time parameters can be set to a note length based on the selected tempo. You can also set the panning and level of each delay sound.

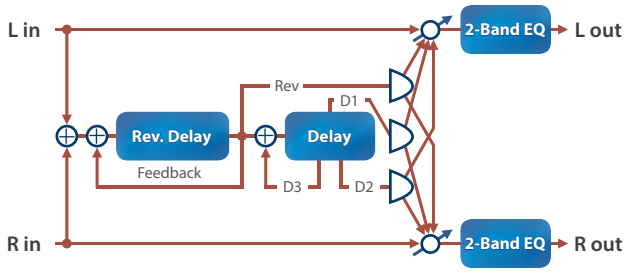


Parameter	Value	Explanation
Delay 1 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 1 Time (msec)	1–2600 [msec]	Adjusts the time from the original sound until Delay 1 is heard.
Delay 1 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 2 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 2 Time (msec)	1–2600 [msec]	Adjusts the time from the original sound until Delay 2 is heard.
Delay 2 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 3 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 3 Time (msec)	1–2600 [msec]	Adjusts the time from the original sound until Delay 3 is heard.
Delay 3 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 4 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 4 Time (msec)	1–2600 [msec]	Adjusts the time from the original sound until Delay 4 is heard.
Delay 4 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 1 Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay 1 Pan	L64–63R	Stereo location of Delays 1–4
Delay 2 Pan		
Delay 3 Pan		
Delay 4 Pan		
Delay 1 Level	0–127	Output level of Delays 1–4
Delay 2 Level		
Delay 3 Level		
Delay 4 Level		
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output Level

42 Reverse Delay

This is a reverse delay that adds a reversed and delayed sound to the input sound.

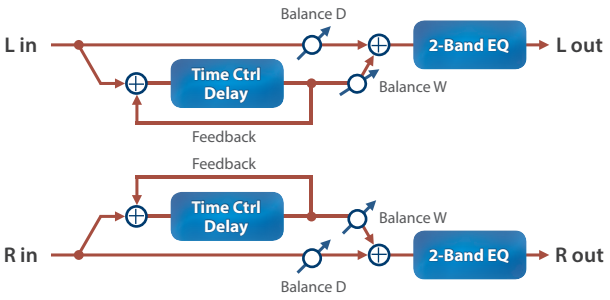
A tap delay is connected immediately after the reverse delay.



Parameter	Value	Explanation
Threshold	0–127	Volume at which the reverse delay will begin to be applied
Rev Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rev Delay Time (msec)	1–1300 [msec]	Delay time from when sound is input into the reverse delay until the delay sound is heard
Rev Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Rev Delay Feedback	-98–+98 [%]	Proportion of the delay sound that is to be returned to the input of the reverse delay (negative (-) values invert the phase)
Rev Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Frequency at which the high-frequency content of the reverse-delayed sound will be cut (**BYPASS:** no cut)
Rev Delay Pan	L64–63R	Panning of the reverse delay sound
Rev Delay Level	0–127	Volume of the reverse delay sound
Delay 1 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 1 Time (msec)	1–1300 [msec]	Delay time from when sound is input into the tap delay until the delay sound is heard
Delay 1 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 2 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 2 Time (msec)	1–1300 [msec]	Delay time from when sound is input into the tap delay until the delay sound is heard
Delay 2 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 3 Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay 3 Time (msec)	1–1300 [msec]	Delay time from when sound is input into the tap delay until the delay sound is heard
Delay 3 Time (note)	Note ➡ **"Note"** (p. 88)	
Delay 3 Feedback	-98–+98 [%]	Proportion of the delay sound that is to be returned to the input of the tap delay (negative (-) values invert the phase)
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Frequency at which the hi-frequency content of the tap delay sound will be cut (**BYPASS:** no cut)
Delay 1 Pan	L64–63R	Panning of the tap delay sounds
Delay 2 Pan	L64–63R	
Delay 1 Level	0–127	Volume of the tap delay sounds
Delay 2 Level	0–127	
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output Level

43 Time Ctrl Delay

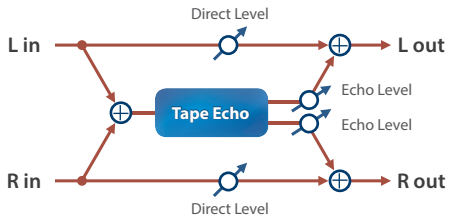
A stereo delay in which the delay time can be varied smoothly.



Parameter	Value	Explanation
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–1300 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Acceleration	0–15	Speed at which the current delay time changes to the specified delay time when you change the delay time. This affects the speed of pitch change as well as the delay time.
Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output Level

44 Tape Echo

A virtual tape echo that produces a realistic tape delay sound. This simulates the tape echo section of a Roland RE-201 Space Echo.



Parameter	Value	Explanation
Mode	S, M, L, S+M, S+L, M+L, S+M+L	Combination of playback heads to use Select from three different heads with different delay times. **S:** Short **M:** Middle **L:** Long
Repeat Rate	0–127	Tape speed Increasing this value will shorten the spacing of the delayed sounds.
Intensity	0–127	Amount of delay repeats
Bass	-15–+15 [dB]	Boost/cut for the lower range of the echo sound
Treble	-15–+15 [dB]	Boost/cut for the upper range of the echo sound
Head S Pan	L64–63R	Independent panning for the short, middle, and long playback heads
Head M Pan	L64–63R	
Head L Pan	L64–63R	
Tape Distortion	0–5	Amount of tape-dependent distortion to be added This simulates the slight tonal changes that can be detected by signal-analysis equipment. Increasing this value will increase the distortion.
W/F Rate	0–127	Speed of wow/flutter (complex variation in pitch caused by tape wear and rotational irregularity)
W/F Depth	0–127	Depth of wow/flutter
Echo Level	0–127	Volume of the echo sound
Direct Level	0–127	Volume of the original sound
Level	0–127	Output Level

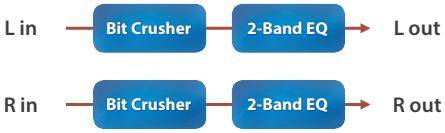
45 LOFI Compress

Degrades the sound quality.

Parameter	Value	Explanation
Pre Filter Type	1, 2, 3, 4, 5, 6	Selects the type of filter applied to the sound before it passes through the Lo-Fi effect. **1:** Compressor off **2–6:** Compressor on
LoFi Type	1, 2, 3, 4, 5, 6, 7, 8, 9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Post Filter Type	OFF, LPF, HPF	Selects the type of filter applied to the sound after it passes through the Lo-Fi effect. **OFF:** No filter is used. **LPF:** Cuts the frequency range above the Cutoff Freq **HPF:** Cuts the frequency range below the Cutoff Freq
Post Filter Cutoff	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Basic frequency of the Post Filter
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output Level

46 Bit Crusher

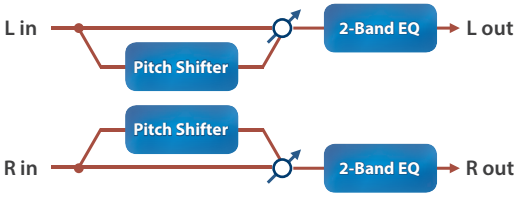
This creates a lo-fi sound.



Parameter	Value	Explanation
Sample Rate	0–127	Adjusts the sample rate.
Bit Down	0–20	Adjusts the bit depth.
Filter	0–127	Adjusts the filter depth.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

47 Pitch Shifter

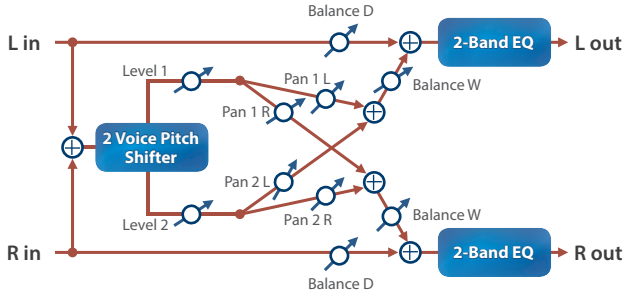
A stereo pitch shifter.



Parameter	Value	Explanation
Coarse	-24–+12 [semi]	Adjusts the pitch of the pitch shifted sound in semitone steps.
Fine	-100–+100 [cent]	Adjusts the pitch of the pitch shifted sound in 2-cent steps.
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–1300 [msec]	Adjusts the delay time from the direct sound until the pitch shifted sound is heard.
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Feedback	-98–+98 [%]	Adjusts the proportion of the pitch shifted sound that is fed back into the effect. Negative (-) settings will invert the phase.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the pitch shifted sound (W)
Level	0–127	Output Level

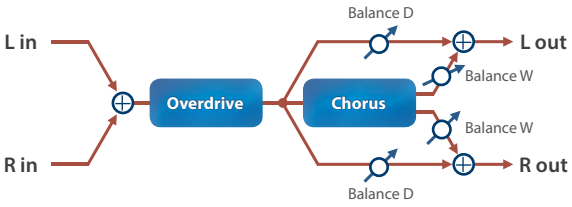
48 2Voice Pitch Shifter

Shifts the pitch of the original sound. This 2-voice pitch shifter has two pitch shifters, and can add two pitch shifted sounds to the original sound.



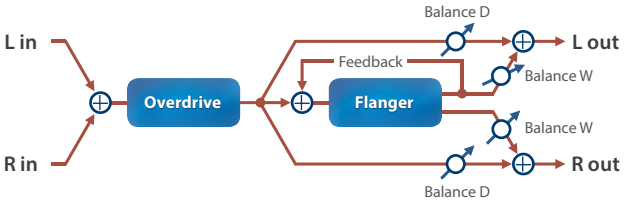
Parameter	Value	Explanation
Pitch1 Coarse	-24–+12 [semi]	Adjusts the pitch of Pitch Shift 1 in semitone steps.
Pitch1 Fine	-100–+100 [cent]	Adjusts the pitch of Pitch Shift Pitch 1 in 2-cent steps.
Pitch1 Delay (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Pitch1 Delay (msec)	1–1300 [msec]	Adjusts the delay time from the direct sound until the Pitch Shift 1 sound is heard.
Pitch1 Delay (note)	Note ➡ **"Note"** (p. 88)	
Pitch1 Feedback	-98–+98 [%]	Adjusts the proportion of the pitch shifted sound that is fed back into the effect. Negative (-) settings will invert the phase.
Pitch1 Pan	L64–63R	Stereo location of the Pitch Shift 1 sound
Pitch1 Level	0–127	Volume of the Pitch Shift 1 sound
Pitch2 Coarse	-24–+12 [semi]	Settings of the Pitch Shift 2 sound. The parameters are the same as for the Pitch Shift 1 sound.
Pitch2 Fine	-100–+100 [cent]	
Pitch2 Delay (sync sw)	OFF, ON	
Pitch2 Delay (msec)	1–1300 [msec]	
Pitch2 Delay (note)	Note ➡ **"Note"** (p. 88)	
Pitch2 Feedback	-98–+98 [%]	
Pitch2 Pan	L64–63R	
Pitch2 Level	0–127	
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the pitch shifted sound (W)
Level	0–127	Output Level

49 Overdrive → Chorus



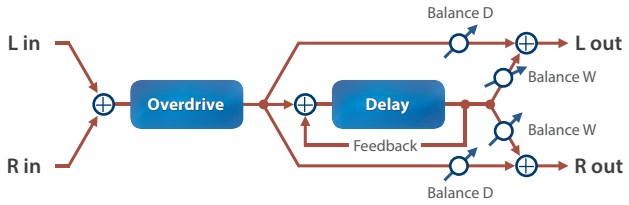
Parameter	Value	Explanation
Overdrive Drive	0–127	Degree of distortion Also changes the volume.
Overdrive Pan	L64–63R	Stereo location of the overdrive sound
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Chorus Rate (note)	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Depth of modulation
Chorus Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).
Level	0–127	Output Level

50 Overdrive → Flanger



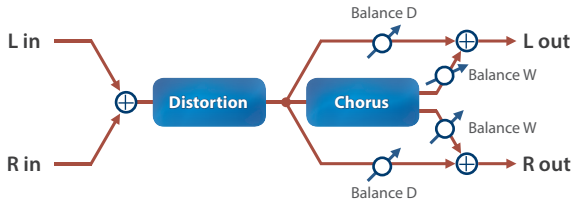
Parameter	Value	Explanation
Overdrive Drive	0–127	Degree of distortion Also changes the volume.
Overdrive Pan	L64–63R	Stereo location of the overdrive sound
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Flanger Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Flanger Rate (note)	Note ➡ **"Note"** (p. 88)	
Flanger Depth	0–127	Depth of modulation
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the flanger (W) and the sound that is not sent through the flanger (D).
Level	0–127	Output Level

51 Overdrive → Delay



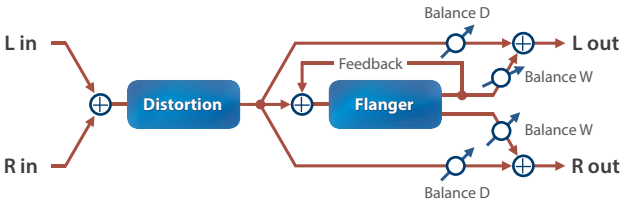
Parameter	Value	Explanation
Overdrive Drive	0–127	Degree of distortion Also changes the volume.
Overdrive Pan	L64–63R	Stereo location of the overdrive sound
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–2600 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

52 Distortion → Chorus



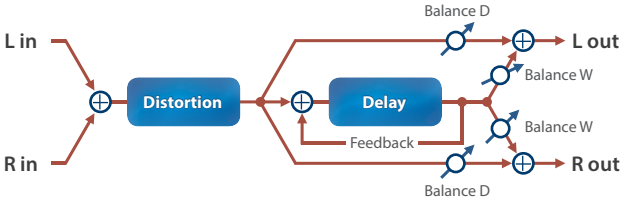
Parameter	Value	Explanation
Distortion Drive	0–127	Degree of distortion Also changes the volume.
Distortion Pan	L64–63R	Stereo location of the overdrive sound
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Chorus Rate (note)	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Depth of modulation
Chorus Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).
Level	0–127	Output Level

53 Distortion → Flanger



Parameter	Value	Explanation
Distortion Drive	0–127	Degree of distortion Also changes the volume.
Distortion Pan	L64–63R	Stereo location of the overdrive sound
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Flanger Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Flanger Rate (note)	Note ➡ **"Note"** (p. 88)	
Flanger Depth	0–127	Depth of modulation
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the flanger (W) and the sound that is not sent through the flanger (D).
Level	0–127	Output Level

54 Distortion → Delay

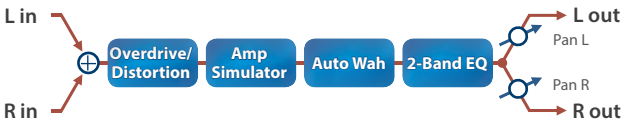


Parameter	Value	Explanation
Distortion Drive	0–127	Degree of distortion Also changes the volume.
Distortion Pan	L64–63R	Stereo location of the overdrive sound
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–2600 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

55 OD/DS → TouchWah

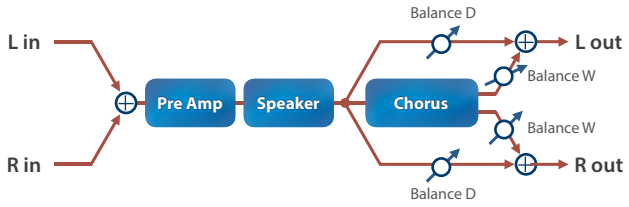
Parameter	Value	Explanation
Drive Switch	OFF, ON	Turns overdrive/distortion on/off
Drive Type	OVERDRIVE, DISTORTION	Type of distortion
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Switch	OFF, ON	Turns the Amp Simulator on/off.
Amp Type	SMALL, BUILT-IN, 2-STACK, 3-STACK	Type of guitar amp **SMALL:** Small amp **BUILT-IN:** Single-unit type amp **2-STACK:** Large double stack amp **3-STACK:** Large triple stack amp
TWah Switch	OFF, ON	Wah on/off
TWah Mode	LPF, BPF	Type of filter **LPF:** Produces a wah effect in a broad frequency range. **BPF:** Produces a wah effect in a narrow frequency range.
TWah Polarity	DOWN, UP	Direction in which the filter will move **UP:** The filter will change toward a higher frequency. **DOWN:** The filter will change toward a lower frequency.
TWah Sens	0–127	Adjusts the sensitivity with which the filter is controlled.
TWah Manual	0–127	Center frequency at which the wah effect is applied
TWah Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
TWah Balance	D100:0W–D0:100W	Volume balance of the sound that passes through the wah (W) and the unprocessed sound (D)
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

56 OD/DS → AutoWah



Parameter	Value	Explanation
Drive Switch	OFF, ON	Turns overdrive/distortion on/off
Drive Type	OVERDRIVE, DISTORTION	Type of distortion
Drive	0–127	Degree of distortion Also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Amp Switch	OFF, ON	Turns the Amp Simulator on/off.
Amp Type	SMALL, BUILT-IN, 2-STACK, 3-STACK	Type of guitar amp **SMALL:** Small amp **BUILT-IN:** Single-unit type amp **2-STACK:** Large double stack amp **3-STACK:** Large triple stack amp
AutoWah Switch	OFF, ON	Wah on/off
AutoWah Mode	LPF, BPF	Type of filter **LPF:** Produces a wah effect in a broad frequency range. **BPF:** Produces a wah effect in a narrow frequency range.
AutoWah Manual	0–127	Center frequency at which the wah effect is applied
AutoWah Peak	0–127	Width of the frequency region at which the wah effect is applied Increasing this value will make the frequency region narrower.
AutoWah Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
AutoWah Rate (Hz)	0.05–10.00 [Hz]	Modulation frequency of the wah effect
AutoWah Rate (note)	Note ➡ **"Note"** (p. 88)	
AutoWah Depth	0–127	Depth of modulation
AutoWah Balance	D100:0W–D0:100W	Volume balance of the sound that passes through the wah (W) and the unprocessed sound (D)
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

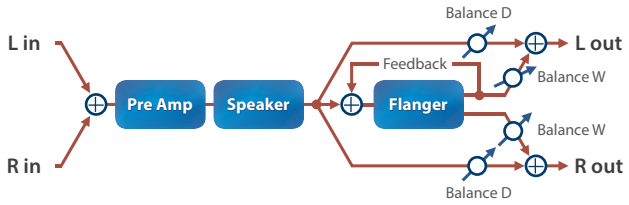
57 GtAmpSim → Chorus



Parameter	Value	Explanation
Pre Amp Sw	OFF, ON	Turns the amp switch on/off.
Pre Amp Type		Type of guitar amp
	JC-120	This models the sound of the Roland JC-120.
	CLEAN TWIN	This models a Fender Twin Reverb.
	MATCH DRIVE	This models the sound input to left input on a Matchless D/C-30. A simulation of the latest tube amp widely used in styles from blues and rock.
	BG LEAD	This models the lead sound of the MESA/ Boogie combo amp. The sound of a tube amp typical of the late '70s to '80s.
	MS1959I	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
	MS1959II	This models the sound input to Input II on a Marshall 1959.
	MS1959I+II	This models the sound of connecting inputs I and II on a Marshall 1959 in parallel. It creates a sound with a stronger low end than I.
	SLDN LEAD	This models a Soldano SLO-100. This is the typical sound of the eighties.
	METAL 5150	This models the lead channel of a Peavey EVH 5150.
	METAL LEAD	This is distortion sound that is ideal for performances of heavy riffs.
	OD-1	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.
	OD-2 TURBO	This is the high-gain overdrive sound of the BOSS OD-2.
	DISTORTION	This gives a basic, traditional distortion sound.
	FUZZ	A fuzz sound with rich harmonic content.
Pre Amp Volume	0–127	Volume and amount of distortion of the amp
Pre Amp Master	0–127	Volume of the entire pre-amp
Pre Amp Gain	LOW, MIDDLE, HIGH	Amount of pre-amp distortion
Pre Amp Bass	0–127	Tone of the bass/mid/treble frequency range
Pre Amp Middle	0–127	
Pre Amp Treble	0–127	

Parameter	Value	Explanation		
Speaker Sw	OFF, ON	Selects whether the sound will be sent through the speaker (ON) or not (OFF)		
Speaker Type		Cabinet	Diameter (in inches) and number of the speaker	Microphone
	SMALL 1	Small open-back enclosure	10	Dynamic
	SMALL 2	Small open-back enclosure	10	Dynamic
	MIDDLE	Open back enclosure	12 x 1	Dynamic
	JC-120	Open back enclosure	12 x 2	Dynamic
	BUILT-IN1	Open back enclosure	12 x 2	Dynamic
	BUILT-IN2	Open back enclosure	12 x 2	Condenser
	BUILT-IN3	Open back enclosure	12 x 2	Condenser
	BUILT-IN4	Open back enclosure	12 x 2	Condenser
	BUILT-IN5	Open back enclosure	12 x 2	Condenser
	BG STACK1	Sealed enclosure	12 x 2	Condenser
	BG STACK2	Large sealed enclosure	12 x 2	Condenser
	MS STACK1	Large sealed enclosure	12 x 4	Condenser
	MS STACK2	Large sealed enclosure	12 x 4	Condenser
	MTL STACK	Large double stack	12 x 4	Condenser
	2-STACK	Large double stack	12 x 4	Condenser
	3-STACK	Large triple stack	12 x 4	Condenser
Chorus Switch	OFF, ON	Chorus on/off		
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.		
Chorus Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation		
Chorus Depth	0–127	Depth of modulation		
Chorus Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).		
Level	0–127	Output Level		

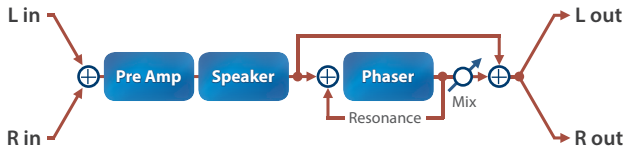
58 GtAmpSim → Flanger



Parameter	Value	Explanation
Pre Amp Sw	OFF, ON	Turns the amp switch on/off.
Pre Amp Type		Type of guitar amp
	JC-120	This models the sound of the Roland JC-120.
	CLEAN TWIN	This models a Fender Twin Reverb.
	MATCH DRIVE	This models the sound input to left input on a Matchless D/C-30. A simulation of the latest tube amp widely used in styles from blues and rock.
	BG LEAD	This models the lead sound of the MESA/ Boogie combo amp. The sound of a tube amp typical of the late '70s to '80s.
	MS1959I	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
	MS1959II	This models the sound input to Input II on a Marshall 1959.
	MS1959I+II	This models the sound of connecting inputs I and II on a Marshall 1959 in parallel. It creates a sound with a stronger low end than I.
	SLDN LEAD	This models a Soldano SLO-100. This is the typical sound of the eighties.
	METAL 5150	This models the lead channel of a Peavey EVH5150.
	METAL LEAD	This is distortion sound that is ideal for performances of heavy riffs.
	OD-1	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.
	OD-2 TURBO	This is the high-gain overdrive sound of the BOSS OD-2.
	DISTORTION	This gives a basic, traditional distortion sound.
	FUZZ	A fuzz sound with rich harmonic content.
Pre Amp Volume	0–127	Volume and amount of distortion of the amp
Pre Amp Master	0–127	Volume of the entire pre-amp
Pre Amp Gain	LOW, MIDDLE, HIGH	Amount of pre-amp distortion
Pre Amp Bass	0–127	Tone of the bass/mid/treble frequency range
Pre Amp Middle	0–127	
Pre Amp Treble	0–127	

Parameter	Value	Explanation
Speaker Sw	OFF, ON	Determines whether the signal passes through the speaker (ON), or not (OFF).
Speaker Type		Cabinet / Diameter (in inches) and number of the speaker / Microphone
	SMALL 1	Small open-back enclosure / 10 / Dynamic
	SMALL 2	Small open-back enclosure / 10 / Dynamic
	MIDDLE	Open back enclosure / 12 x 1 / Dynamic
	JC-120	Open back enclosure / 12 x 2 / Dynamic
	BUILT-IN1	Open back enclosure / 12 x 2 / Dynamic
	BUILT-IN2	Open back enclosure / 12 x 2 / Condenser
	BUILT-IN3	Open back enclosure / 12 x 2 / Condenser
	BUILT-IN4	Open back enclosure / 12 x 2 / Condenser
	BUILT-IN5	Open back enclosure / 12 x 2 / Condenser
	BG STACK1	Sealed enclosure / 12 x 2 / Condenser
	BG STACK2	Large sealed enclosure / 12 x 2 / Condenser
	MS STACK1	Large sealed enclosure / 12 x 4 / Condenser
	MS STACK2	Large sealed enclosure / 12 x 4 / Condenser
	MTL STACK	Large double stack / 12 x 4 / Condenser
	2-STACK	Large double stack / 12 x 4 / Condenser
	3-STACK	Large triple stack / 12 x 4 / Condenser
Flanger Switch	OFF, ON	Flanger on/off
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Flanger Depth	0–127	Depth of modulation
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the flanger (W) and the sound that is not sent through the flanger (D).
Level	0–127	Output Level

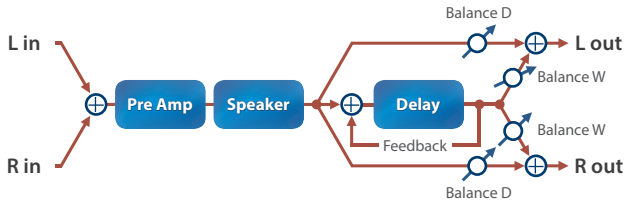
59 GtAmpSim → Phaser



Parameter	Value	Explanation
Pre Amp Sw	OFF, ON	Turns the amp switch on/off.
Pre Amp Type		Type of guitar amp
	JC-120	This models the sound of the Roland JC-120.
	CLEAN TWIN	This models a Fender Twin Reverb.
	MATCH DRIVE	This models the sound input to left input on a Matchless D/C-30. A simulation of the latest tube amp widely used in styles from blues and rock.
	BG LEAD	This models the lead sound of the MESA/ Boogie combo amp. The sound of a tube amp typical of the late '70s to '80s.
	MS1959I	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
	MS1959II	This models the sound input to Input II on a Marshall 1959.
	MS1959I+II	This models the sound of connecting inputs I and II on a Marshall 1959 in parallel. It creates a sound with a stronger low end than I.
	SLDN LEAD	This models a Soldano SLO-100. This is the typical sound of the eighties.
	METAL 5150	This models the lead channel of a Peavey EVH5150.
	METAL LEAD	This is distortion sound that is ideal for performances of heavy riffs.
	OD-1	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.
	OD-2 TURBO	This is the high-gain overdrive sound of the BOSS OD-2.
	DISTORTION	This gives a basic, traditional distortion sound.
	FUZZ	A fuzz sound with rich harmonic content.
Pre Amp Volume	0–127	Volume and amount of distortion of the amp
Pre Amp Master	0–127	Volume of the entire pre-amp
Pre Amp Gain	LOW, MIDDLE, HIGH	Amount of pre-amp distortion
Pre Amp Bass	0–127	Tone of the bass/mid/treble frequency range
Pre Amp Middle	0–127	
Pre Amp Treble	0–127	

Parameter	Value	Explanation		
Speaker Sw	OFF, ON	Determines whether the signal passes through the speaker (ON), or not (OFF).		
Speaker Type		Cabinet	Diameter (in inches) and number of the speaker	Microphone
	SMALL 1	Small open-back enclosure	10	Dynamic
	SMALL 2	Small open-back enclosure	10	Dynamic
	MIDDLE	Open back enclosure	12 x 1	Dynamic
	JC-120	Open back enclosure	12 x 2	Dynamic
	BUILT-IN1	Open back enclosure	12 x 2	Dynamic
	BUILT-IN2	Open back enclosure	12 x 2	Condenser
	BUILT-IN3	Open back enclosure	12 x 2	Condenser
	BUILT-IN4	Open back enclosure	12 x 2	Condenser
	BUILT-IN5	Open back enclosure	12 x 2	Condenser
	BG STACK1	Sealed enclosure	12 x 2	Condenser
	BG STACK2	Large sealed enclosure	12 x 2	Condenser
	MS STACK1	Large sealed enclosure	12 x 4	Condenser
	MS STACK2	Large sealed enclosure	12 x 4	Condenser
	MTL STACK	Large double stack	12 x 4	Condenser
	2-STACK	Large double stack	12 x 4	Condenser
	3-STACK	Large triple stack	12 x 4	Condenser
Phaser Switch	OFF, ON	Phaser on/off		
Phaser Rate (Hz)	0.05–10.00 [Hz]	Modulation rate		
Phaser Manual	0–127	Center frequency at which the sound is modulated		
Phaser Depth	0–127	Depth of modulation		
Phaser Resonance	0–127	Amount of feedback		
Phaser Mix	0–127	Level of the phase-shifted sound		
Level	0–127	Output Level		

60 GtAmpSim → Delay



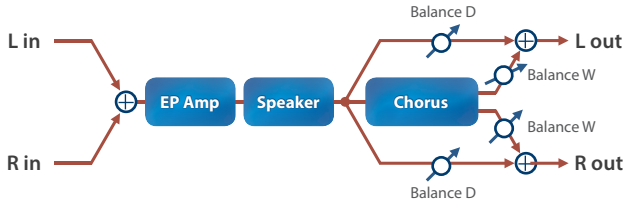
Parameter	Value	Explanation
Pre Amp Sw	OFF, ON	Turns the amp switch on/off.
Pre Amp Type		Type of guitar amp
	JC-120	This models the sound of the Roland JC-120.
	CLEAN TWIN	This models a Fender Twin Reverb.
	MATCH DRIVE	This models the sound input to left input on a Matchless D/C-30. A simulation of the latest tube amp widely used in styles from blues and rock.
	BG LEAD	This models the lead sound of the MESA/ Boogie combo amp. The sound of a tube amp typical of the late '70s to '80s.
	MS1959I	This models the sound input to Input I on a Marshall 1959. This is a trebly sound suited to hard rock.
	MS1959II	This models the sound input to Input II on a Marshall 1959.
	MS1959I+II	This models the sound of connecting inputs I and II on a Marshall 1959 in parallel. It creates a sound with a stronger low end than I.
	SLDN LEAD	This models a Soldano SLO-100. This is the typical sound of the eighties.
	METAL 5150	This models the lead channel of a Peavey EVH5150.
	METAL LEAD	This is distortion sound that is ideal for performances of heavy riffs.
	OD-1	This models the sound of the BOSS OD-1. This produces sweet, mild distortion.
	OD-2 TURBO	This is the high-gain overdrive sound of the BOSS OD-2.
	DISTORTION	This gives a basic, traditional distortion sound.
	FUZZ	A fuzz sound with rich harmonic content.
Pre Amp Volume	0–127	Volume and amount of distortion of the amp
Pre Amp Master	0–127	Volume of the entire pre-amp
Pre Amp Gain	LOW, MIDDLE, HIGH	Amount of pre-amp distortion
Pre Amp Bass	0–127	Tone of the bass/mid/treble frequency range
Pre Amp Middle	0–127	
Pre Amp Treble	0–127	

Parameter	Value	Explanation
Speaker Sw	OFF, ON	Determines whether the signal passes through the speaker (ON), or not (OFF).
Speaker Type		Cabinet / Diameter (in inches) and number of the speaker / Microphone
	SMALL 1	Small open-back enclosure / 10 / Dynamic
	SMALL 2	Small open-back enclosure / 10 / Dynamic
	MIDDLE	Open back enclosure / 12 x 1 / Dynamic
	JC-120	Open back enclosure / 12 x 2 / Dynamic
	BUILT-IN1	Open back enclosure / 12 x 2 / Dynamic
	BUILT-IN2	Open back enclosure / 12 x 2 / Condenser
	BUILT-IN3	Open back enclosure / 12 x 2 / Condenser
	BUILT-IN4	Open back enclosure / 12 x 2 / Condenser
	BUILT-IN5	Open back enclosure / 12 x 2 / Condenser
	BG STACK1	Sealed enclosure / 12 x 2 / Condenser
	BG STACK2	Large sealed enclosure / 12 x 2 / Condenser
	MS STACK1	Large sealed enclosure / 12 x 4 / Condenser
	MS STACK2	Large sealed enclosure / 12 x 4 / Condenser
	MTL STACK	Large double stack / 12 x 4 / Condenser
	2-STACK	Large double stack / 12 x 4 / Condenser
	3-STACK	Large triple stack / 12 x 4 / Condenser
Delay Switch	OFF, ON	Delay on/off
Delay Time	1–1300 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Frequency at which the high-frequency portion of the delay sound will be cut (**BYPASS:** no cut)
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

61 EPAmpSim → Tremolo

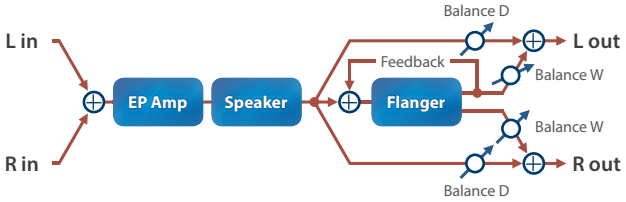
Parameter	Value	Explanation
Type		Type of amp
	OLDCASE	A standard electric piano sound of the early 70s
	NEWCASE	A standard electric piano sound of the late 70s and early 80s
	WURLY	A standard electric piano sound of the 60s
Bass	-50–+50	Amount of low-frequency boost/cut
Treble	-50–+50	Amount of high-frequency boost/cut
Tremolo Switch	OFF, ON	Tremolo on/off
Tremolo Speed (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Tremolo Speed (Hz)	0.05–10.00 [Hz]	Rate of the tremolo effect
Tremolo Speed (note)	Note ➡ **"Note"** (p. 88)	
Tremolo Depth	0–127	Depth of the tremolo effect
Tremolo Duty	-10–+10	Adjusts the duty cycle of the LFO waveform used to apply tremolo.
Speaker Type	LINE, OLD, NEW, WURLY, TWIN	Type of speaker If LINE is selected, the sound will not be sent through the speaker simulation.
OD Switch	OFF, ON	Overdrive on/off
OD Gain	0–127	Overdrive input level
OD Drive	0–127	Degree of distortion Also changes the volume.
Level	0–127	Output Level

62 EPAmpSim → Chorus



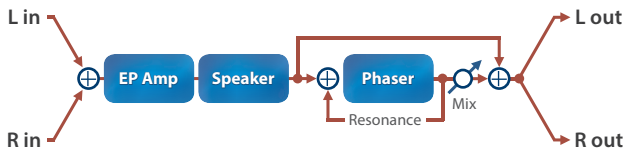
Parameter	Value	Explanation
Type		Type of amp
	OLDCASE	A standard electric piano sound of the early 70s
	NEWCASE	A standard electric piano sound of the late 70s and early 80s
Bass	-50–+50	Amount of low-frequency boost/cut
Treble	-50–+50	Amount of high-frequency boost/cut
Chorus Switch	OFF, ON	Chorus on/off
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Chorus Rate (note)	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Depth of modulation
Chorus Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).
Speaker Type	LINE, OLD, NEW, WURLY, TWIN	Type of speaker If LINE is selected, the sound will not be sent through the speaker simulation.
OD Switch	OFF, ON	Overdrive on/off
OD Gain	0–127	Overdrive input level
OD Drive	0–127	Degree of distortion Also changes the volume.
Level	0–127	Output Level

63 EPAmpSim → Flanger



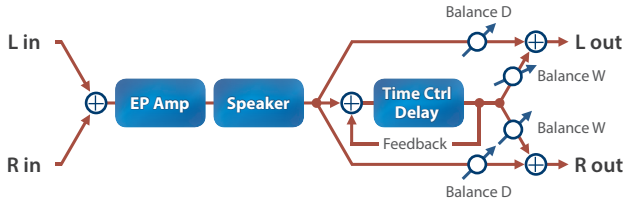
Parameter	Value	Explanation
Type		Type of amp
	OLDCASE	A standard electric piano sound of the early 70s
	NEWCASE	A standard electric piano sound of the late 70s and early 80s
Bass	-50–+50	Amount of low-frequency boost/cut
Treble	-50–+50	Amount of high-frequency boost/cut
Flanger Switch	OFF, ON	Flanger on/off
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Flanger Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Flanger Rate (note)	Note ➡ **"Note"** (p. 88)	
Flanger Depth	0–127	Depth of modulation
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the flanger (W) and the sound that is not sent through the flanger (D).
Speaker Type	LINE, OLD, NEW, WURLY, TWIN	Type of speaker If LINE is selected, the sound will not be sent through the speaker simulation.
OD Switch	OFF, ON	Overdrive on/off
OD Gain	0–127	Overdrive input level
OD Drive	0–127	Degree of distortion Also changes the volume.
Level	0–127	Output Level

64 EPAmpSim → Phaser



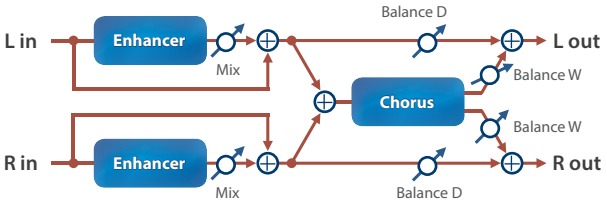
Parameter	Value	Explanation
Type		Type of amp
	OLDCASE	A standard electric piano sound of the early 70s
	NEWCASE	A standard electric piano sound of the late 70s and early 80s
Bass	-50–+50	Amount of low-frequency boost/cut
Treble	-50–+50	Amount of high-frequency boost/cut
Phaser Switch	OFF, ON	Phaser on/off
Phaser Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Phaser Rate (Hz)	0.05–10.00 [Hz]	Modulation rate
Phaser Rate (note)	Note ➡ **"Note"** (p. 88)	
Phaser Manual	0–127	Center frequency at which the sound is modulated
Phaser Depth	0–127	Depth of modulation
Phaser Resonance	0–127	Amount of feedback
Phaser Mix	0–127	Level of the phase-shifted sound
Speaker Type	LINE, OLD, NEW, WURLY, TWIN	Type of speaker If LINE is selected, the sound will not be sent through the speaker simulation.
OD Switch	OFF, ON	Overdrive on/off
OD Gain	0–127	Overdrive input level
OD Drive	0–127	Degree of distortion Also changes the volume.
Level	0–127	Output Level

65 EPAmpSim → Delay



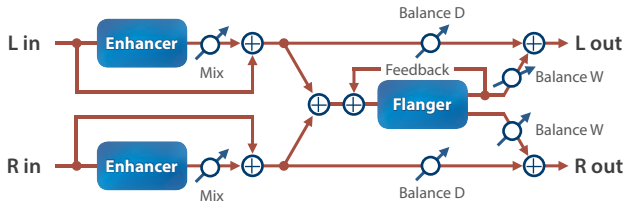
Parameter	Value	Explanation
Type		Type of amp
	OLDCASE	A standard electric piano sound of the early 70s
	NEWCASE	A standard electric piano sound of the late 70s and early 80s
Bass	-50–+50	Amount of low-frequency boost/cut
Treble	-50–+50	Amount of high-frequency boost/cut
Delay Switch	OFF, ON	Delay on/off
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–1300 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Accel	0–15	Speed at which the current delay time changes to the specified delay time when you change the delay time. This affects the speed of pitch change as well as the delay time.
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Frequency at which the high-frequency portion of the delay sound will be cut (**BYPASS:** no cut)
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Speaker Type	LINE, OLD, NEW, WURLY, TWIN	Type of speaker If LINE is selected, the sound will not be sent through the speaker simulation.
OD Switch	OFF, ON	Overdrive on/off
OD Gain	0–127	Overdrive input level
OD Drive	0–127	Degree of distortion Also changes the volume.
Level	0–127	Output Level

66 Enhancer → Chorus



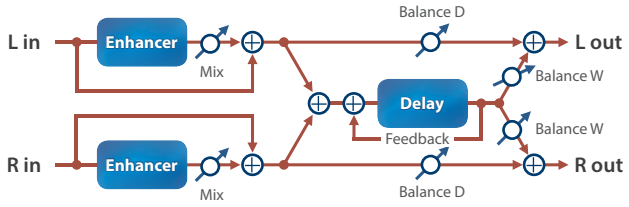
Parameter	Value	Explanation
Enhancer Sens	0–127	Sensitivity of the enhancer
Enhancer Mix	0–127	Level of the overtones generated by the enhancer
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Chorus Rate (note)	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Depth of modulation
Chorus Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the chorus (W) and the sound that is not sent through the chorus (D).
Level	0–127	Output Level

67 Enhancer → Flanger



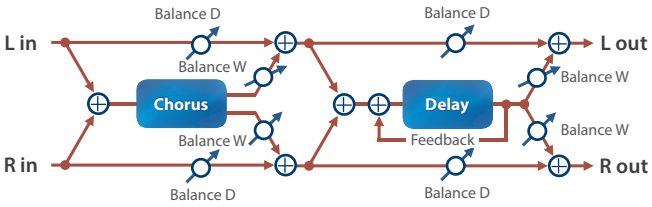
Parameter	Value	Explanation
Enhancer Sens	0–127	Sensitivity of the enhancer
Enhancer Mix	0–127	Level of the overtones generated by the enhancer
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Flanger Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Flanger Rate (note)	Note ➡ **"Note"** (p. 88)	
Flanger Depth	0–127	Depth of modulation
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the flanger (W) and the sound that is not sent through the flanger (D).
Level	0–127	Output Level

68 Enhancer → Delay



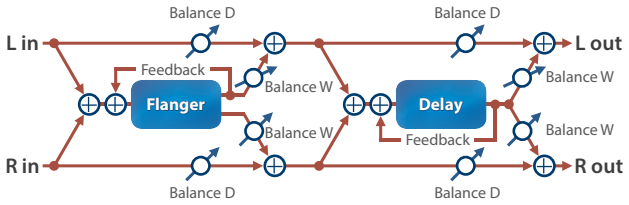
Parameter	Value	Explanation
Enhancer Sens	0–127	Sensitivity of the enhancer
Enhancer Mix	0–127	Level of the overtones generated by the enhancer
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–2600 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

69 Chorus → Delay



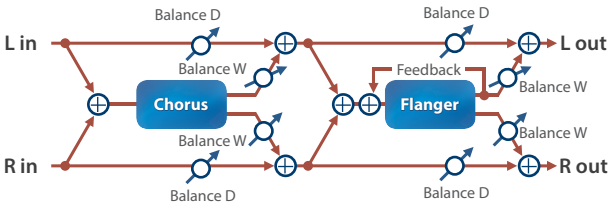
Parameter	Value	Explanation
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Chorus Rate (note)	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Depth of modulation
Chorus Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–2600 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

70 Flanger → Delay



Parameter	Value	Explanation
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Flanger Rate (Hz)	0.05–10.00 [Hz]	Frequency of modulation
Flanger Rate (note)	Note ➡ **"Note"** (p. 88)	
Flanger Depth	0–127	Depth of modulation
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the flanger sound (W)
Delay Time (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Delay Time (msec)	1–2600 [msec]	Delay time from when the original sound is heard to when the delay sound is heard
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

71 Chorus → Flanger

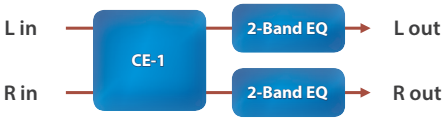


Parameter	Value	Explanation
Chorus Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Chorus Rate (Hz)	0.05–10.00 [Hz]	Modulation frequency of the chorus effect
Chorus Rate (note)	Note ➡ **"Note"** (p. 88)	
Chorus Depth	0–127	Modulation depth of the chorus effect
Chorus Balance	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Flanger Pre Delay	0.0–100 [msec]	Adjusts the delay time from the direct sound until the flanger sound is heard.
Flanger Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Flanger Rate (Hz)	0.05–10.00 [Hz]	Modulation frequency of the flanger effect
Flanger Rate (note)	Note ➡ **"Note"** (p. 88)	
Flanger Depth	0–127	Modulation depth of the flanger effect
Flanger Feedback	-98–+98 [%]	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Flanger Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the flanger (W) and the sound that is not sent through the flanger (D).
Level	0–127	Output Level

72 CE-1

This models the classic BOSS CE-1 chorus effect unit.

It provides a chorus sound with a distinctively analog warmth.



Parameter	Value	Explanation
Intensity	0–127	Chorus depth
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

73 SBF-325

This effect reproduces Roland's SBF-325 analog flanger.

It provides three types of flanging effect (which adds a metallic resonance to the original sound) and a chorus-type effect.

Parameter	Value	Explanation
Mode		Types of flanging effect
	FL1	A typical mono flanger
	FL2	A stereo flanger that preserves the stereo positioning of the original sound
	FL3	A cross-mix flanger that produces a more intense effect
	CHO	A chorus effect
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.02–5.00 [Hz]	Modulation frequency of the flanger effect
Rate (note)	Note ➡ **"Note"** (p. 88)	
Depth	0–127	Modulation depth of the flanger effect
Manual	0–127	Center frequency at which the flanger effect is applied
Feedback	0–127	Amount by which the flanging effect is boosted If Mode is CHO, this setting is ignored.
CH-R Mode Phase	NORM, INV	Phase of the right channel modulation: Normally, you will leave this at Normal (NORM). If you specify Inverted (INV), the modulation (upward/downward movement) of the right channel is inverted.
CH-L Phase		Phase when mixing the flanging sound with the original sound **NORM:** normal phase **INV:** inverse phase
CH-R Phase		
Level	0–127	Output Level

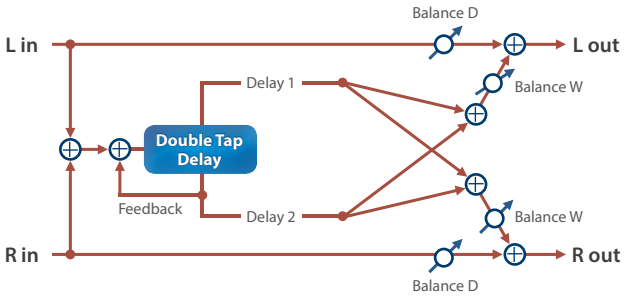
74 SDD-320

This models Roland's DIMENSION D (SDD-320).

It provides a clear chorus sound.

Parameter	Value	Explanation
Mode	1, 2, 3, 4, 1+4, 2+4, 3+4	Switches the mode.
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Level	0–127	Output Level

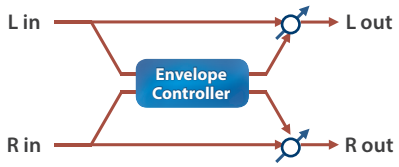
75 2Tap Pan Delay



Parameter	Value	Explanation
Delay Time (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
Delay Time (msec)	1–2600 [msec]	Adjusts the delay time from the direct sound until the second delay sound is heard.
Delay Time (note)	Note ➡ **"Note"** (p. 88)	
Delay Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
Delay 1 Pan	L64–63R	Stereo location of Delay 1
Delay 2 Pan	L64–63R	Stereo location of Delay 2
Delay 1 Level	0–127	Volume of delay 1
Delay 2 Level	0–127	Volume of delay 2
Low Gain	-15–+15 [dB]	Gain of the low range
High Gain	-15–+15 [dB]	Gain of the high range
Balance	D100:0W–D0:100W	Adjusts the volume balance between the sound that is sent through the delay (W) and the sound that is not sent through the delay (D).
Level	0–127	Output Level

76 Transient

This effect lets you control the way in which the sound attacks and decays.



Parameter	Value	Explanation
Attack	-50–+50	Character of the attack. Higher values make the attack more aggressive; lower values make the attack milder.
Release	-50–+50	Character of the decay. Higher values make the sound linger; lower values make the sound cutoff quickly.
Output Gain	-24–+12 [dB]	Output gain
Sense	LOW, MID, HIGH	Quickness with which the attack is detected
Level	0–127	Output Level

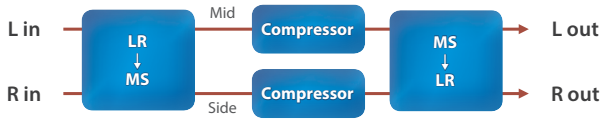
77 Mid-Side EQ

This effect allows the left/right signals that have similar phase to be tonally adjusted in a different way than the left/right signals that have different phase.

Parameter	Value	Explanation
M EQ Switch	OFF, ON	Switches whether to apply tonal adjustment to left/right input signals whose phase is similar (in phase).
M Input Gain	-12.00–+12.00 [dB]	Volume of left/right input signals whose phase is similar (in phase)
M Low Frequency	20, 25, 31, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400 [Hz]	Frequency of the low range
M Low Gain	-12.00–+12.00 [dB]	Gain of the low range
M Mid1 Frequency	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 1
M Mid1 Gain	-12.00–+12.00 [dB]	Gain of the middle range 1
M Mid1 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 1 Set a higher value to narrow the range to be affected.
M Mid2 Frequency	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 2
M Mid2 Gain	-12.00–+12.00 [dB]	Gain of the middle range 2
M Mid2 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 2 Set a higher value to narrow the range to be affected.
M Mid3 Frequency	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 3
M Mid3 Gain	-12.00–+12.00 [dB]	Gain of the middle range 3
M Mid3 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 3 Set a higher value to narrow the range to be affected.
M High Frequency	2000, 2500, 3150, 4000, 5000, 6300, 8000, 10000, 12500, 16000 [Hz]	Frequency of the high range
M High Gain	-12.00–+12.00 [dB]	Gain of the high range
S EQ Switch	OFF, ON	Switches whether to apply tonal adjustment to left/right input signals whose phase is distant (opposite phase).
S Input Gain	-12.00–+12.00 [dB]	Volume of left/right signals whose phase is distant (opposite phase)
S Low Frequency	20, 25, 31, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400 [Hz]	Frequency of the low range
S Low Gain	-12.00–+12.00 [dB]	Gain of the low range
S Mid1 Frequency	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 1
S Mid1 Gain	-12.00–+12.00 [dB]	Gain of the middle range 1
S Mid1 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 1 Set a higher value to narrow the range to be affected.
S Mid2 Frequency	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 2
S Mid2 Gain	-12.00–+12.00 [dB]	Gain of the middle range 2
S Mid2 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 2 Set a higher value to narrow the range to be affected.
S Mid3 Frequency	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]	Frequency of the middle range 3
S Mid3 Gain	-12.00–+12.00 [dB]	Gain of the middle range 3
S Mid3 Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the middle range 3 Set a higher value to narrow the range to be affected.
S High Frequency	2000, 2500, 3150, 4000, 5000, 6300, 8000, 10000, 12500, 16000 [Hz]	Frequency of the high range
S High Gain	-12.00–+12.00 [dB]	Gain of the high range
Level	0–127	Output Level

78 Mid-Side Compressor

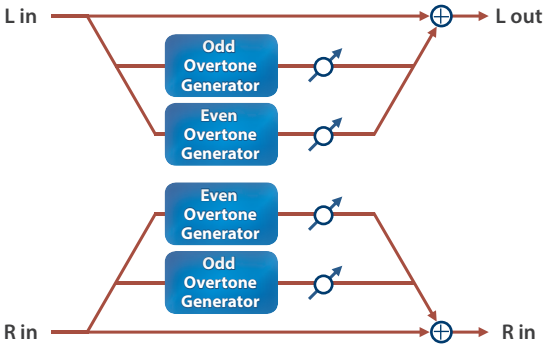
This effect allows the left/right signals that have similar phase to be adjusted to a different sense of volume than the left/right signals that have different phase.



Parameter	Value	Explanation
M Comp Switch	OFF, ON	Switches whether to adjust the sense of volume for left/right input signals whose phase is similar (in phase).
M Attack	0–124	Sets the time from when the input exceeds the Threshold until the volume starts being compressed
M Release	0–124	Adjusts the time after the signal volume falls below the Threshold Level until compression is no longer applied.
M Threshold	-60–0 [dB]	Adjusts the volume at which compression begins
M Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than THRESHOLD. Higher values produce a smoother transition.
M Ratio	1:1, 1.5:1, 2:1, 4:1, 16:1, INF:1	Compression ratio
M Post Gain	0–+18 [dB] -	Adjusts the output gain.
S Comp Switch	OFF, ON	Switches whether to adjust the sense of volume for left/right input signals whose phase is distant (opposite phase).
S Attack	0–124	Sets the time from when the input exceeds the Threshold until the volume starts being compressed
S Release	0–124	Adjusts the time after the signal volume falls below the Threshold Level until compression is no longer applied.
S Threshold	-60–0 [dB]	Adjusts the volume at which compression begins
S Knee	0–30 [dB]	This is a function that smooths the onset of compression from the uncompressed state; it gradually applies compression starting earlier than THRESHOLD. Higher values produce a smoother transition.
S Ratio	1:1, 1.5:1, 2:1, 4:1, 16:1, INF:1	Compression ratio
S Post Gain	0–+18 [dB]	Adjusts the output gain.
Level	0–127	Output Level

79 Tone Fattener

This effect applies distinctive distortion, adding overtones to give more depth to the sound.



Parameter	Value	Explanation
Odd Level	0–400 [%]	Raising the value adds odd-order overtones.
Even Level	0–400 [%]	Raising the value adds even-order overtones.
Level	0–127	Output Level

80 Mid-Side Delay

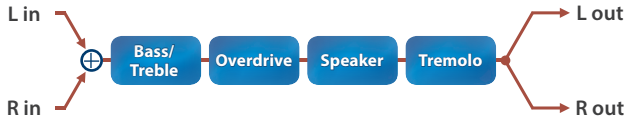
This effect applies different amounts of delay to left/right signals of similar phase and differing phase.

Parameter	Value	Explanation
M Delay Level	0–127	Delay volume of left/right input signals whose phase is similar (in phase)
M Delay Mode	2Tap, 3Tap, 4Tap	Delay divisions for the input signals whose left/right phase is similar (identical phase)
M Delay Time (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
M Delay Time (msec)	1–1300 [msec]	Adjusts the time from the original sound until the delay sound is heard.
M Delay Time (note)	Note ➡ **"Note"** (p. 88)	
M Delay 1 Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
M HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
M Delay 1 Pan	L64–63R	Panning of the first delay sound
M Delay 2 Pan		Panning of the second delay sound
M Delay 3 Pan		Panning of the third delay sound
M Delay 4 Pan		Panning of the fourth delay sound
S Delay Level	0–127	Delay volume of left/right input signals whose phase is distant (opposite phase)
S Delay Mode	2Tap, 3Tap, 4Tap	Delay divisions for the input signals whose left/right phase is distant (reverse phase)
S Delay Time (sync sw)	OFF, ON	If this is ON, the delay synchronizes with the tempo.
S Delay Time (msec)	1–1300 [msec]	Adjusts the time from the original sound until the delay sound is heard.
S Delay Time (note)	Note ➡ **"Note"** (p. 88)	

Parameter	Value	Explanation
S Delay 1 Feedback	-98–+98 [%]	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
S HF Damp	200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS [Hz]	Adjusts the frequency above which the delay sound fed back to the effect is filtered out (**BYPASS:** no cut).
S Delay 1 Pan	L64–63R	Panning of the first delay sound
S Delay 2 Pan		Panning of the second delay sound
S Delay 3 Pan		Panning of the third delay sound
S Delay 4 Pan		Panning of the fourth delay sound
Level	0–127	Output Level

81 RD EPAmpSim

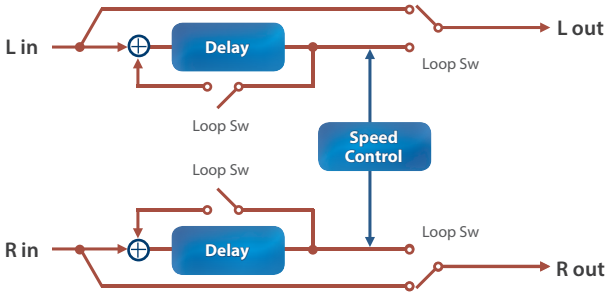
This is an effect that was developed for the RD series SuperNatural E.Piano.



Parameter	Value	Explanation
Bass	-50–+50	Amount of low-frequency boost/cut
Treble	-50–+50	Amount of high-frequency boost/cut
Tremolo Switch	OFF, ON	Tremolo on/off
Tremolo Type		Type of tremolo effect
	OLDCASE MONO	A standard electric piano sound of the early 70s (mono)
	OLDCASE STEREO	A standard electric piano sound of the early 70s (stereo)
	NEWCASE	A standard electric piano sound of the late 70s and early 80s
	DYNO	A classic modified electric piano
	WURLY	A classic electric piano of the '60s
Tremolo Speed (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Tremolo Speed (Hz)	0.05–10.00 [Hz]	Rate of the tremolo effect
Tremolo Speed (note)	Note ➡ **"Note"** (p. 88)	
Tremolo Depth	0–127	Depth of the tremolo effect
Tremolo Shape	0–20	Adjusts the waveform of the tremolo.
AMP Switch	OFF, ON	Turns the speaker and distortion on/off
Speaker Type	LINE, OLD, NEW, WURLY, TWIN	Type of speaker If LINE is selected, the sound will not be sent through the speaker simulation.
OD Drive	0–127	Degree of distortion Also changes the volume.
Level	0–127	Output Level

82 DJFX Looper

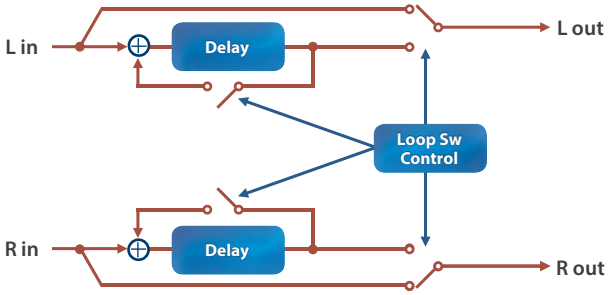
Loops a short portion of the input sound. You can vary the playback direction and playback speed of the input sound to add turntable-type effects.



Parameter	Value	Explanation
Length	0–127	Specifies the length of the loop.
Speed	-1.00–+1.00	Specifies the playback direction and playback speed. **- direction:** Reverse playback **+ direction:** Normal playback **0:** Stop playback As the value moves away from 0, the playback speed becomes faster.
Loop Sw	OFF, ON	If you turn this on while the sound is heard, the sound at that point will be looped. Turn this off to cancel the loop. * **If the effect is recalled with this ON, this parameter must be turned OFF and then turned ON again in order to make the loop operate.**
Level	0–127	Output Level

83 BPM Looper

Loops a short portion of the input sound. This can automatically turn the loop on/off in synchronization with the rhythm.

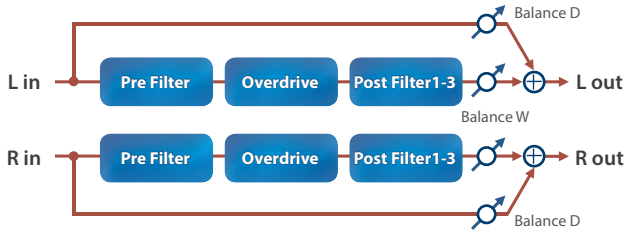


Parameter	Value	Explanation
Length	0–127	Specifies the length of the loop.
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate Hz	0.05–10.00 [Hz]	Cycle at which the loop automatically turns on/off
Rate Note	Note ➡ **"Note"** (p. 88)	
On Timing	1–8	Specifies the timing within the cycle at which the loop automatically starts (which step of the eight timing divisions at which the sound is heard)
On Length	1–8	Specifies the length at which the loop automatically ends within the cycle (the number of times that the 1/8-length of sound is heard)
Loop Mode	OFF, AUTO, ON	If this is AUTO, the loop automatically turns on/off in synchronization with the rhythm. * **If the effect is recalled with this ON, this parameter must first be set to something other than ON in order to make the loop operate.**

Parameter	Value	Explanation
Level	0–127	Output Level

84 Saturator

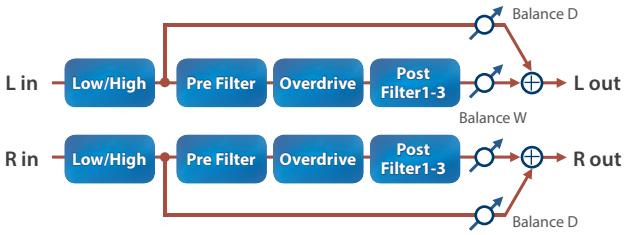
This effect combines overdrive and filter.



Parameter	Value	Explanation
DrvPre1 Type	THRU, LPF, HPF, LSV, HSV	Type of filter that precedes the distortion processing **THRU:** No filter is applied **LPF:** A filter that passes the sound below the specified frequency **HPF:** A filter that passes the sound above the specified frequency **LSV:** A filter that boosts/cuts the sound below the specified frequency **HSV:** A filter that boosts/cuts the sound above the specified frequency
DrvPre1 Frequency	20–16000 [Hz]	Frequency at which the pre-distortion filter operates
DrvPre1 Gain	-24.0–+24.0 [dB]	For the LSV/HSV types, the amount of boost/cut
Drive	0.0–+48.0 [dB]	Strength of distortion
DrvPost1 Type	THRU, LPF, HPF, LSV, HSV	Type of filter 1 which follows the distortion processing
DrvPost1 Frequency	20–16000 [Hz]	Frequency at which post-distortion filter 1 operates
DrvPost1 Gain	-24.0–+24.0 [dB]	For the LSV/HSV types, the amount of boost/cut
DrvPost2 Type	THRU, LPF, HPF, LSV, HSV	Type of filter 2 which follows the distortion processing
DrvPost2 Frequency	20–16000 [Hz]	Frequency at which post-distortion filter 2 operates
DrvPost2 Gain	-24.0–+24.0 [dB]	For the LSV/HSV types, the amount of boost/cut
DrvPost3 Type	THRU, LPF, HPF, BPF, PKG	Type of filter 3 which follows the distortion processing **THRU:** No filter is applied **LPF:** A filter that passes the sound below the specified frequency **HPF:** A filter that passes the sound above the specified frequency **BPF:** A filter that passes only the specified frequency **PKG:** A filter that boosts/cuts the specified frequency
DrvPost3 Frequency	20–16000 [Hz]	Frequency at which post-distortion filter 3 operates
DrvPost3 Gain	-24.0–+24.0 [dB]	For the PKG type, the amount of boost/cut
DrvPost3 Q	0.5–16.0	Width of the frequency range affected by the filter
Makeup Sense	-60.0–0.0 [dB]	Adjust this value so that the sound is not made louder when distortion is applied.
DrvPost Gain	-48.0–+12.0 [dB]	Gain following distortion processing
Drive Balance	D100:0W–D0:100W	Volume balance between the dry sound (D) and effect sound (W)
Level	0–127	Output Level

85 Warm Saturator

This is a variety of saturator, and is distinctive for its warmer sound.

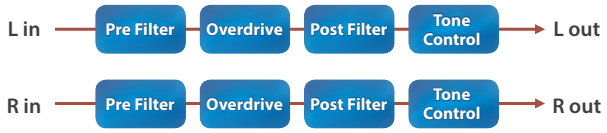


Parameter	Value	Explanation
EQ Low Frequency	20–16000 [Hz]	Input filter (low range) Boosts/cuts the sound below the specified frequency.
EQ Low Gain	-24–+24 [dB]	Amount of boost/cut
EQ High Slope	THRU, -12dB, -24dB	Input filter (high range) Boosts/cuts the sound above the specified frequency.
EQ High Frequency	20–16000 [Hz]	Amount of boost/cut
DrvPre1 Type	THRU, LPF, HPF, LSV, HSV	Types of filter that precedes the distortion processing **THRU:** No filter is applied **LPF:** A filter that passes the sound below the specified frequency **HPF:** A filter that passes the sound above the specified frequency **LSV:** A filter that boosts/cuts the sound below the specified frequency **HSV:** A filter that boosts/cuts the sound above the specified frequency
DrvPre1 Frequency	20–16000 [Hz]	Frequency at which the pre-distortion filter operates
DrvPre1 Gain	-24.0–+24.0 [dB]	For the LSV/HSV types, the amount of boost/cut
Drive	0.0–+48.0 [dB]	Strength of distortion
DrvPost1 Type	THRU, LPF, HPF, LSV, HSV	Type of filter 1 which follows the distortion processing
DrvPost1 Frequency	20–16000 [Hz]	Frequency at which post-distortion filter 1 operates
DrvPost1 Gain	-24.0–+24.0 [dB]	For the LSV/HSV types, the amount of boost/cut
DrvPost2 Type	THRU, LPF, HPF, LSV, HSV	Type of filter 2 which follows the distortion processing
DrvPost2 Frequency	20–16000 [Hz]	Frequency at which post-distortion filter 2 operates
DrvPost2 Gain	-24.0–+24.0 [dB]	For the LSV/HSV types, the amount of boost/cut
DrvPost3 Type	THRU, LPF, HPF, LSV, HSV	Type of filter 3 which follows the distortion processing **THRU:** No filter is applied **LPF:** A filter that passes the sound below the specified frequency **HPF:** A filter that passes the sound above the specified frequency **BPF:** A filter that passes only the specified frequency **PKG:** A filter that boosts/cuts the specified frequency
DrvPost3 Frequency	20–16000 [Hz]	Frequency at which post-distortion filter 3 operates
DrvPost3 Gain	-24.0–+24.0 [dB]	For the PKG type, the amount of boost/cut
DrvPost3 Q	0.5–16.0	Width of the frequency range affected by the filter
Makeup Sense	-60.0–0.0 [dB]	Adjust this value so that the sound is not made louder when distortion is applied.
DrvPost Gain	-48.0–+12.0 [dB]	Gain following distortion processing

Parameter	Value	Explanation
Drive Balance	D100:0W–D0:100W	Volume balance between the dry sound (D) and effect sound (W)
Level	0–127	Output Level

86 Fuzz

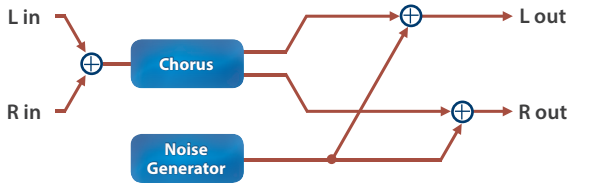
Adds overtones and intensely distorts the sound.



Parameter	Value	Explanation
Drive	0–127	Adjusts the amount of distortion. This also changes the volume.
Tone	0–127	Sound quality of the Overdrive effect
Level	0–127	Output Level

87 JUNO-106 Chorus

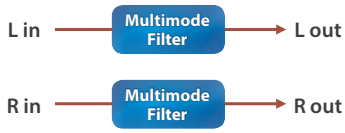
This models the chorus effects of the Roland JUNO-106.



Parameter	Value	Explanation
Mode	I, II, I+II, JX I, JX II	Type of Chorus **I+II:** The state in which two buttons are pressed simultaneously.
Noise Level	0–127	Volume of the noise produced by chorus
Balance	D100:0W–D0:100W	Volume balance between the dry sound (D) and effect sound (W)
Level	0–127	Output Level

88 Multi Mode Filter

This is a filter that is adjusted for effective use in a DJ performance.



Parameter	Value	Explanation
Filter Type	LPF/HPF, LPF, HPF, BPF	Type of filter **LPF/HPF:** The filter type is automatically switched according to the Filter Tone parameter value.
Filter Tone	0–255	Frequency at which the filter operates
Filter Color	0–255	Filter resonance level Higher values more strongly emphasize the region of the operating frequency.
Filter Slope	-12, -24, -36 [dB]	Amount of attenuation per octave **-12 dB:** gentle **-24 dB:** steep **-36 dB:** extremely steep
Filter Gain	0–+12 [dB]	Amount of boost for the filter output
Level	0–127	Output Level

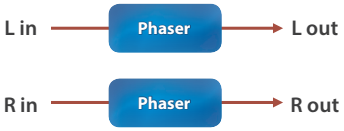
89 HMS Distortion

This is a distortion-type effect that models the vacuum tube amp section of a rotary speaker of the past.

Parameter	Value	Explanation
Distortion	0–127	Strength of distortion
Level	0–127	Output Level

90 Phaser 100

This simulates an analog phaser of the past.



Parameter	Value	Explanation
Rate (sync sw)	OFF, ON	If this is ON, the rate synchronizes with the tempo of the rhythm. ➡ **"BPM"** (p. 39)
Rate (Hz)	0.05–10.00 [Hz]	Modulation rate
Rate (note)	Note ➡ **"Note"** (p. 88)	
Duty	-50–50	Adjusts the ratio of speeds at which the modulation rises or falls.
Min	0–100	Lower limit reached by modulation
Max	0–100	Upper limit reached by modulation
Manual Sw	OFF, ON	Applies modulation according to the value of the Manual parameter, rather than modulating automatically.
Manual	0–100	Center frequency at which the sound is modulated
Resonance	0–66	Amount of feedback
Mix	0–127	Level of the phase-shifted sound
Level	0–127	Output Level

Note

	Sixty-fourth-note triplet		Sixty-fourth note		Thirty-second-note triplet		Thirty-second note
	Sixteenth-note triplet		Dotted thirty-second note		Sixteenth note		Eighth-note triplet
	Dotted sixteenth note		Eighth note		Quarter-note triplet		Dotted eighth note
	Quarter note		Half-note triplet		Dotted quarter note		Half note
	Whole-note triplet		Dotted half note		Whole note		Double-note triplet
	Dotted whole note		Double note				

Block Diagram