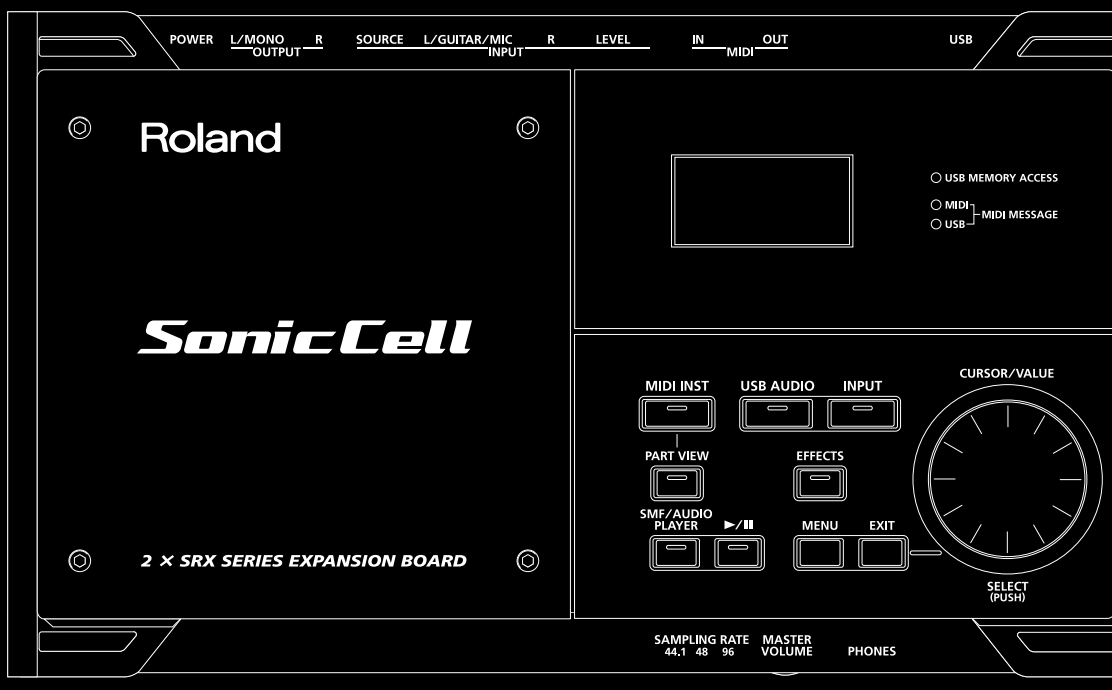

SonicCell

Owner's Manual

Roland®

USING THE UNIT SAFELY

INSTRUCTIONS FOR THE PREVENTION OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS

About ⚠WARNING and ⚠CAUTION Notices

⚠WARNING	Used for instructions intended to alert the user to the risk of death or severe injury should the unit be used improperly.
⚠CAUTION	Used for instructions intended to alert the user to the risk of injury or material damage should the unit be used improperly. * Material damage refers to damage or other adverse effects caused with respect to the home and all its furnishings, as well to domestic animals or pets.

About the Symbols

⚠	The △ symbol alerts the user to important instructions or warnings.The specific meaning of the symbol is determined by the design contained within the triangle. In the case of the symbol at left, it is used for general cautions, warnings, or alerts to danger.
	The ⃠ symbol alerts the user to items that must never be carried out (are forbidden). The specific thing that must not be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the unit must never be disassembled.
	The ● symbol alerts the user to things that must be carried out. The specific thing that must be done is indicated by the design contained within the circle. In the case of the symbol at left, it means that the power-cord plug must be unplugged from the outlet.

ALWAYS OBSERVE THE FOLLOWING

⚠WARNING

- Before using this unit, make sure to read the instructions below, and the Owner's Manual.

- Do not open or perform any internal modifications on the unit or its AC adaptor. (The only exception would be where this manual provides specific instructions which should be followed in order to put in place user-installable options; see p. 47, p. 50.)

- Do not attempt to repair the unit, or replace parts within it (except when this manual provides specific instructions directing you to do so). Refer all servicing to your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Never use or store the unit in places that are:
  - Subject to temperature extremes (e.g., direct sunlight in an enclosed vehicle, near a heating duct, on top of heat-generating equipment); or are
  - Damp (e.g., baths, washrooms, on wet floors); or are
  - Humid; or are
  - Exposed to rain; or are
  - Dusty; or are
  - Subject to high levels of vibration.

- This unit should be used only with a BKT-S that is recommended by Roland (p. 30).

- When using the unit with the BKT-S and PDS-10 recommended by Roland, the rack or stand must be carefully placed so it is level and sure to remain stable. If not using a rack or stand, you still need to make sure that any location you choose for placing the unit provides a level surface that will properly support the unit, and keep it from wobbling.

⚠WARNING

- Be sure to use only the AC adaptor supplied with the unit. Also, make sure the line voltage at the installation matches the input voltage specified on the AC adaptor's body. Other AC adaptors may use a different polarity, or be designed for a different voltage, so their use could result in damage, malfunction, or electric shock.

- Use only the attached power-supply cord. Also, the supplied power cord must not be used with any other device.

- Do not excessively twist or bend the power cord, nor place heavy objects on it. Doing so can damage the cord, producing severed elements and short circuits. Damaged cords are fire and shock hazards!

- This unit, either alone or in combination with an amplifier and headphones or speakers, may be capable of producing sound levels that could cause permanent hearing loss. Do not operate for a long period of time at a high volume level, or at a level that is uncomfortable. If you experience any hearing loss or ringing in the ears, you should immediately stop using the unit, and consult an audiologist.

- Do not allow any objects (e.g., flammable material, coins, pins); or liquids of any kind (water, soft drinks, etc.) to penetrate the unit.

⚠WARNING

- Immediately turn the power off, remove the AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - If smoke or unusual odor occurs
  - Objects have fallen into, or liquid has been spilled onto the unit; or
  - The unit has been exposed to rain (or otherwise has become wet); or
  - The unit does not appear to operate normally or exhibits a marked change in performance.

- In households with small children, an adult should provide supervision until the child is capable of following all the rules essential for the safe operation of the unit.

- Protect the unit from strong impact.
  (Do not drop it!)

- Do not force the unit's power-supply cord to share an outlet with an unreasonable number of other devices. Be especially careful when using extension cords—the total power used by all devices you have connected to the extension cord's outlet must never exceed the power rating (watts/amperes) for the extension cord. Excessive loads can cause the insulation on the cord to heat up and eventually melt through.

- Before using the unit in a foreign country, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.

- Always turn the unit off and unplug the AC adaptor before attempting installation of the circuit board (model no. SRX series; p. 19).

- DO NOT play a CD-ROM disc on a conventional audio CD player. The resulting sound may be of a level that could cause permanent hearing loss. Damage to speakers or other system components may result.

- The unit and the AC adaptor should be located so their location or position does not interfere with their proper ventilation.

- Always grasp only the plug on the AC adaptor cord when plugging into, or unplugging from, an outlet or this unit.

⚠CAUTION

- At regular intervals, you should unplug the AC adaptor and clean it by using a dry cloth to wipe all dust and other accumulations away from its prongs. Also, disconnect the power plug from the power outlet whenever the unit is to remain unused for an extended period of time. Any accumulation of dust between the power plug and the power outlet can result in poor insulation and lead to fire.

- Try to prevent cords and cables from becoming entangled. Also, all cords and cables should be placed so they are out of the reach of children.

- Never climb on top of, nor place heavy objects on the unit.

- Never handle the AC adaptor or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the AC adaptor and all cords coming from external devices.

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (p. 19).

- Whenever you suspect the possibility of lightning in your area, disconnect the AC adaptor from the outlet.

- Install only the specified circuit board(s) (model no. SRX series). Remove only the specified screws (p. 47, p. 50).

- Keep any screws you may remove and the included wrench in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.

- Always turn the phantom power off when connecting any device other than condenser microphones that require phantom power. You risk causing damage if you mistakenly supply phantom power to dynamic microphones, audio playback devices, or other devices that don't require such power. Be sure to check the specifications of any microphone you intend to use by referring to the manual that came with it.

  (This instrument's phantom power: 48 V DC, 10 mA Max)

IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on page 3–4, please read and observe the following:

Power Supply

- Do not connect this unit to same electrical outlet that is being used by an electrical appliance that is controlled by an inverter (such as a refrigerator, washing machine, microwave oven, or air conditioner), or that contains a motor. Depending on the way in which the electrical appliance is used, power supply noise may cause this unit to malfunction or may produce audible noise. If it is not practical to use a separate electrical outlet, connect a power supply noise filter between this unit and the electrical outlet.
- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.
- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- Using the unit near power amplifiers (or other equipment containing large power transformers) may induce hum. To alleviate the problem, change the orientation of this unit; or move it farther away from the source of interference.
- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.
- Noise may be produced if wireless communications devices, such as cell phones, are operated in the vicinity of this unit. Such noise could occur when receiving or initiating a call, or while conversing. Should you experience such problems, you should relocate such wireless devices so they are at a greater distance from this unit, or switch them off.
- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.
- When moved from one location to another where the temperature and/or humidity is very different, water droplets (condensation) may form inside the unit. Damage or malfunction may result if you attempt to use the unit in this condition. Therefore, before using the unit, you must allow it to stand for several hours, until the condensation has completely evaporated.
- Depending on the material and temperature of the surface on which you place the unit, its rubber feet may discolor or mar the surface.
  You can place a piece of felt or cloth under the rubber feet to prevent this from happening. If you do so, please make sure that the unit will not slip or move accidentally.

Maintenance

- For everyday cleaning wipe the unit with a soft, dry cloth or one that has been slightly dampened with water. To remove stubborn dirt, use a cloth impregnated with a mild, non-abrasive detergent. Afterwards, be sure to wipe the unit thoroughly with a soft, dry cloth.
- Never use benzine, thinners, alcohol or solvents of any kind, to avoid the possibility of discoloration and/or deformation.

Repairs and Data

- Please be aware that all data contained in the unit's memory may be lost when the unit is sent for repairs. Important data should always be backed up on an USB memory, or written down on paper (when possible). During repairs, due care is taken to avoid the loss of data. However, in certain cases (such as when circuitry related to memory itself is out of order), we regret that it may not be possible to restore the data, and Roland assumes no liability concerning such loss of data.

Additional Precautions

- Please be aware that the contents of memory can be irretrievably lost as a result of a malfunction, or the improper operation of the unit. To protect yourself against the risk of loosing important data, we recommend that you periodically save a backup copy of important data you have stored in the unit's memory on an USB memory.
- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory or on an USB memory once it has been lost. Roland Corporation assumes no liability concerning such loss of data.
- Use a reasonable amount of care when using the unit's buttons, sliders, or other controls; and when using its jacks and connectors. Rough handling can lead to malfunctions.
- Never strike or apply strong pressure to the display.
- A small amount of noise may be heard from the display during normal operation.
- When connecting / disconnecting all cables, grasp the connector itself—never pull on the cable. This way you will avoid causing shorts, or damage to the cable's internal elements.
- To avoid disturbing your neighbors, try to keep the unit's volume at reasonable levels. You may prefer to use headphones, so you do not need to be concerned about those around you (especially when it is late at night).
- When you need to transport the unit, package it in the box (including padding) that it came in, if possible. Otherwise, you will need to use equivalent packaging materials.

- Some connection cables contain resistors. Do not use cables that incorporate resistors for connecting to this unit. The use of such cables can cause the sound level to be extremely low, or impossible to hear. For information on cable specifications, contact the manufacturer of the cable.
- Unauthorized duplication, reproduction, hiring, and lending prohibited.

Handling CD-ROMs

- Avoid touching or scratching the shiny underside (encoded surface) of the disc. Damaged or dirty CD-ROM discs may not be read properly. Keep your discs clean using a commercially available CD cleaner.

Copyright

- Recording, duplication, distribution, sale, lease, performance, or broadcast of copyrighted material (musical works, visual works, broadcasts, live performances, etc.) belonging to a third party in part or in whole without the permission of the copyright owner is forbidden by law.
- This product can be used to record or duplicate audio or visual material without being limited by certain technological copy-protection measures. This is due to the fact that this product is intended to be used for the purpose of producing original music or video material, and is therefore designed so that material that does not infringe copyrights belonging to others (for example, your own original works) can be recorded or duplicated freely.
- Do not use this unit for purposes that could infringe on a copyright held by a third party. We assume no responsibility whatsoever with regard to any infringements of third-party copyrights arising through your use of this unit.

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* The screen shots in this document are used in compliance with the guidelines of the Microsoft Corporation.
* Windows® is known officially as: "Microsoft® Windows® operating system."
* Apple and Macintosh are registered trademarks of Apple Computer, Inc.
* Mac OS is a trademark of Apple Inc.
* Pentium is a registered trademark of Intel Corporation.
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* VST is a trademark of Steinberg Media Technologies AG.
* MatrixQuest™ 2007 TEPCO UQUEST, LTD.
  All rights reserved.
  The SonicCell's USB functionality uses MatrixQuest middleware technology from TEPCO UQUEST, LTD.

* SONAR is a registered trademark of Twelve Tone Systems, Inc.
* MPEG Layer-3 audio compression technology is licensed from Fraunhofer IIS Corporation and THOMSON Multimedia Corporation.

Contents

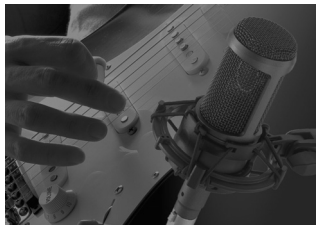
Main Features

Superior Desktop Synthesizer

- 128-voice sound module with new sound set featuring true-to-life instruments
- Two SRX sound expansion slots for sound set personalization

USB Audio/MIDI Interface

- USB audio interface functionality w/MIC and GUITAR (Hi-Z) inputs
- Record using the professional on-board DSP effects
- PC/Mac VSTi/AU Editor and Cakewalk SONAR LE software included



Portable Backing Machine

- SMF, WAV, AIFF and MP3 playback capability via optional USB-memory is perfect for the gig
- Build playlists of any file-type combination using the playlist editor

User Guide

Panel Descriptions

Top Panel

USB MEMORY ACCESS Indicator
This will light when you're playing song data from USB memory that's connected to the SonicCell, or when you're saving data to USB memory.

MIDI MESSAGE Indicator

MIDI
This will light when MIDI messages are being received from a MIDI device connected to the MIDI IN connector.

USB
This will light when MIDI messages are being received from the connected computer.

Display
Various information is shown here according to your operations.

SRX Slot
You can install SRX series wave expansion boards here.
- Installation → p. 46
- Selecting a wave → p. 98

SMF/AUDIO PLAYER Buttons
Press these buttons when you're using the SonicCell as an SMF/audio player.
- Playing a song → p. 28, p. 168
- Creating a playlist → p. 30

►/II (Play/Pause) Button
Plays/pauses the song data.

MENU Button
You can press this button to switch to a menu screen for the current mode or editing screen.
- The menu screen of each main mode
→ p. 59, p. 68, p. 76, p. 84, p. 88, p. 117, p. 133, p. 141, p. 143, p. 146, p. 169, p. 171, p. 181

EXIT Button
Press this button to cancel an operation.

MIDI INST Button

Press this button when you want to use the SonicCell as a MIDI sound module.

- MIDI connections → p. 22, p. 54
- Performance → p. 22, p. 58
- Patch → p. 23, p. 82

USB AUDIO Button

Press this button when you want to apply an effect to the audio signal from the connected computer, or to make output-related settings.

- USB AUDIO → p. 140

INPUT Button

Press this button when you want to apply an effect to the signal from a device connected to the INPUT jack, or to make output-related settings.

- Recording a mic or guitar → p. 40
- Inputting sound from an external device → p.142

PART VIEW Button

If the MIDI sound module is in Performance mode (p. 54), press this button when you want to make settings for each part.
By pressing this button together with the [MIDI INST] button, you can switch between Performance mode and Patch mode.

EFFECTS Button

Press this button when you want to make effect-related settings.

- Applying effects to a performance → p. 78
- Applying effects to a patch → p. 26, p. 132
- Applying effects to the signal from the Input jack → p. 43

CURSOR/VALUE Dial

Use this to move the cursor, select a parameter, or edit a value.
Press the dial to confirm the value.

- How to use [CURSOR/VALUE] → p. 20

■ Playing the Demo Songs

1 **Press [SMF/AUDIO PLAYER].**

2 **Press [►/II].**

Playback will start from the first song.

No.	Title	Composer	Copyright
1	Welcome Back	Yo Sakaue	© 2007 Roland Corporation
2	Mach Juan	Adrian Scott	© 2007 Roland Corporation
3	Big & Bold	Scott Tibbs	© 2007 Roland Corporation
4	Human Sonic	YUHKI	© 2007 Roland Corporation

* *If USB memory containing song file is connected, select [Demo Songs] in the playlist list screen. For details on playing from a playlist, refer to p. 28.*

* *All rights reserved. Unauthorized use of this material for purposes other than private, personal enjoyment is a violation of applicable laws.*

* *No data for the music that is played will be output from MIDI OUT.*

Rear and Front Panels

POWER Switch
Turns the power on/off (p. 18).

DC IN Jack
Connect the included AC adaptor here (p. 18). Do not use any AC adaptor other than the included one; doing so may cause malfunctions.

USB COMPUTER Connector
Use a USB cable to connect your computer here. This connection can handle both MIDI and audio.
- Using the SonicCell with your computer → p.31, p.135

USB MEMORY Connector
You can connect USB memory here and use the SonicCell to play back files (songs) that have been stored on USB memory.
- Playing back songs → p.28, p.167

MIDI IN/OUT Connectors
You can connect these to other MIDI equipment to send and receive MIDI messages.
- Using the SonicCell as a MIDI sound module → p. 22, p. 54

Rear Panel

Security Slot
http://www.kensington.com

PHONES Jack
This is a stereo mini-type jack for connecting headphones.
This jack will output the sound received from the INPUT jack mixed with the sound from the USB-connected computer and the sound from the SonicCell itself.
Connecting headphones will not mute the sound from the OUTPUT jack.

Front Panel

SAMPLING RATE Switch
This specifies the sampling rate used to record or play back audio data.
After changing this setting, you'll need to turn the SonicCell's power off, then on again. If you're using software, you'll also need to restart your software.
Be sure to set the [SAMPLING RATE] switch to match the sampling rate setting of the software you're using.

MASTER VOLUME Dial
This adjusts the volume of the signals output from the PHONES jack and OUTPUT jacks (p. 19).

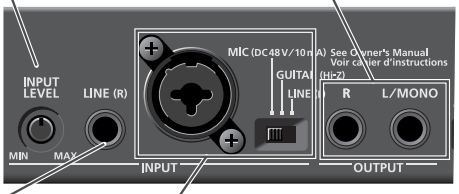
INPUT/OUTPUT Jacks
These jacks input or output audio signals.

INPUT LEVEL Knob
Adjusts the input level of the signal received at INPUT.
• Adjusting the input level → p. 42

OUTPUT Jacks (R, L/MONO)
These jacks output the audio signal.
If you're outputting in mono, connect to the L/MONO jack.
These jacks output the combined signals of the sound received from INPUT, the sound from the USB-connected computer, and the sound from the SonicCell itself.

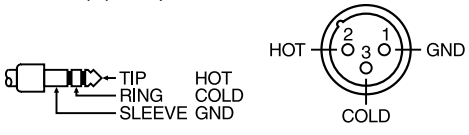
LINE (R) Jack
When using LINE (L) and LINE (R) for stereo input, input the signal for the R channel here.
* If you're inputting in mono, connect it to the LINE (L) jack.

You can't use this jack if the INPUT gain select switch is not at the LINE (L) position.
• Recording a mic or guitar → p. 40, 142



L/GUITAR/MIC Jack (combo input jack)
You can connect either a mic, guitar, or line equipment here.

This instrument is equipped with balanced (XLR/TRS) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.



INPUT SOURCE Switch
Set this as appropriate for the device you've connected to the LINE (L) jack.
If you've connected your source to the LINE (R) jack, you must set this switch to LINE (L).

LINE (L):
Connect a line-level device such as an audio device (e.g., CD player) or keyboard.

GUITAR (Hi-Z):
Connect an electric guitar that's not being sent through an effects processor (high-impedance connection).

MIC:
Connect a mic.

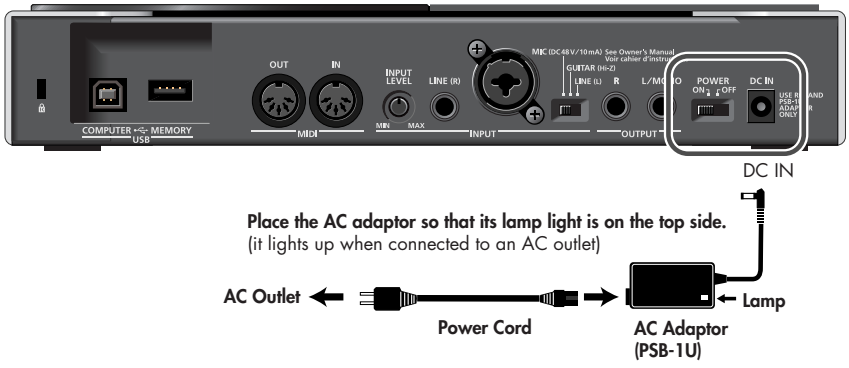
• Recording a mic or guitar → p. 40, 142

Switch		Plug/connector accepted	Nominal input level
LINE		1/4" phone plug (unbalanced)	-30 – -10 dBu
GUITAR		1/4" phone plug (unbalanced) (High impedance supported)	-30 – -10 dBu
MIC	Dynamic	1/4" phone plug (balanced or unbalanced), XLR connector * Switch OFF "Phantom Power" in the INPUT screen.	-50 – -30 dBu
	Condenser	XLR connector (48 V phantom power supported) Connecting a phantom-powered condenser mic →In the INPUT screen, turn "Phantom Power" on (p.142)	

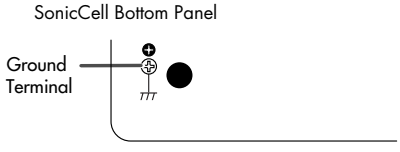
Turning the Power On/Off

■ Connecting the AC Adaptor

1. **Make sure that the [POWER] switch is off.**
2. **Connect the included power cord to the included AC adaptor.**
3. **Connect the AC adaptor to the SonicCell's DC IN connector, and plug the power cord into an AC outlet.**



* *Depending on the circumstances of a particular setup, you may experience a discomforting sensation, or perceive that the surface feels gritty to the touch when you touch this device, microphones connected to it, or the metal portions of other objects, such as guitars. This is due to an infinitesimal electrical charge, which is absolutely harmless. However, if you are concerned about this, connect the ground terminal (see figure) with an external ground. When the unit is grounded, a slight hum may occur, depending on the particulars of your installation. If you are unsure of the connection method, contact the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page.*



Unsuitable places for connection

- Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)

* *When turning the unit upside-down, get a bunch of newspapers or magazines, and place them under the four corners or at both ends to prevent damage to the buttons and controls. Also, you should try to orient the unit so no buttons or controls get damaged.*

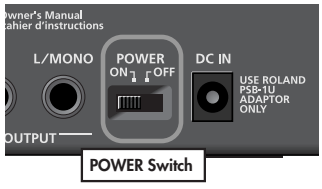
* *When turning the unit upside-down, handle with care to avoid dropping it, or allowing it to fall or tip over.*

■ Turning the Power On

> **⚠ NOTE**
>
> Once the connections have been completed, turn on power to your various devices in the order specified. By turning on devices in the wrong order, you risk causing malfunction and/or damage to speakers and other devices.

1. **Minimize the volume of the SonicCell and of your connected audio equipment.**
2. **Turn on the [POWER] switch.**
   * *This unit is equipped with a protection circuit. A brief interval (a few seconds) after power up is required before the unit will operate normally.*
3. **Use the [MASTER VOLUME] knob to adjust the volume.**

Rear Panel



Front Panel

■ Turning the Power Off

1. **Minimize the volume of the SonicCell and of your connected audio equipment.**
2. **Turn off the power of your connected audio equipment.**
3. **Turn off the [POWER] switch.**
   The indications in the display will disappear, and the power will turn off.

About the display and [CURSOR/VALUE]

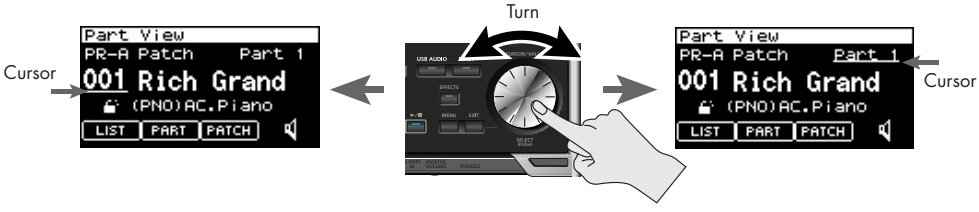
We'll explain this using the Performance mode Part View screen as an example.

Accessing the Part View Screen

After turning the power on, make sure that [MIDI INST] is lit, then press [PART VIEW].

Moving the Cursor

1 The cursor will move when you turn [CURSOR/VALUE].



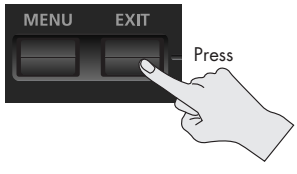
Moving Between Screens

1 Turn [CURSOR/VALUE] to move the cursor to [PATCH].

2 Press [CURSOR/VALUE].

The Patch Edit screen will appear.

3 Press [EXIT].



You'll return to the Part View screen.

Editing a Value

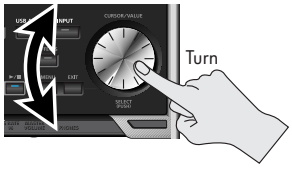
Let's try changing the patch number.

1 Turn [CURSOR/VALUE] to move the cursor to the patch number.

2 Press [CURSOR/VALUE].

The patch number will be highlighted.

3 Turn [CURSOR/VALUE].

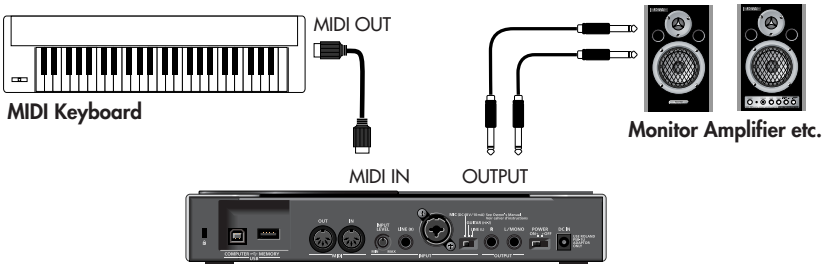


The value will change.
When you edit the value, an "E" symbol may appear in the upper right of the screen.
In this case, you can save the settings you've edited.

Saving perfoemances
→ Refer to "Performance Write (p. 73)."

4 Press [CURSOR/VALUE] once more.
The cursor will return to its original state.

■ Connections



> **⚠ NOTE**
>
> To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.
> When connection cables with resistors are used, the volume level of equipment connected to the inputs (INPUT) may be low. If this happens, use connection cables that do not contain resistors.

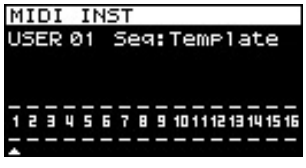
■ Performance mode and Patch mode

When using the SonicCell as a MIDI sound module, either Performance mode or Patch mode can be selected.
When the power is turned on, Performance mode is selected.
For details on Performance mode and Patch mode, refer to p. 54 .

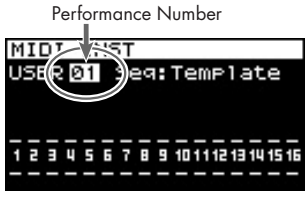
Playing the SonicCell in Performance Mode

■ Selecting a Performance

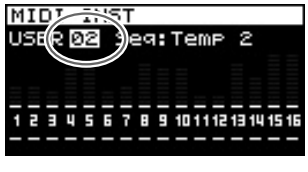
1. **Press [MIDI INST] so its indicator is lit.**
   The MIDI INST screen will appear.



2. **Move the Cursor to the Performance Number.**
3. **Press [CURSOR/VALUE].**
   The value at the cursor will be highlighted.
   For details on using [CURSOR/VALUE], refer to p. 20 .



4. **Turn [CURSOR/VALUE] to change the performance number. The sound will change.**
5. **Press [CURSOR/VALUE].**



Playing the SonicCell in Patch Mode

■ Selecting Patch Mode

1. **In the MIDI INST screen, simultaneously press [MIDI INST] and [PART VIEW].**
   The SonicCell will enter Patch mode, and the Patch Play screen will appear.
   If you once again hold down [MIDI INST] and press [PART VIEW], you'll switch to Performance mode, and the MIDI INST screen will appear.

■ Setting the MIDI channel

1. **In the Patch Play screen, turn [CURSOR/VALUE] to move the cursor to "RxCh."**
2. **Press [CURSOR/VALUE].**
   The RxCh value will be highlighted.
3. **Turn [CURSOR/VALUE] to set the "RxCh" value to match the transmit channel of the connected equipment.**

■ Selecting Sounds

1. **In the Patch Play screen, turn [CURSOR/VALUE] to move the cursor to the patch number.**
2. **Press [CURSOR/VALUE].**
3. **Turn [CURSOR/VALUE] to change the patch number.**
   The sound will change.

Example: Selecting "037 Violin" from the "PR-C" group

1. **In the Patch Play screen, turn [CURSOR/VALUE] to move the cursor to the patch group.**
2. **Press [CURSOR/VALUE].**

3. **Turn [CURSOR/VALUE] to select "PR-C," then press [CURSOR/VALUE].**

4. **Turn [CURSOR/VALUE] to move the cursor to the patch number, then press [CURSOR/VALUE].**
   The patch number will be highlighted.
5. **Turn [CURSOR/VALUE] to select "037" as the patch number.**
   "Violin" will be selected.

Modifying the Sound (editing a patch)

Before you continue, select "037 Violin" from "PR-C" as described in the procedure above.

■ Editing the Amp Envelope

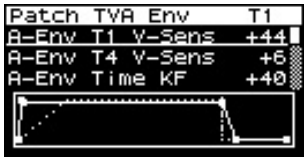
This specifies how the sound begins and decays.

Access the Patch Edit Screen

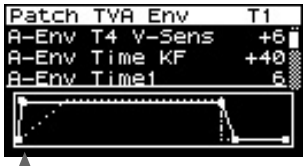
1. **In the Patch Play screen, use [CURSOR/VALUE] to move the cursor to the "EDIT."**
2. **Press [CURSOR/VALUE].**
   The Patch Edit screen will appear.

3. **Turn [CURSOR/VALUE] to select the graphic below Tone 1 "TVA," then press [CURSOR/VALUE].**

The Patch TVA Envelope (T1) screen will appear.



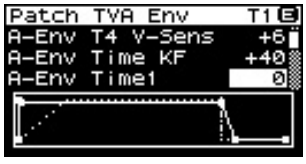
Adjusting the Attack



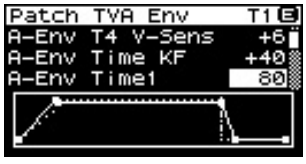
T1 (when you press a key)

4. **Turn [CURSOR/VALUE] to move the cursor to "A-Env Time1."**
5. **Press [CURSOR/VALUE].**
   The value will be highlighted.
6. **Turn [CURSOR/VALUE] to change the value, then press [CURSOR/VALUE].**
   When you change the value, the graph in the lower part of the screen will also change.
   If you press [EXIT] you'll return to the previous screen.

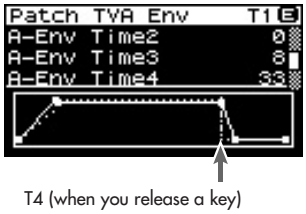
- **To make the sound begin immediately when you press a key**
  → Set "A-Env Time1" to a low value



- **To make the sound begin slowly when you press a key**
  → Set "A-Env Time1" to a high value



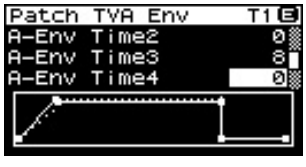
Adjusting the Release



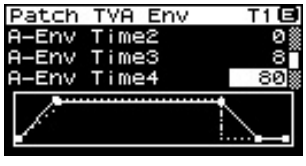
T4 (when you release a key)

7. **Turn [CURSOR/VALUE] to move the cursor to "A-Env Time4."**
8. **Press [CURSOR/VALUE].**
   The value will be highlighted.
9. **Turn [CURSOR/VALUE] to change the value, then press [CURSOR/VALUE].**
   When you change the value, the graph in the lower part of the screen will also change.
   If you press [EXIT] you'll return to the previous screen.

- **To make the sound stop immediately when you release a key**
  → Set "A-Env Time4" to a low value



- **To make the sound linger after you release a key**
  → Set "A-Env Time1" to a high value



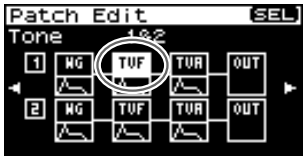
MEMO For details on amp envelope, refer to p. 107 .
If you want to save the patch you modified, refer to p. 116 .

■ Editing the Filter

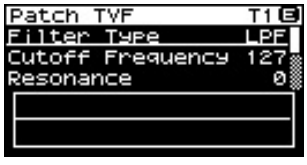
By editing the filter settings you can make the tonal character of the sound brighter or darker.

1. **In the Patch Play screen, turn [CURSOR/VALUE] to move the cursor to the "EDIT."**
2. **Press [CURSOR/VALUE].**
   The Patch Edit screen will appear.

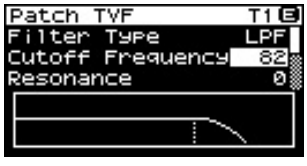
3. **Turn [CURSOR/VALUE] to move the cursor to the "TVF."**
4. **Press [CURSOR/VALUE].**
   The Patch TVF screen will appear.



5. **Turn [CURSOR/VALUE] to move the cursor the "Cutoff Frequency."**
6. **Press [CURSOR/VALUE].**
   The value will be highlighted.



7. **Turn the [CURSOR/VALUE] to edit the value, and then press [CURSOR/VALUE].**
   When you change the value, the graph in the lower part of the screen will also change.
   If you press [EXIT] you'll return to the preceding screen.

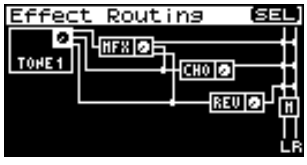


MEMO For details on filter, refer to p. 102 .
If you want to save the patch you modified, refer to p. 116 .

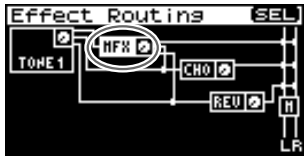
■ Changing the Effect

Effects are various types of processing that you can apply to the sound. You can dramatically vary the character of the sound simply by changing the effect.

1. **In the Patch Play screen, press [EFFECTS].**
   The Effect Routing screen will appear.



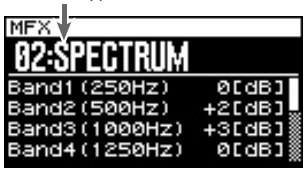
2. **Turn [CURSOR/VALUE] to move the cursor "MFX."**



3 Press [CURSOR/VALUE].

The MFX screen will appear.

MFX Type

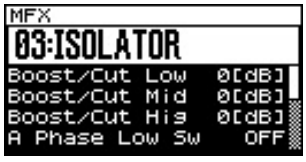


4 Use [CURSOR/VALUE] to select the MFX type.

5 Press [CURSOR/VALUE].

The MFX type indication will be highlighted.

6 Use [CURSOR/VALUE] to change the MFX type.



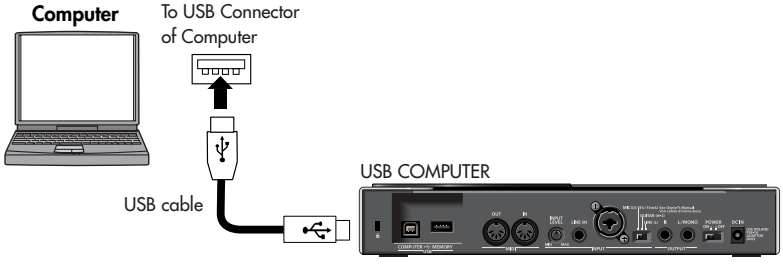
7 Press [CURSOR/VALUE].

If you press [EXIT] you'll return to the preceding screen.

MEMO For details on effect editing, refer to p. 132 .
If you want to save the patch you modified, refer to p. 116 .

Using the Editor and Librarian

Connections

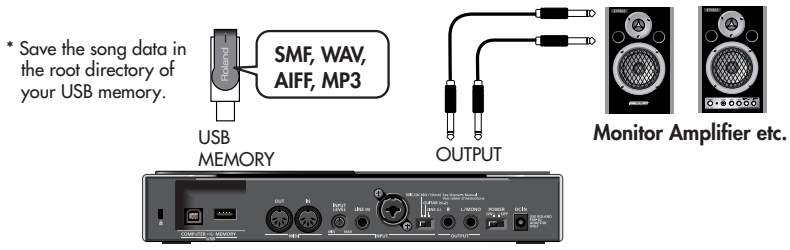


Dedicated editor and librarian software is included with the SonicCell.
By using the editor you can edit the SonicCell's performance and patch parameters on your computer.
You can edit the settings while viewing them in the large screen of your computer.
By using the librarian you can manage the edited settings on your computer.
For details on installing the software, refer to p. 31 .
For details on using the software, refer to the PDF manual that is installed along with the software.

Playing Songs (Portable Backing Machine)

The SonicCell can play back MIDI files (SMF) and audio files (WAV, AIFF, MP3).
This is a convenient function that you can also use to play backing tracks during a live performance.

■ Connections



* *Use only USB memory sold by Roland. Operation cannot be guaranteed when products other than there is used. Proper operation cannot be guaranteed if other USB memory products is used.*
* *Connect the USB memory after the SonicCell's power is turned on.*
* *If, after a USB memory device has been removed, you decide that you want to connect it again, you'll need to switch the SonicCell's power off, then switch it back on again.*

> **⚠ NOTE**
>
> To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.
> When connection cables with resistors are used, the volume level of equipment connected to the inputs (INPUT) may be low. If this happens, use connection cables that do not contain resistors.

■ File Formats that You Can Play

For details on the file formats that you can play, refer to p. 168 .

■ Playing the Demo Songs

Refer to p. 15

Playback Procedure

Before you continue, make sure that the USB memory containing the song file you want to play is connected to the SonicCell.
You should also make sure that the SonicCell is set to Performance mode (p. 60).

* *When saving song file on your USB memory, be sure to save it in the root directory.*

1 Press [SMF/AUDIO PLAYER].
The Playlist Select screen will appear.

2 Turn [CURSOR/VALUE] to move the cursor to the "USB Memory."

3 Press [CURSOR/VALUE].

A list of the songs in the USB memory will appear.

4 Turn [CURSOR/VALUE] to select a song, then press [CURSOR/VALUE].

The selected song will be displayed.

* *The song length indicated in the display may differ from the actual song length.*

5 Press [►/II].

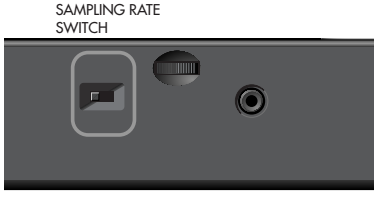
The selected song will play.

6 Press [►/II] to stop the song.

If you press [EXIT] you'll return to the preceding screen.

About the Sampling Rate

The SonicCell will play songs that were saved with the same sampling rate as the setting for the [SAMPLING RATE] switch on the front panel.
Songs whose sampling rate differs from the SonicCell's setting will be shown in the list of songs, but cannot be selected or played.
In this case, move the sampling rate switch to the rate of the song you want to play, then turn the SonicCell's power off, then on again.



1 Change the setting of the [SAMPLING RATE] switch.

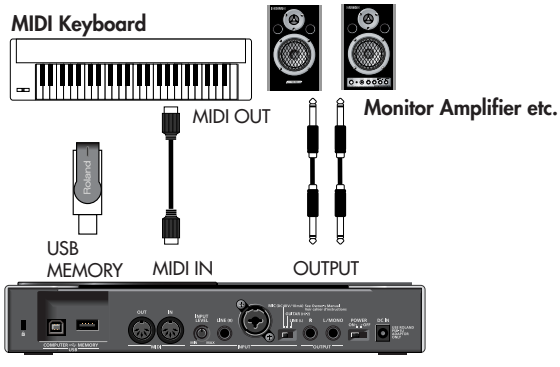
2 Switch off the SonicCell's power, then turn it back on.

Creating a Playlist

You can use the included "SonicCell Playlist Editor" to create a playlist for playback by the SonicCell.
If you want to use the SonicCell to play backing tracks, it's convenient to create a playlist in the order you want the songs to play.
For details on installing "SonicCell Playlist Editor," refer to p. 31 .
For details on using the software, refer to the PDF manual that is installed along with the software.

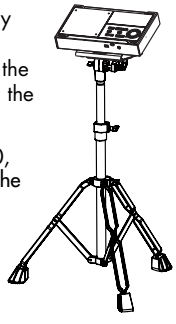
Performing via MIDI while a Song Plays

■ Connections



By using the separately available PDS-10 and BKT-S, you can set up the SonicCell as shown in the illustration.

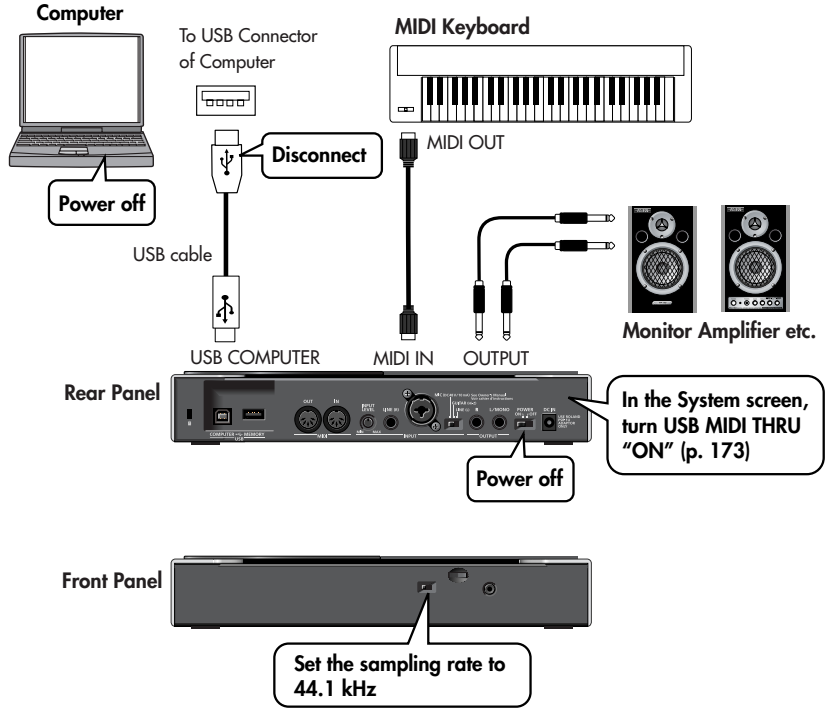
*If you use the PDS-10, spread the tripod to the maximum extent. Ensure that the total height including the SonicCell does not exceed one meter.



You can use the SonicCell as an external sound module for your DAW or sequencer software.

> **⚠ NOTE**
>
> You must install the driver before you connect the SonicCell to your computer.

■ Example Connections and Preparations for Installation



> **⚠ NOTE**
>
> To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.
> When connection cables with resistors are used, the volume level of equipment connected to the inputs (INPUT) may be low. If this happens, use connection cables that do not contain resistors.

> **⚠ NOTE**
>
> It is forbidden to use SonicCell Editor, SonicCell Librarian, or SonicCell Playlist Editor for rental, lease, or similar purposes without the permission of the copyright owner. Unauthorized duplication is forbidden by law.

SonicCell Editor System Requirements

Windows OS

Windows : Microsoft® Windows® XP
Microsoft® Windows Vista™
* This does not work with the 64-bit Edition of Windows Vista™.
CPU/Clock : Pentium®/Celeron® processor 1.4 GHz or higher
RAM : 512 MB or more
Hard Disk : 160 MB or more
Display/Colors : 1280 x 800 or higher/24 bit Full Color or more
Others : A computer with a USB connector that supports USB Specification Revision 2.0 or higher
* Intel chipset is recommended.
* SonicCell may not perform to its full specs when used with an added USB 2.0 interface card.
CD-ROM Drive

Mac OS

Operating System : Mac OS 10.4.3 or later
CPU/Clock : PowerPC G4 1 GHz or higher/Intel processor
RAM : 512 MB or more
Hard Disk : 160 MB or more
Display/Colors : 1280 x 800 or higher/1670 million colors or more
Others : Apple Macintosh series computer with on-board USB 2.0
CD-ROM Drive

* Although Roland has tested numerous configurations, and has determined that on average, a computer system similar to that described above will permit normal operation of the SonicCell Applications, Roland cannot guarantee that a given computer can be used satisfactorily with the SonicCell Applications based solely on the fact that it meets the left requirements. This is because there are too many other variables that may influence the processing environment, including differences in motherboard design and the particular combination of other devices involved.
* In the interest of product improvement, the specifications and/or contents of this package are subject to change without prior notice.

■ Installation Procedure

Windows XP users..... p. 33
Windows Vista users ..... p. 35
Mac OS users..... p. 37
Installing SONAR LE ..... p. 152

Specifications of the dedicated plug-in version of the editor

SonicCell Editor is provided in two forms: a stand-alone version and a plug-in version.

Plug-in Formats

- Windows: VSTi
- Mac: VSTi, Audio Unit

Host Applications in Which Operation has been Verified

If you're using the plug-in version of the editor, please refer also to the applicable explanation.

- SONAR LE → p. 152
- SONAR 6.2 → p. 157
- CUBASE 4 → p. 160
- Logic Pro 7.2 → p. 163

* *In order to use plug-in version of the editor, your computer must meet the above operating requirements as well as the requirements of the host application you're using.*

* *The plug-in version of the editor has been tested and found to work with major host applications, but we cannot guarantee that it will work with all host applications.*

Windows XP users

In order to install the driver and software, you must log on as a user who has administrative privileges.

* *For details, ask the system administrator of your computer.*

> **⚠ NOTE**
>
> On the SonicCell Editor CD, the XP folder located inside the Driver folder contains a Readme file (Readme_E.html), which explains how to install the driver and includes a number of trouble-shooting tips. Be sure to read this file before using the software.

Installing the Driver

1. **Start up Windows with all USB cables disconnected (except for a USB keyboard and/or mouse, if used).**
2. **Log on to Windows as one of the following users.**
   - A user belonging to the Administrators group, such as Administrator
   - A user whose account type is Computer Administrator

   * *For details, contact the system administrator of the computer you're using.*
3. **Close all applications.**
   Also close any anti-virus or system-monitoring software.
4. **Insert the "SonicCell Editor CD-ROM" into your CD-ROM drive, navigate to the Driver folder | XP folder, and double-click Setup.exe.**
5. **The screen will indicate "Roland SonicCell Driver will be installed on your computer..." Click [Next].**

   * *If any other message is displayed, proceed as directed by the contents of the message.*
6. **The message "To begin installation, click [Next]" will appear. Proceed with the driver installation as directed by the instructions in the screen.**

Windows Settings

■ System Settings

These settings will prevent problems with the sound being interrupted when you play back audio from your computer.

1. **Open "Control Panel" and double-click "System."**
   * *If you don't see the above icon, click "Performance and Maintenance," then click "System."*
2. **Click the "Advanced" tab, and then in the Performance section click [Settings].**
3. **Click the "Advanced" tab.**
4. **Choose "Background services" and click [OK].**
5. **Click [OK] to close "System Properties."**

■ Settings for Using the Media Player Included with Windows

1. **Open "Control Panel" and double-click "Sounds and Audio Devices."**
   * *If you don't see the above icon, click "Sounds, Audio, and Audio Devices," then click "Sounds and Audio Devices."*
2. **Click [OK] to close "Sounds and Audio Devices Properties."**
3. **Start up Windows Media Player, play back an audio file and a MIDI file, and verify that you hear the sound correctly.**

Installing SonicCell Editor

1. **Insert the "SonicCell Driver CD-ROM" into your CD-ROM drive, navigate to the Editor folder, and double-click Setup.exe.**
2. **The "Welcome" screen will appear. Click [Next].**
3. **Follow the on-screen directions to install SonicCell Editor.**
   When you install SonicCell Editor, the SonicCell Editor, SonicCell Editor VSTi plugin, SonicCell Librarian, SonicCell Playlist Editor, and online manuals for each editor will be installed.

> The online manual for each editor can be found under Windows "Start | All Programs | SonicCell Editor" folder. The online manuals are provided as PDF files.
> You'll need Adobe Reader (available free of charge) in order to view PDF files.

Windows Vista Users

In order to install the driver and software, you must log on as a user who has administrative privileges.

* *For details, ask the system administrator of your computer.*

⚠ NOTE

The Driver | Vista folder of the SonicCell Driver CD-ROM contains a Readme file (Readme_E.html) that describes driver installations and troubleshooting. Be sure to read this before use.

Installing the Driver

1. **Start up Windows with all USB cables disconnected (except for a USB keyboard and/or mouse, if used).**
2. **Close all applications.**
   Also close any anti-virus or system-monitoring software.
3. **Place the "SonicCell Editor CD" into your CD-ROM drive, navigate to the Driver folder | Vista folder, and double-click Setup.exe.**
   * *If the message "Drivers must be installed by an administrator user." is displayed, log on to Windows as a user whose account type is Administrator, and then perform the installation again.*
4. **A User Account Control screen will appear; click [Continue].**
5. **A message of "Roland SonicCell Driver will be installed on your computer..." will appear. Click [Next].**
   * *If any other message is displayed, proceed as directed by the contents of the message.*
6. **The message "Click [Next] to begin the installation" will appear. Proceed with the driver installation as directed by the instructions in the screen.**

Windows Settings

■ Settings for using the Media Player included with Windows

1. **Open "Control Panel," click "Hardware and Sounds," then click "Sounds."**
   * *If you've chosen the Classic View, double-click "Sounds."*
2. **In "Playback," choose Roland SonicCell's "OUT" and click "Set Default."**
3. **Click [OK] to close "Sounds."**
4. **Start up Windows Media Player, play back an audio file, and verify that sound is produced correctly.**

Installing SonicCell Editor

1. **Insert the "SonicCell Editor CD-ROM" into your CD-ROM drive, navigate to the Editor folder, and double-click Setup.exe.**
2. **The screen will indicate "An unidentified program is requesting access to this computer"; click [Allow].**
3. **A User Account Control screen will appear; click [Continue].**
4. **The installer will start up. Follow the on-screen instructions to proceed with installing SonicCell Editor.**
   When you install SonicCell Editor, the SonicCell Editor, SonicCell Editor VSTi plugin, SonicCell Librarian, SonicCell Playlist Editor, and online manuals for each editor will be installed.

> The online manual for each editor can be found under Windows "Start | All Programs | SonicCell Editor" folder. The online manuals are provided as PDF files.
> You'll need Adobe Reader (available free of charge) in order to view PDF files.

Mac OS X Users

In order to install the driver and other software, you must log on as a user who has an administrative account.

* *For details, ask the system administrator of the computer you're using.*

* *The included SONAR LE is not compatible with Mac OS.*

Installing the Driver

* *If an "Authentication" dialog box appears during the installation, enter your password and click [OK].*

1. **Start up your computer with all USB cables disconnected (except for the keyboard and mouse).**
2. **Insert the "SonicCell Editor CD-ROM" into your CD-ROM drive, navigate to the Driver folder, and double-click "SonicCellUSBDriver.pkg."**
3. **You may see the message "This installer package needs to run a program to determine if it can be installed. Do you want to continue?"**
   In this case, click [Continue].
4. **A message will indicate "Welcome to Roland SonicCell Driver installer."**
   Click [Continue].
5. **A message will indicate "Select a Destination."**
   Click to select the drive in which the system is installed, and then click [Continue].
6. **A message will indicate "Easy install."**
   Click either [Install] or [Upgrade].
7. **A message will indicate "Installing this software requires you to restart..." Click [Continue with installation].**
8. **A message will indicate "The software was successfully installed" will appear. Click [Restart] to restart your computer.**

Installing SonicCell Editor

1. **In the "SonicCell Editor CD-ROM," navigate to the Editor folder and double-click "SonicCell EditorInstaller.mpkg."**
2. **The installer will start up. Follow the on-screen instructions to proceed with installing SonicCell Editor.**
   When you install SonicCell Editor, the SonicCell Editor, SonicCell Librarian, SonicCell Playlist Editor, and online manuals for each editor will be installed.

> The "Manual" folder within the folder where SonicCell Editor is installed contains online manuals for each editor. The online manuals are provided as PDF files.
> You'll need Adobe Reader (available free of charge) in order to view PDF files.

Settings

■ Mac OS X Audio Input/Output Settings

1. **Use a USB cable to connect the SonicCell to your computer, then switch on the SonicCell's power.**
2. **In "System Preference," click "Sounds."**
3. **Choose "Roland SonicCell ** kHz" for the following settings.**
   (** will depend on the sampling rate setting of the SonicCell itself.)
   - In the "Sound Effects" tab, "Play alerts and sound effects through:"
   - In the "Output" tab, "Choose a device for sound output"
   - In the "Input" tab, "Choose a device for sound input"

■ Mac OS X MIDI Input/Output Settings

1. **Use a USB cable to connect the SonicCell to your computer, then switch on the SonicCell's power.**
2. **In the "Applications - Utilities" folder, double-click "Audio MIDI Setup" to start it up.**
3. **Click the "MIDI Devices" tab.**

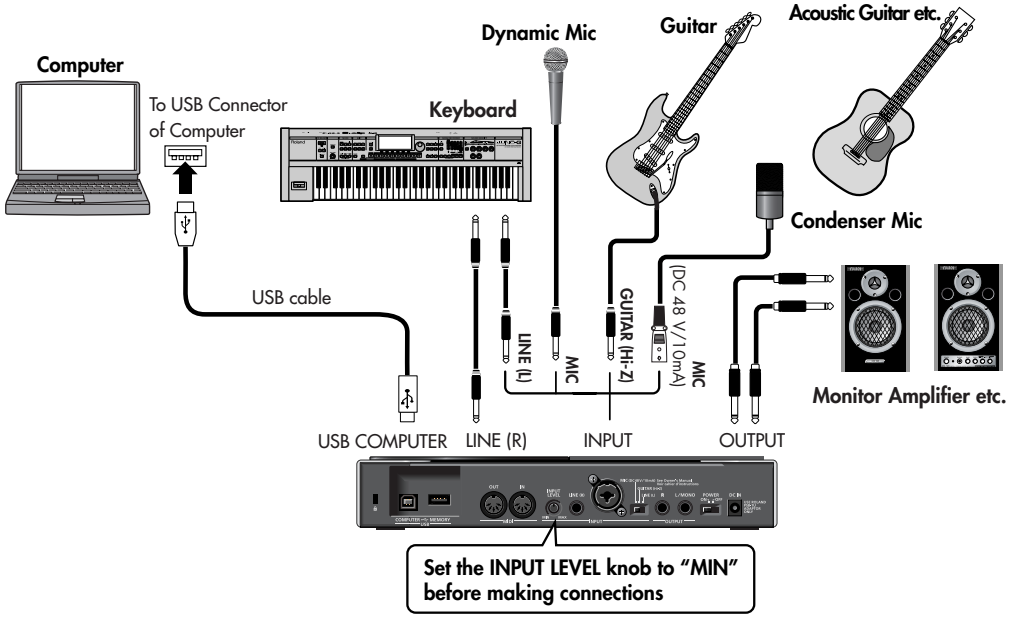
4. **In the "Audio MIDI Setup" dialog box, verify that "SonicCell" is shown.**
   * *If "SonicCell" is not shown, or if it is shown grayed-out, the SonicCell was not detected correctly. Try clicking "Re-scan MIDI." You can also try switching off the SonicCell's power, then turning it back on.*
   * *If a different version of the driver had been installed, the old settings may still exist. In this case, click the grayed-out "SonicCell" or "Roland SonicCell" to select it, and then click "Delete device" to delete the settings.*
5. **Click "Add Device." A "New External Device" item will appear.**
6. **Click added "New External Device" that was added, and then click "View Information."**
7. **Enter the following names in the "Device Name" field of each "New External Device."**
   First new external device SonicCell
8. **Drag with the mouse so that the up/down arrows indicating the input/output ports are connected as follows.**
   - Connect the first up/down arrow of "SonicCell" to the up/down arrow of the added "SonicCell"
9. **Verify that MIDI transmission and reception is occurring normally.**
   - Click "Test Settings." The mouse cursor will change to the shape of a musical note.
10. **Click the added external device. If you hear sound from the sound module, the settings are correct.**
11. **Click "Test Setup" once again to end the test.**
12. **Close the "Audio MIDI Settings" dialog box. This completes the settings.**

■ Before You Use the SonicCell with Your Software

1. **Use a USB cable to connect the SonicCell to your computer before you start up your software.**
2. **In the Audio Driver settings of the software you're using, choose "Roland SonicCell ** kHz."**
   (** will depend on the sampling rate setting of the SonicCell itself.)
3. **In the MIDI Driver settings of the software you're using, choose SonicCell.**
   For details, refer to the manual of the software you're using.

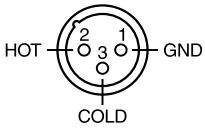
Recording a Mic or Guitar
(USB/Audio Interface)

■ Connections

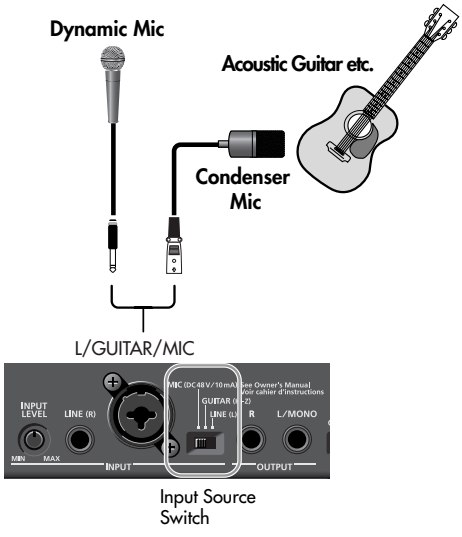


⚠ NOTE

* *To prevent malfunction and/or damage to speakers or other devices, always turn down the volume, and turn off the power on all devices before making any connections.*
* *When connection cables with resistors are used, the volume level of equipment connected to the inputs (INPUT) may be low. If this happens, use connection cables that do not contain resistors.*
* *Howling could be produced depending on the location of microphones relative to speakers. This can be remedied by:*
  1. Changing the orientation of the microphone(s).
  2. Relocating microphone(s) at a greater distance from speakers.
  3. Lowering volume levels.
* *This instrument is equipped with balanced (XLR/TRS) type jacks. Wiring diagrams for these jacks are shown below. Make connections after first checking the wiring diagrams of other equipment you intend to connect.*



Connecting a Mic



Settings Required

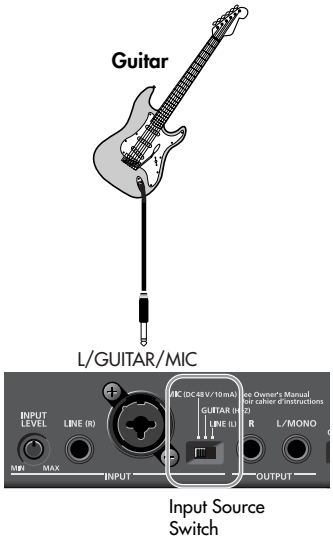
INPUT SOURCE switch

→ Set to "MIC"

When connecting a condenser mic that requires phantom power

→ Turn phantom power on (p. 142)

Connecting a Guitar



Settings Required

INPUT SOURCE switch

When sending your guitar through an effects unit before connecting it to the SonicCell

→ Set to "LINE"

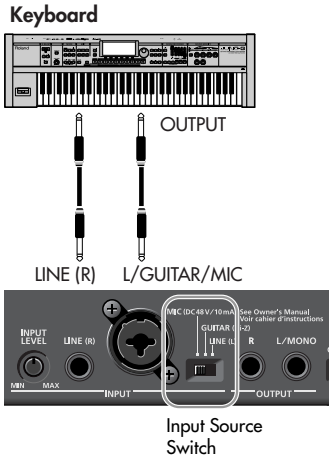
When connecting your guitar directly to the SonicCell without passing through an effects unit

→ Set to "GUITAR"

If you want to apply an effect

→ Refer to p. 144

Using the Line Input



Settings Required

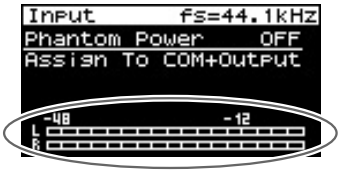
INPUT SOURCE switch
→ Set to "LINE"

If you're inputting in mono (one cable)
→ Connect to L (MONO)

If you want to apply an effect
→ Refer to p. 144

Adjusting the Input Volume

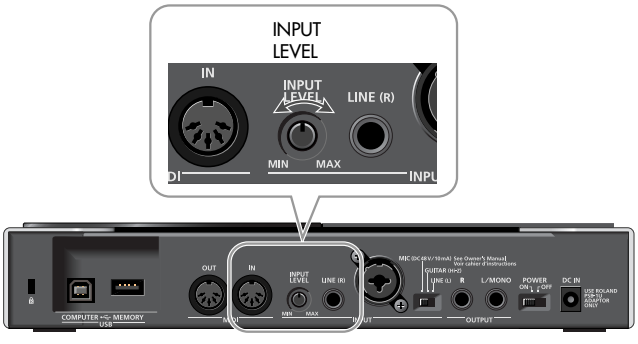
Checking the Volume Level



1 **Press [INPUT] so it's lit.**
The Input screen will appear.
If the volume is too high, the level meter at the bottom of the Input screen will indicate "CLIP."

Adjusting the Volume

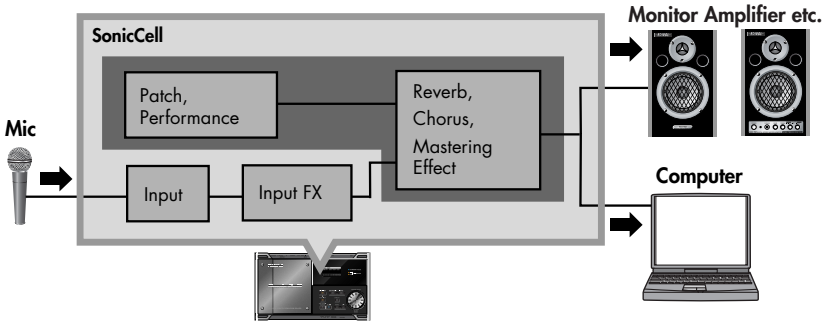
1 **Use the rear panel [INPUT LEVEL] to adjust the input volume.**
Raise the volume as high as you can without causing the "CLIP" indication to appear in the level meter of the Input screen.



Input Effect Settings

If you want to apply an effect to the sound from the Input jack, change the settings as appropriate for your situation.

■ Sending the Same Sound as Heard From the Speakers to Your Computer



■ Settings Required

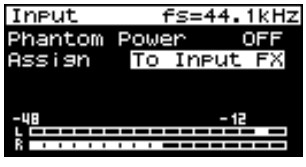
1 Press [INPUT] so it's lit.
The Input screen will appear.

Routing the Sound Through InputFX (input effect)

2 Turn [CURSOR/VALUE] to move the cursor to the "Assign."

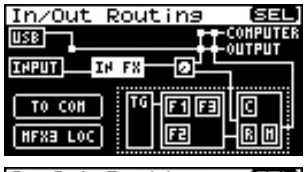
3 Press [CURSOR/VALUE].

4 Change the value to "To Input FX."
For more about the Input "Assign" setting → p. 142
To select the type of input effect → p. 147



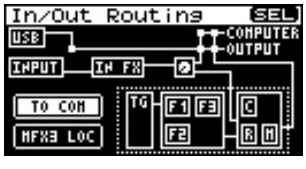
Setting the Output to Computer

5 Press [EFFECT] to access the In/Out Routing screen.
** The illustration at right is an example of the IN/OUT Routing screen in Performance mode.*



6 Turn [CURSOR/VALUE] to move the cursor to "To Com."

7 Press [CURSOR/VALUE].
The To Computer screen will appear.

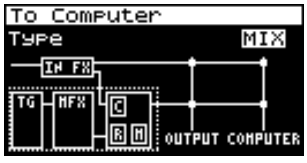


8 Turn [CURSOR/VALUE] to move the cursor to the "Type."

9 Press [CURSOR/VALUE].

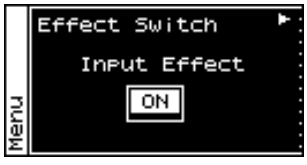
10 Change the value of Type to "MIX."

For more about the "Type" setting of To Computer screen
→ p. 148



If the Input Effect is Not Applied

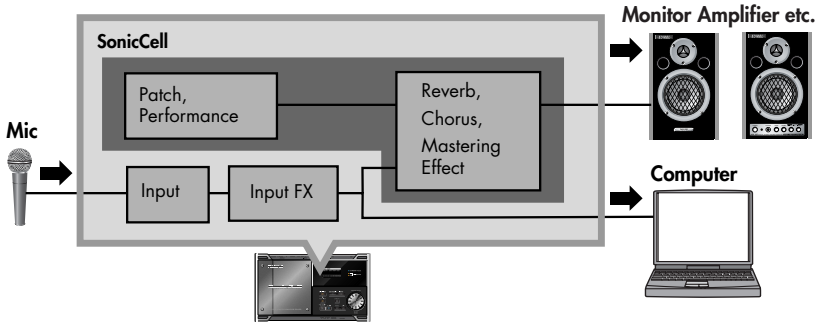
In the In/Out Routing screen, press [MENU] to access the Menu screen. Turn the Input Effect "ON."



MEMO If you want to make more detailed effect settings, refer to the following pages.

- Input Effect → p. 147
- Chorus Send Level → p. 148
- Reverb Send Level → p. 148
- Mastering Effect → p. 181

■ Applying an effect such as reverb to the sound heard from the speakers, while recording the unprocessed sound to your computer



■ Settings Required

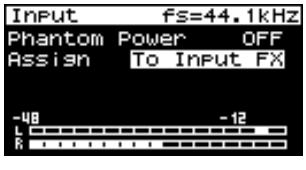
1 Press [INPUT] so it's lit.

The Input screen will appear.

Routing the Sound Through InputFX (input effect)

2 Turn [CURSOR/VALUE] to move the cursor to the "Assign."

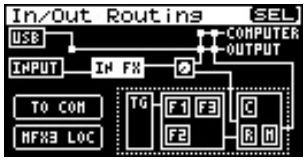
3 Press [CURSOR/VALUE].



4 Change the value to "To Input FX."

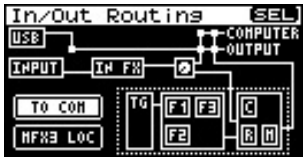
For more about the Input "Assign" setting → p. 142
To select the type of input effect → p. 147
To adjust the depth of chorus or reverb → p. 148

Setting the Output to Computer



5 Press [EFFECT] to access the In/Out Routing screen.

* *The illustration at right is an example of the IN/OUT Routing screen in Performance mode.*

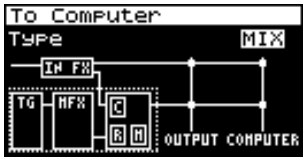


6 Turn [CURSOR/VALUE] to move the cursor to "To Com."

7 Press [CURSOR/VALUE].

The To Computer screen will appear.

8 Turn [CURSOR/VALUE] to move the cursor to the "Type."



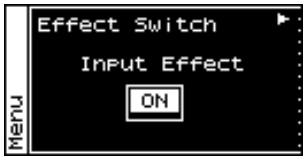
9 Press [CURSOR/VALUE].

10 Change the value of Type to "INPUT FX."

For more about the "Type" setting of To Computer screen
→ p. 148

If the Input Effect is Not Applied

In the In/Out Routing screen, press [MENU] to access the Menu screen.
Turn the Input Effect "ON."



MEMO

If you want to make more detailed effect settings, refer to the following pages.

- Input Effect → p. 147
- Chorus Send Level → p. 148
- Reverb Send Level → p. 148
- Mastering Effect → p. 181

Installing the Wave Expansion Board

Two Wave Expansion Boards (SRX series; sold separately) can be installed in the SonicCell.
Waveform data, patches and rhythm sets are stored on the Wave Expansion Board, so you can increase the number of available sounds by installing the board in the SonicCell.

> **⚠ NOTE**
>
> Installing a Wave Expansion Board increases the patches and drum sets for Parts, but the number of Parts doesn't change. The Wave Expansion Board can be installed by removing the top cover.

Cautions When Installing an Wave Expansion Board

- **To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the board.**
  - ❍ Before you touch the board, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you might have been carrying has been discharged.
  - ❍ When handling the board, grasp it only by its edges. Avoid touching any of the electronic components or connectors.
- **When removing the screws, you must use the included Allen wrench. If you use the wrong tool, you risk damaging the screw head.**
- **To remove a screw, rotate the Allen wrench counter-clockwise. To tighten the screws, rotate the Allen wrench clockwise.**

- **When you tighten the screws, take care not to overtighten them. Doing so may cause the screw head to be stripped, allowing the Allen wrench to turn uselessly.**
- **When installing Wave Expansion Boards, remove only the specified screws.**
- **Be careful that the screws you remove do not drop into the interior of the SonicCell.**
- **Do not leave the cover removed. After installation of the Wave Expansion Boards is complete, be sure to replace the cover.**
- **Be careful not to cut your hand on the opening for installing the board.**
- **Do not touch any of the printed circuit pathways or connection terminals.**
- **Never use excessive force when installing a circuit board. If it doesn't fit properly on the first attempt, remove the board and try again.**
- **When circuit board installation is complete, double-check your work.**

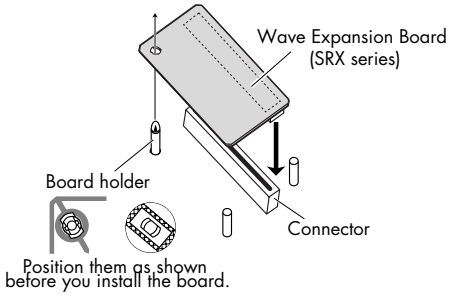
How to Install a Wave Expansion Board

To install a wave expansion board, you'll need to remove the top panel cover. Boards can be installed in the EXP A-EXP B slots. These slots correspond with the Wave Expansion Board groups (XP-A-XP-B) when the expansion Wave, patches, and rhythm sets are used.

1. **Before installing the Wave Expansion Board, turn off the power of the SonicCell and all connected devices, and disconnect all cables, including the Power cable, from the SonicCell.**

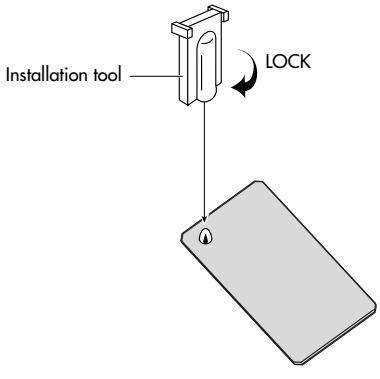
2. **From the SonicCell, remove only the screws shown in the following diagram, and detach the top panel cover.**

3. **As shown in the following illustration, plug the connector of the Wave Expansion Board into the connector of the relevant slot, and at the same time insert the board holder through the hole of the Wave Expansion Board.**
   * *If you install expansion boards of the same type, only one board will be detected.*



4. **Use the Installation Tool supplied with the Wave Expansion Board to turn the holders in the LOCK direction, so the board will be fastened in place.**

5. **Use the screws that you removed in step 2 to fasten the cover back in place.**



Checking the Installed Wave Expansion Boards

After installation of the Wave Expansion Boards has been completed, check to confirm that the installed boards are being recognized correctly.

1. **Turn on the power, as described in "Turning the Power On" (p. 19).**

2. **Press [MENU].**
   The Menu screen will appear.

3. **Turn [CURSOR/VALUE] to select "SRX Info."**

4. **Press [CURSOR/VALUE].**
   Press or to display System SRX Info screen.
   The System screen will appear. Verify that the name of the installed Wave Expansion Board is displayed.

> **⚠ NOTE**
>
> If "-- -----" appears next to the installed slot name, it's possible that the installed Wave Expansion Board is not being recognized correctly. Re-install the Wave Expansion Board correctly.

5. **Press [EXIT] to exit the System screen.**

Installation de la carte d'extension Wave
(French language for Canadian Safety Standard)

French language
for Canadian Safety Standard

Deux cartes d'expansion Wave (serie SRX; vendues separement) peuvent etre installees dans le SonicCell. Les donnees Waveform, les retouches et les groupes de rythme sont stockes sur la carte d'expansion Wave; vous pouvez donc augmenter le nombre de sons disponibles en installant la carte dans le SonicCell.

> **⚠ NOTE**
>
> Installer une carte d'expansion Wave augmente les retouches et les groupes de percussion pour les partitions mais le nombre de partitions ne change pas.

Precautions a prendre lors de l'installation d'une carte d'expansion Wave

- **Veuillez suivre attentivement les instructions suivantes quand vous manipulez la carte afin d'eviter tout risque d'endommagement des pieces internes par l'electricite statique.**
  - ❍ Toujours toucher un objet metallique relie a la terre (comme un tuyau par exemple) avant de manipuler la carte pour vous decharger de l'electricite statique que vous auriez pu accumuler.
  - ❍ Lorsque vous manipulez la carte, la tenir par les cotes. Evitez de toucher aux composants ou aux connecteurs.
- **Utiliser la clé Allen incluse pour retirer les vis. L'utilisation d'un outil inadéquat risque d'endommager la tête de la vis.**
- **Pour retirer une vis, tourner la clé hexagonale dans le sens contraire des aiguilles d'une montre. Pour serrer les vis, tourner la clé hexagonale dans le sens des aiguilles d'une montre.**

- **Veiller à ne pas trop serrer les vis. Un serrage excessif peut fausser la tête des vis et la clé Allen tournerait alors inutilement.**
- **Pour installer les cartes d'expansion Wave, retirer uniquement les vis mentionnees..**
- **Assurez-vous que les vis retirees ne tombent pas dans le SonicCell.**
- **Replacer le couvercle pour ne pas laisser l'ouverture béante. S'assurer de l'avoir rattacher apres avoir installe le disque dur.**
- **Faites attention de ne pas vous couper sur l'ouverture d'installation de la carte.**
- **Ne pas toucher aux circuits imprimes ou aux connecteurs.**
- **Ne jamais forcer lors de l'installation de la carte de circuits imprimes. Si la carte s'ajuste mal au premier essai, enlevez la carte et recommencez l'installation.**
- **Quand l'installation de la carte de circuits imprimes est terminee, reverifiez si tout est bien installe.**

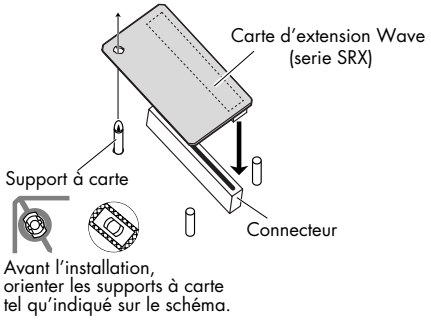
Installation d'une carte d'expansion Wave

Pour installer une carte d'expansion Wave, il faut retirer le couvercle superieur. Les cartes peuvent etre installees dans les emplacements SRX-A- SRX-B. Ces fentes correspondent aux groupes de cartes d'expansion Wave (XP-A- XP-B) lorsque l'expansion Wave, les correctifs et rythmes sont utilises.

1. **Avant d'installer la carte d'expansion Wave, coupez l'alimentation du SonicCell et de tous les appareils branches, et debranchez tous les cables du SonicCell, y compris le cable d'alimentation.**

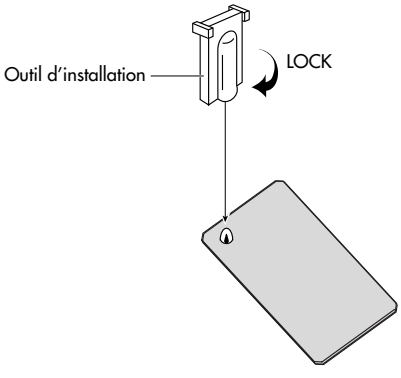
2. **Retirer du SonicCell, uniquement les vis montrees dans le diagramme ci-dessous et detacher le couvercle superieur.**

3. **Comme le montre l'illustration ci-dessous, branchez le connecteur de la carte d'expansion Wave dans la fente appropriee et, en meme temps, inserez le support de carte de circuits imprimes dans l'ouverture de la carte d'expansion Wave.**
   * *Si plusieurs cartes d'expansion du meme type sont installees, une seule sera detectee.*



4. **Utilisez l'outil d'installation fourni avec la carte d'expansion Wave pour tourner les supports en position LOCK (verrouille) afin de retenir la carte en place.**

5. **Remettez le couvercle en place a l'aide des vis retirees a l'etape 2.**



Verification des cartes d'extension audio apres installation

Lorsque l'installation des cartes d'extension audio est terminee, proceder a une verification pour s'assurer que l'ordinateur les identifie correctement.

1. **Mettre sous tension de la facon decrite sous "Turning the Power On" (p. 19).**

2. **Appuyer sur [MENU].**
   L'écran Menu s'affichera à l'écran.

3. **Tourner [CURSEUR/VALEUR] pour sélectionner "SRX Info."**

4. **Appuyer sur [CURSOR/VALUE].**
   L'ecran System Edit s'affiche. Verifiez que le nom de la carte d'expansion Wave installee s'est affiche.

> **⚠ NOTE**
>
> Si "-- -----" est affiche a cote du nom de la fente dans laquelle la carte est installee, il est possible que la carte d'extension audio installee ne soit pas reconnue correctement. Reinstaller correctement la carte d'extension audio.

5. **Appuyer sur [EXIT] pour quitter la fenetre du systeme.**

MEMO

MIDI Sound Module

Overview

You can use the SonicCell as a MIDI sound module in either of two modes: Performance mode or Patch mode.

Performance Mode and Patch Mode

■ Performance mode

In Performance mode you can use multiple patches or rhythm sets simultaneously. A performance contains sixteen "Parts." You can assign a patch or rhythm set to each part, and use them as an ensemble, or layer sounds to create rich textures.
Since in Performance mode you can use an external MIDI device or sequencer software to independently control each of the SonicCell's sixteen parts, this is the mode to use when you're creating a song.

MEMO
With the factory settings, Performance mode is selected.

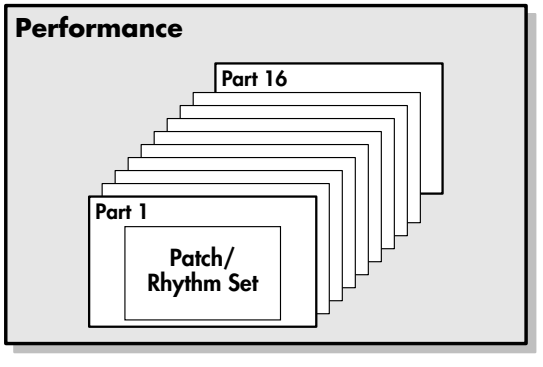
The SonicCell's sixty-four preset performances have been created to be appropriate for the following uses.
PRST01–33 For song production
PRST34–64 For playing

■ Patch mode

In Patch mode you can use a connected keyboard or other device to play a single Patch on the SonicCell. Since Patch mode lets you use a variety of effects on a single patch, you can play very rich textures.
In Patch mode it's also easy to edit the selected sound, so this is the mode to use when editing or creating your own sounds.

How a Performance is structured

A performance has a patch or rhythm set assigned to each of the 16 parts, and can simultaneously handle 16 sounds.
Because the SonicCell sound generator can control multiple sounds (instruments) it is called a Multi-timbral sound generator.

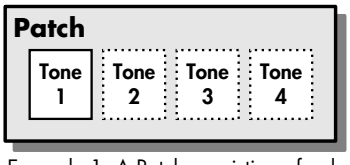


■ Part

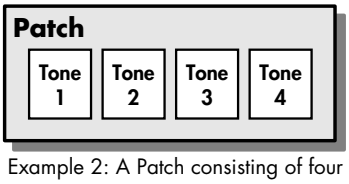
On the SonicCell, a "part" is something to which you assign a patch or rhythm set. In Performance mode, each performance has sixteen parts, and you can assign a patch or rhythm set to each part.

How a Patch is structured

Patches are the basic sound configurations that you play during a performance. Each patch can be configured by combining up to four tones. How the four tones are combined is determined by the Structure Type parameter.



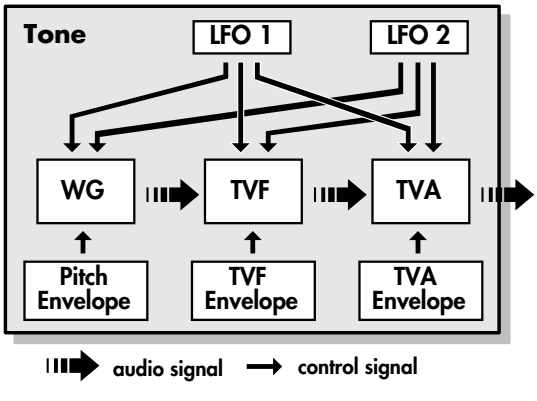
Example 1: A Patch consisting of only one Tone (Tones 2–4 are turned off).



Example 2: A Patch consisting of four Tones.

■ Tones

On the SonicCell, the tones are the smallest unit of sound. However, it is not possible to play a tone by itself. The patch is the unit of sound which can be played, and the tones are the basic building blocks which make up the patch.



WG (Wave Generator)

Specifies the PCM waveform (wave) that is the basis of the

sound, and determines how the pitch of the sound will change.

TVF (Time Variant Filter)

Specifies how the frequency components of the sound will change.

TVA (Time Variant Amplifier)

Specifies the volume changes and the sound's position in a stereo soundfield.

Envelope

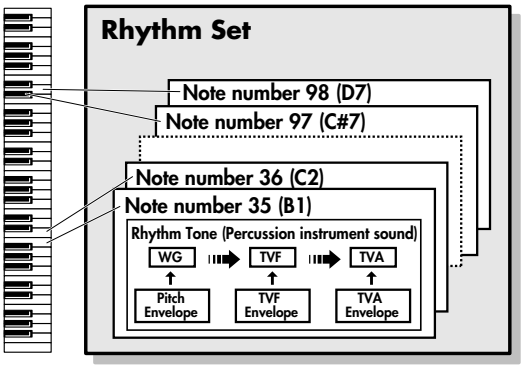
You use Envelope to initiate changes to occur to a sound over time. There are separate envelopes for Pitch, TVF (filter), and TVA (volume).

LFO (Low Frequency Oscillator)

Use the LFO to create cyclic changes (modulation) in a sound. The SonicCell has two LFOs. Either one or both can be applied to effect the WG (pitch), TVF (filter) and/or TVA (volume). When an LFO is applied to the WG pitch, a vibrato effect is produced. When an LFO is applied to the TVF cutoff frequency, a wah effect is produced. When an LFO is applied to the TVA volume, a tremolo effect is produced.

How a Rhythm Set is structured

Rhythm sets are groups of a number of different percussion instrument sounds. Since percussion instruments generally do not play melodies, there is no need for a percussion instrument sound to be able to play a scale on the keyboard. It is, however, more important that as many percussion instruments as possible be available to you at the same time. Therefore, each key (note number) of a rhythm set will produce a different percussion instrument.



* There are four wave generators for each rhythm tone (percussion instrument sounds).

* LFO is not included in the rhythm tones (percussion instrument sounds).

Calculating the Number of Voices Being Used

The SonicCell is able to play up to 128 notes simultaneously. The polyphony, or the number of voices (sounds) does not refer only to the number of patches actually being played, but changes according to the number of tones used in the patches, and the number of waves used in the tones. The following method is used to calculate the number of sounds used for one patch being played.

(Number of patches being played) x (Number of tones used by patches being played) x (Number of waves used in the tones)

For example, a patch that combines four tones, each of which use two waves, will use eight notes of polyphony at once. Also, when playing in Performance mode, the number of sounds for each part is counted to obtain the total number of sounds for all parts.

■ How a Patch Sounds

When the SonicCell is requested to play more than 128 voices simultaneously, currently sounding notes will be turned off to make room for newly requested notes. The note with the lowest priority will be turned off first. The order of priority is determined by the Patch Priority setting (p. 90).

Patch Priority can be set either to "LAST" or "LOUDEST." When "LAST" is selected, a newly requested note that exceeds the 128 voice limit will cause the first-played of the currently sounding notes to be turned off. When "LOUDEST" is selected, the quietest of the currently sounding notes will be turned off. Usually, "LAST" is selected.

■ Note priority in Performance Mode

Since Performance mode is usually used to play an ensemble consisting of several patches, it is important to decide which parts take priority. Priority is specified by the Voice Reserve settings (p. 71). When a note within a patch needs to be turned off to make room for a new note, the Patch Priority setting of the patch will apply (p. 90).

■ Voice Reserve

The SonicCell has a Voice Reserve function that lets you reserve a minimum number of notes that will always be available for each part. For example if Voice Reserve is set to "10" for part 16, part 16 will always have 10 notes of sound-producing capacity available to it even if a total of more than 128 notes (total for all parts) are being requested. When you make Voice Reserve settings, you need to take into account the number of notes you want to play on each part as well as the number of tones used by the selected patch (p. 71).

It is not possible to make Voice Reserve settings that would cause the total of all parts to be greater than 64 voices.

About the Effects

The SonicCell has built-in effect units, and you can independently edit each unit's settings.

■ Multi-Effects

The multi-effects are multi-purpose effects that completely change the sound type by changing the sound itself. Contained are 78 different effects types; select and use the type that suits your aims. In addition to effects types composed of simple effects such as Distortion, Flanger, and other such effects, you can also set up a wide variety of other effects, even connecting effects in series or in parallel. Furthermore, while chorus and reverb can be found among the multi-effects types, the following chorus and reverb are handled with a different system. In Performance mode, three types of multi-effect can be used simultaneously; these are referred to as MFX1, MFX2, and MFX3. In Patch mode, you can use one multi-effect.

■ Chorus

Chorus adds depth and spaciousness to the sound. You can select whether to use this as a chorus effect or a delay effect.

■ Reverb

Reverb adds the reverberation characteristics of halls or auditoriums. Five different types are offered, so you can select and use the type that suits your purpose.

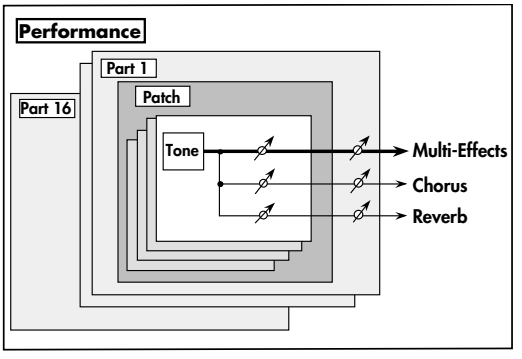
■ Mastering Effect

This is a stereo compressor (limiter) that is applied to the final output of the SonicCell. It has independent high, mid, and low ranges. Independently for the high-frequency, mid-frequency, and low-frequency regions, this compresses any sounds that exceed the specified level, making the volume more consistent.

Effects in Performance Mode

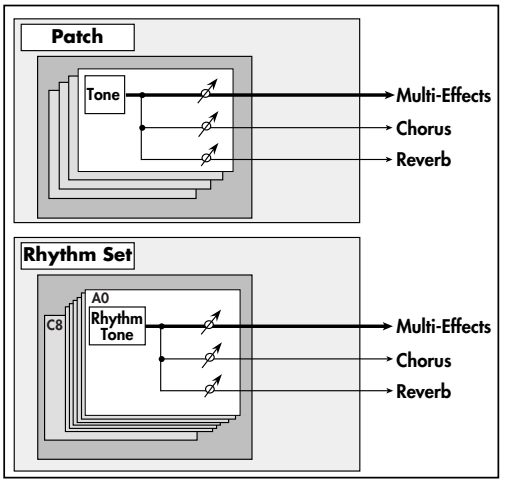
The multi-effects, chorus and reverb effects can be set individually for each performance. The intensity of each effect will be set for each part.

When you apply effects in Performance mode, the effect settings of the patch or rhythm set assigned to each part will be ignored, and the effect settings of the performance will be used. Thus, the effects for the same patch or rhythm set may differ when played in Patch mode and in Performance mode. However, depending on the settings, you can have effect settings for a patch or rhythm set assigned to a part applied to the entire performance.



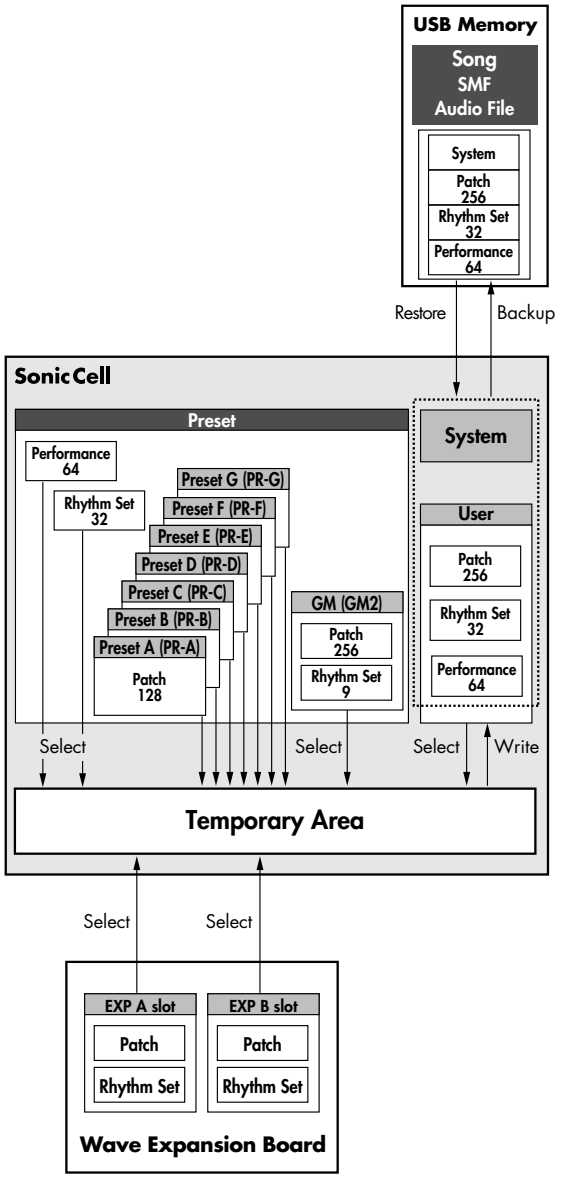
Effects in Patch Mode

The multi-effects, chorus and reverb effects can be set up individually for each patch/rhythm set. Adjusting the signal level to be sent to each effects unit (Send Level) provides control over the effect intensity that's applied to each tone.



About Memory

Patch and performance settings are stored in what is referred to as memory. There are three kind of memory: temporary, rewritable, and non-rewritable.



Temporary Memory

■ Temporary Area

This is the area that holds the data for the patch or performance that you've selected using the panel buttons. When you play the SonicCell, sound is produced based on data in the temporary area. When you edit a patch or performance, you do not directly modify the data in memory; rather, you call up the data into the temporary area, and edit it there.

Settings in the temporary area are temporary, and will be lost when the power is turned off or when you select another patch/performance. To keep the settings you have modified, you must write them into rewritable memory.

Rewritable Memory

■ System Memory

System memory stores system parameter settings that determine how the SonicCell functions.

To store system parameters, execute System Write (p. 176, p. 150).

■ User Memory

User memory is where you normally store the data you need. To store a performance, execute Performance Write (p. 73). To store a patch, execute Patch Write (p. 116). To store a Rhythm Set, execute Rhythm Set Write (p. 131).

■ USB Memory

The performances/patches/rhythm sets in user memory and the system settings in system memory can be backed up together to USB memory.

Non-Rewritable memory

■ Preset memory

Data in Preset memory cannot be rewritten. However, you can call up settings from preset memory into the temporary area, modify them and then store the modified data in rewritable memory.

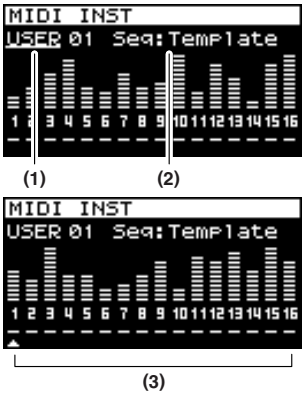
■ Wave Expansion Boards (optional: SRX Series)

The SonicCell can be equipped with up to two Wave Expansion Boards (optional: SRX Series). Wave Expansion Boards contain Wave data, as well as patches and rhythm sets that use this Wave data, which can be called directly into the temporary area and played.

Using the SonicCell in Performance Mode

Viewing the MIDI INST (MIDI sound module) screen

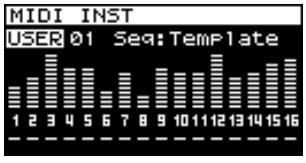
1. Press [MIDI INST] so its indicator is lit.
The MIDI INST screen will appear.



* If Sound Mode (p. 60) is set to "Patch," the Patch Play screen (p. 82) will appear.
In this case, simultaneously press [MIDI INST] and [PART VIEW] to switch to the MIDI INST screen of Performance mode.

2. Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.

3. Press [CURSOR/VALUE] to highlight the value.



4. Turn [CURSOR/VALUE] to edit the value.

5. When you've finished editing, press [CURSOR/VALUE].

Parameter		Value	Explanation
(1)	**Performance group**	USER, PRST	Selects the performance group. **USER:** User **PRST:** Preset
(2)	**Performance number/name**	01–64	Selects the performance. (MEMO) The SonicCell's sixty-four preset performances have been created to be appropriate for the following uses. **PRST01–33** For song production **PRST34–64** For playing
(3)	**Settings for each part**	-, M, S, *	For each part, you can specify whether sound will be heard. **-:** Sound can be heard. **M (mute):** The sound will be temporarily muted (silenced). **S (solo):** Selects the one part that will be heard. Parts other than the one set to "S" will be muted. ***:** In the SonicCell Editor you can set mute and solo separately. In this case, "*" is shown for parts for which both mute and solo have been specified.

Viewing the menu screen (Performance Menu screen)

1. Press [MIDI INST] so its indicator is lit.
The MIDI INST screen will appear.

2. Press [MENU].

The Performance Menu screen will appear.

The Performance Menu screen has the structure shown in the illustration at right.

You can turn [CURSOR/VALUE] to the right or left to switch screens.

3. Turn [CURSOR/VALUE] to move the cursor to the item you want to edit.

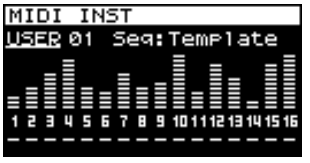
4. Press [CURSOR/VALUE] to access the corresponding screen.

Parameter	Explanation
Snd (Sound) Mode	Lets you switch between Performance mode and Patch mode. Press [CURSOR/VALUE] to access the Sound Mode screen (p. 60).
General	Specifies the recommended tempo of the performance. Press [CURSOR/VALUE] to access the Performance General screen (p. 60).
MIDI Filter	Turns reception of various MIDI messages on/off for each part. Press [CURSOR/VALUE] to access the Perform MIDI Filter screen (p. 60).
Ctrl Init (Sound Control Initialize)	Initializes the values of only the following sound-related parameters for the current performance (p. 73). • Cutoff Offset, Resonance Offset, Attack Offset, Release Offset, Decay Offset, Vibrato Rate, Vibrato Depth, Vibrato Delay
Prf Init (Performance Initialize)	Initializes the settings of the current performance (p. 73).
Write (Performance Write)	Saves the current performance as user data. Press [CURSOR/VALUE] to access the Performance Name screen (p. 73).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Switching the sound mode (Sound Mode screen)

This specifies the mode of the MIDI sound generator.
The current mode is highlighted.

1. Turn [CURSOR/VALUE] to move the cursor, and press [CURSOR/VALUE] to confirm your choice of mode.
If you select "Performance" and press [CURSOR/VALUE], the following screen will appear.



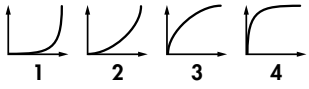
Specifying the recommended performance tempo (Performance General screen)

Parameter	Value	Explanation
Recommend Tempo	20–250	If you want the system tempo to change when you switch Performances, specify the tempo that will follow this change. This setting is valid when the Seq Tempo Override is "ON." In order to enable this setting, turn on the Tempo Override (p. 177).

MIDI-related settings (Perform MIDI Filter screen)

In the Perform MIDI Filter screen you can edit the following parameters for each part.

Parameter	Value	Explanation
PC **(Receive Program Change Switch)**	–, O	Determines, on an individual part basis, whether MIDI program change messages will be received (O) or not received (_).
BS **(Receive Bank Select Switch)**	–, O	Determines, on an individual part basis, whether MIDI bank select messages will be received (O) or not received (_).
PB **(Receive Pitch Bend Switch)**	–, O	Determines, on an individual part basis, whether MIDI pitch bend messages will be received (O) or not received (_).
PA **(Receive Polyphonic Key Pressure Switch)**	–, O	Determines, on an individual part basis, whether MIDI polyphonic key pressure messages will be received (O) or not received (_).
CA **(Receive Channel Pressure Switch)**	–, O	Determines, on an individual part basis, whether MIDI channel pressure messages will be received (O) or not received (_).

Parameter	Value	Explanation
MD (Receive Modulation Switch)	–, O	Determines, on an individual part basis, whether MIDI modulation messages will be received (O) or not received (_).
VO (Receive Volume Switch)	–, O	Determines, on an individual part basis, whether MIDI volume messages will be received (O) or not received (_).
PN (Receive Pan Switch)	–, O	Determines, on an individual part basis, whether MIDI pan messages will be received (O) or not received (_).
EX (Receive Expression Switch)	–, O	Determines, on an individual part basis, whether MIDI expression messages will be received (O) or not received (_).
HD (Receive Hold 1 Switch)	–, O	Determines, on an individual part basis, whether MIDI hold 1 messages will be received (O) or not received (_).
PL (Phase Lock Switch)	–, O	Set Phase Lock to "O" when you want to suppress discrepancies in timing of parts played on the same MIDI channel. **NOTE** When the Phase Lock parameter is set to "O," parts on the same MIDI channel are put in a condition in which their timing is matched, enabling them to be played at the same time. Accordingly, a certain amount of time may elapse between reception of the Note messages and playing of the sounds. Turn this setting to "O" only as needed.
VC (Velocity Curve Type)	–, 1–4	Velocity Curve selects for each MIDI channel one of the four following Velocity Curve types that best matches the touch of the connected MIDI keyboard. Set this to "–" if you are using the MIDI keyboard's own velocity curve.  1 2 3 4

■ Menu screen

From the Perform MIDI Filter screen, press [MENU] to access the MIDI Filter screen.
Press [MENU] once again to return to the Perform MIDI Filter screen.

Parameter	Explanation
PC, BS, PB, PA, CA, MD, VO, PN, EX, HD, PL, VC	The cursor will move to the current part for the item you selected in the Perform MIDI Filter screen.

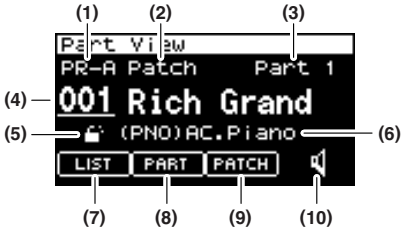
Viewing the part settings (Part View screen)

1. **Press [MIDI INST] so its indicator is lit.**
   The MIDI INST screen will appear.

2. **Move the cursor to the part that you want to edit, and press [PART VIEW].**
   The [PART VIEW] indicator will light, and the Part View screen will appear.

If the patch type is Patch

If in Performance mode you've set the current part's patch type to "Patch," the following screen will appear.



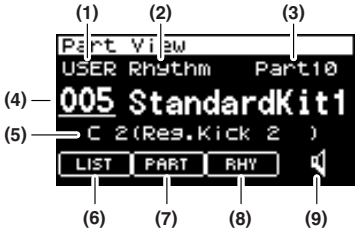
Parameter		Value	Explanation
(1)	**Patch group**	USER, PR-A–PR-G, GM XP-A, XP-B	Selects the patch group. **USER:** User **PR-A–PR-G:** Preset A–Preset G **GM:** General MIDI **XP-A, XP-B:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose XP-A, XP-B unless a wave expansion board is inserted in to the corresponding slot.
(2)	**Patch type**	Patch, Rhythm	Specifies whether the current part will use a patch or a rhythm set.
(3)	**Current part**	Part1–Part 16	Selects the part (current part) that will be affected by your operations.
(4)	**Patch number/name**	001–	Selects the patch used by the current part.
(5)	**Category lock**	,	Specifies whether the category will be locked ( ) or not locked ( ) when you select patches. If you lock the category, only sounds that are within the category will appear when you select patches.
(6)	**Patch category**	- - - –CMB	Switches the category.
(7)	**LIST**		Press [CURSOR/VALUE] to access the Patch List screen (p. 65, p. 66).
(8)	**PART**		Press [CURSOR/VALUE] to access the Part Edit screen (p. 68).
(9)	**PATCH**		Press [CURSOR/VALUE] to access the edit screen for the patch used by the current part (p. 88).
(10)	**Preview**	,	If you switch the preview icon ( ) to ( ), you'll be able to hear a preview sound played by that patch. (MEMO) The system Preview setting (p. 179) lets you specify how the preview will be sounded.

■ Patch Category

Category		Contents
- - -	No Assign	No assign
PNO	AC.Piano	Acoustic Piano
EP	EL.Piano	Electric Piano
KEY	Keyboards	Other Keyboards (Clav, Harpsichord etc.)
BEL	Bell	Bell, Bell Pad
MLT	Mallet	Mallet
ORG	Organ	Electric and Church Organ
ACD	Accordion	Accordion
HRM	Harmonica	Harmonica, Blues Harp
AGT	AC.Guitar	Acoustic Guitar
EGT	EL.Guitar	Electric Guitar
DGT	DIST.Guitar	Distortion Guitar
BS	Bass	Acoustic & Electric Bass
SBS	Synth Bass	Synth Bass
STR	Strings	Strings
ORC	Orchestra	Orchestra Ensemble
HIT	Hit&Stab	Orchestra Hit, Hit
WND	Wind	Winds (Oboe, Clarinet etc.)
FLT	Flute	Flute, Piccolo
BRS	AC.Brass	Acoustic Brass
SBR	Synth Brass	Synth Brass
SAX	Sax	Sax
HLD	Hard Lead	Hard Synth Lead
SLD	Soft Lead	Soft Synth Lead
TEK	Techno Synth	Techno Synth
PLS	Pulsating	Pulsating Synth
FX	Synth FX	Synth FX (Noise etc.)
SYN	Other Synth	Poly Synth
BPD	Bright Pad	Bright Pad Synth
SPD	Soft Pad	Soft Pad Synth
VOX	Vox	Vox, Choir
PLK	Plucked	Plucked (Harp etc.)
ETH	Ethnic	Other Ethnic
FRT	Fretted	Fretted Inst (Mandolin etc.)
PRC	Percussion	Percussion
SFX	Sound FX	Sound FX
BTS	Beat&Groove	Beat and Groove
DRM	Drums	Drum Set
CMB	Combination	Other patches which use Split and Layer

If the patch type is Rhythm Set

If in Performance mode you've set the current part's patch type to "Rhythm," the following screen will appear.



Parameter		Value	Explanation
(1)	**Rhythm Set group**	USER, PRST, GM, XP-A, XP-B	Selects the rhythm set group. **USER:** User **PRST:** Preset **GM:** General MIDI **XP-A, XP-B:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose XP-A, XP-B unless a wave expansion board is inserted in to the corresponding slot.
(2)	**Patch type**	Patch, Rhythm	Specifies whether the current part will use a patch or a rhythm set.
(3)	**Current part**	Part1–Part 16	Selects the part (current part) that will be affected by your operations.
(4)	**Rhythm Set number/name**	001–	Selects the rhythm set used by the current part.
(5)	**Editing key**	A0–C8	Within the currently selected rhythm set, selects the key that you'll be editing.
(6)	**LIST**		Press [CURSOR/VALUE] to access the Rhythm Set List screen (p. 67).
(7)	**PART**		Press [CURSOR/VALUE] to access the Part Edit screen (p. 68).
(8)	**RHY**		Press [CURSOR/VALUE] to access the edit screen for the rhythm set used by the current part (p. 117).
(9)	**Preview**	,	If you switch the preview icon ( ) to ( ), you'll be able to hear a preview sound played by that rhythm set. (MEMO) The system Preview setting (p. 179) lets you specify how the preview will be sounded.

Selecting patches from a patch list by category (Patch List (Ctg) screen)

You can choose the patch for each part from a list that's arranged by category.

* When the power is turned on, the Patch List (Ctg) screen is selected.

1. Press [MIDI INST] so its indicator is lit.
The MIDI INST screen will appear.

2. Move the cursor to the part that you want to edit, and press [PART VIEW].
The [PART VIEW] indicator will light, and the Part View screen will appear.

3. Select "LIST" and press [CURSOR/VALUE].
The Patch List (Ctg) screen will appear.

* If the Patch List (Grp) screen was displayed last, the Patch List (Grp) screen will appear.
In this case, press [MENU] to access the Group Select screen, select "CATEG LIST," then press [CURSOR/VALUE] to access the Patch List (Ctg) screen.

4. Turn [CURSOR/VALUE] to select a patch, and press [CURSOR/VALUE].
The patch will change, and you'll be returned to the Part View screen.

■ Menu screen.....

From the Patch List (Ctg) screen, press [MENU] to access the Category Select screen.
Press [MENU] once again to return to the Patch List (Ctg) screen.

Parameter	Explanation
PNO, KBD, GTR, BAS, ORC, BRS, SYN, VCL, WLD	Changes the category (major classification) and returns to the patch list screen organized by category. You can change the category by moving the cursor to the currently selected category (at the top of the screen) and pressing [CURSOR/VALUE]. **Major Classification** / **Category** **PNO:** AC.Piano, EL.Piano **KBD:** Keyboards, Bell, Mallet, Organ, Accordion, Harmonica **GTR:** AC.Guitar, EL.Guitar, Dist.Guitar **BAS:** Bass, Synth Bass **ORC:** Strings, Orchestra, Hit&Stab **BRS:** Wind, Flute, AC.Brass, Synth Brass, Sax **SYN:** Hard Lead, Soft Lead, Techno Synth, Pulsating, Synth FX, Other Synth **VCL:** Bright Pad, Soft Pad, Vox **WLD:** Plucked, Ethnic, Fretted, Percussion, Sound FX, Beat&Groove, Drums, Combination
GROUP LIST	Press [CURSOR/VALUE] to access the Patch List (Grp) screen (p. 66). * Once you move to the Patch List (Grp) screen, the Patch List (Grp) screen will appear when you select "LIST" in the Part View screen.

Selecting patches from a patch list by group (Patch List (Grp) screen)

You can choose the patch for each part from a list that's arranged by group, such as USER or expansion board.

* When the power is turned on, the Patch List (Ctg) screen is selected.

1. **Press [MIDI INST] so its indicator is lit.**
   The MIDI INST screen will appear.
2. **Move the cursor to the part that you want to edit, and press [PART VIEW].**
   The [PART VIEW] indicator will light, and the Part View screen will appear.
3. **Select "LIST" and press [CURSOR/VALUE].**
   The Patch List (Ctg) screen will appear.
   * If the Patch List (Grp) was displayed last, the Patch List (Grp) screen will appear. Proceed to step 6.
4. **Press [MENU] to access the menu screen.**
5. **Choose "GROUP LIST" and press [CURSOR/VALUE].**
   The Patch List (Grp) screen will appear.

6. **Turn [CURSOR/VALUE] to select a patch, and press [CURSOR/VALUE].**
   The patch will change, and you'll be returned to the Part View screen.

■ Menu screen

From the Patch List (Grp) screen, press [MENU] to access the Group Select screen.
Press [MENU] once again to return to the Patch List (Grp) screen.

Parameter	Explanation
USR, A–G, GM, EXA, EXB	Changes the group and returns to the patch list by group screen. **USR:** User **A–G:** Preset A–Preset G **GM:** General MIDI **EXA, EXB:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose EXA, EXB unless a wave expansion board is inserted in to the corresponding slot.
CATEG (Category) LIST	Press [CURSOR/VALUE] to access the Patch List (Ctg) screen (p. 65). * Once you move to the Patch List (Ctg) screen, the Patch List (Ctg) screen will appear when you select "LIST" in the Part View screen.

Selecting a rhythm set from a list (Rhythm Set List screen)

If the current part's patch type is "Rhythm," you can choose a rhythm set from a list.

1. **Press [MIDI INST] so its indicator is lit.**
   The MIDI INST screen will appear.

2. **Move the cursor to the part that you want to edit, and press [PART VIEW].**
   The [PART VIEW] indicator will light, and the Part View screen will appear.

3. **Select "LIST" and press [CURSOR/VALUE].**
   Rhythm Set List screen will appear.

4. **Turn [CURSOR/VALUE] to select a rhythm set, and press [CURSOR/VALUE].**
   The patch will change, and you'll be returned to the Part View screen.

■ Menu screen

From the Rhythm Set List screen, press [MENU] to access the Group Select screen. Press [MENU] once again to return to the Rhythm Set List screen.

Parameter	Explanation
USR, PRESET, GM, EXA, EXB	Changes the group and returns to the patch list by group screen. **USR:** User **PRESET:** Preset **GM:** General MIDI **EXA, EXB:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose EXA, EXB unless a wave expansion board is inserted in to the corresponding slot.

Editing parts (Part Edit screen)

1. **Press [MIDI INST] so its indicator is lit.**
   The MIDI INST screen will appear.

2. **Move the cursor to the part that you want to edit, and press [PART VIEW].**
   The [PART VIEW] indicator will light, and the Part View screen will appear.

3. **Turn [CURSOR/VALUE] to select "PART," and press [CURSOR/VALUE].**
   The Part Edit screen will appear.

4. **Turn [CURSOR/VALUE] to select the parameter that you want to edit, and press [CURSOR/VALUE].**
   The value of the selected parameter will be highlighted.
   If you select "Scale Tune," an editing screen will appear.

5. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**

■ Menu screen

From the Part Edit screen, press [MENU] to access the Menu screen.

The Menu screen is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left.

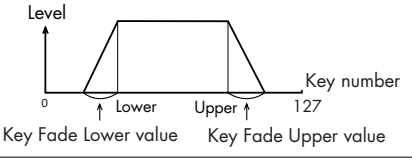
Press [MENU] once again to return to the Part Edit screen.

Parameter	Explanation
1–16	Changes the current part and returns to the Part Edit screen.
SND (Sound Mode)	Lets you switch between Performance mode and Patch mode. Press [CURSOR/VALUE] to access the Sound Mode screen (p. 60).
GEN (General)	Specifies the recommended tempo of the performance. Press [CURSOR/VALUE] to access the Performance General screen (p. 60).
MIDI (MIDI Filter)	Turns reception of various MIDI messages on/off for each part. Press [CURSOR/VALUE] to access the Perform MIDI Filter screen (p. 60).
CINI (Sound Control Initialize)	Initializes the values of only the following sound-related parameters for the current performance (p. 73). • Cutoff Offset, Resonance Offset, Attack Offset, Release Offset, Decay Offset, Vibrato Rate, Vibrato Depth, Vibrato Delay
PINI (Performance Initialize)	Initializes the settings of the current performance (p. 73).
Write (Performance Write)	Saves the current performance as user data. Press [CURSOR/VALUE] to access the Performance Name screen (p. 73).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

■ Part Edit screen .....

Parameter	Value	Explanation
Level	0–127	Adjust the volume of each part. This setting's main purpose is to adjust the volume balance between parts.
Pan	L64–63R	Adjust the pan of each part. "L64" is far left, "0" is center, and "63R" is far right.
Octave Shift	-3–+3	Adjusts the pitch of the part's sound up or down in units of an octave (+/-3 octaves).
Coarse Tune	-48–+48	Adjusts the pitch of the part's sound up or down in semitone steps (+/-4 octaves).
Fine Tune	-50–+50	Adjusts the pitch of the part's sound up or down in 1-cent (1/100th of a semitone) steps (+/-50 cents).
Output Assign	MFX, L+R, L, R, PAT	Specifies for each part how the direct sound will be output. **MFX:** Output in stereo through multi-effects. You can also apply chorus or reverb to the sound that passes through multi-effects. **L+R:** Output to the OUTPUT jack in stereo without passing through multi-effects. **L:** Output from L. **R:** Output from R. **PAT:** The part's output destination is determined by the settings of the patch or rhythm set assigned to the part. **NOTE** • When outputting in mono, the Pan setting is disabled. • Chorus and Reverb are output in mono at all times. • When the settings are such that signals are split and output from the L jack and R jack, and no plug is inserted in the R jack, the sounds from L and R are mixed together, then output from the L jack. This sound comprises the sounds from the L and R jacks. **TIP** When the Output Assign parameter is set to PAT, the output level settings for the Patch or Rhythm Set as well as the Part go into effect. If you want the various level settings of the Patch/Rhythm Set to be reflected as they are, set the various Part levels to 127 (maximum). **MEMO** For more on how to set each effect, refer to the pages shown below. • Multi-effects(p. 78, p. 192) • Chorus (p. 78, p. 219) • Reverb (p. 79, p. 220)
Output MFX (Output MFX Select)	1–3	Of the three types of multi-effects that can be used simultaneously, specify which multi-effects will be used.
Output Level	0–127	Sets the direct sound's volume for each Part. When Multi-effects are being applied, this sets the amount of the effect that is applied; when Multi-effects are not applied, this sets the volume of the direct sound.
Chorus Send (Chorus Send Level)	0–127	Adjusts the amount of Chorus for each Part. If you don't want to add the Chorus effect, set it to 0.
Reverb Send (Reverb Send Level)	0–127	Adjusts the amount of Reverb for each Part. If you don't want to add the Reverb effect, set it to 0.
Cutoff Offset	-64–+63	Adjusts the cutoff frequency for the patch or rhythm set assigned to a part. **NOTE** Patches also have a Cutoff Offset setting (p. 90). The final Cutoff frequency value is the sum of the tone Cutoff Frequency value and the patch and part Cutoff Offset values. If the tone's cutoff frequency is already set to "127" (maximum), there will be no change produced by setting the Cutoff Offset to a positive value.

Parameter	Value	Explanation
Resonance Offset	-64–+63	Adjusts the Resonance for the patch or rhythm set assigned to a part. **NOTE** Patches also have a Resonance Offset setting (p. 91). The final Resonance value is the sum of the tone Resonance value and the patch and part Resonance Offset values. If the tone's resonance is already set to "127" (maximum), there will be no change produced by setting the resonance offset to a positive value.
Attack Offset (Attack Time Offset)	-64–+63	Adjusts the TVA/TVF Envelope Attack Time for the patch or rhythm set assigned to a part. **NOTE** Patches also contain the Attack Offset setting (p. 91). The final TVA Envelope attack time value is therefore the sum of the tone's TVA Envelope Time 1 setting, the patch's Attack Time Offset, and the part's Attack Time Offset. If the tone's Time 1 parameter is already set to "127" (maximum), there will be no change produced by setting the Attack Time Offset to a positive value.The same applies to the TVF envelope.
Release Offset (Release Time Offset)	-64–+63	Adjusts the TVA/TVF Envelope Release Time for the patch or rhythm set assigned to a part. **NOTE** Patches also contain a Release Offset setting (p. 91). The final TVA Envelope release time value is therefore the sum of the tone's TVA Envelope Time 4 setting, the patch's Release Time Offset, and the part's Release Time Offset. If the tone's Time 4 parameter is set to "127" (maximum), there will be no change in the Release Time Offset, even when this is set to a positive value.The same applies to the TVF envelope.
Decay Offset (Decay Time Offset)	-64–+63	Adjusts the TVA/TVF Envelope Decay Time for the patch or rhythm set assigned to a part.
Mono/Poly	MONO, POLY, PAT	Sets how the Patch's notes play. The MONO setting is effective when playing a solo instrument Patch such as sax or flute. **MONO:** Only one note sounds at a time. **POLY:** Two or more notes can be played simultaneously. **PAT:** The Part uses the Patch's Mono/Poly setting. **NOTE** This setting is ignored for parts to which a rhythm set is assigned.
Legato Switch	OFF, ON, PAT	Turn this parameter "ON" when you want to use the Legato feature and "OFF" when you don't. Legato is a feature that works only when the Mono/Poly is MONO. When Legato is ON, pressing one key when another is already pressed causes the currently playing note's pitch to change to that of the newly pressed key while continuing to sound. This can be effective when you wish to simulate performance techniques such as a guitarist's hammering on and pulling off strings. When PAT is selected, the Patch's own settings take effect. **NOTE** This setting is ignored for parts to which a rhythm set is assigned.
Portamento Sw (Switch)	OFF, ON, PAT	Specify whether portamento will be applied. Turn this parameter "ON" when you want to apply Portamento and "OFF" when you don't. If you want to use the Portamento Switch setting of the patch assigned to the part, set this to "PAT." **NOTE** This setting is ignored for parts to which a rhythm set is assigned.
Portamento Time	0–127, PAT	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. If you want to use the Portamento Time setting of the patch assigned to the part, set this to "PAT." **NOTE** This setting is ignored for parts to which a rhythm set is assigned.
Vibrato Rate	-64–+63	For each part, 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.

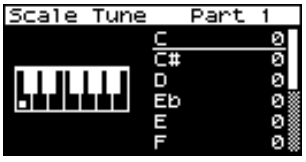
Parameter	Value	Explanation
Vibrato Depth	-64–+63	For each part, this adjusts the depth of the vibrato effect (the depth at which the pitch is modulated). The pitch will be modulated more greatly for higher settings, and less with lower settings.
Vibrato Delay	-64–+63	For each part, this adjusts the time delay until the vibrato (pitch modulation) effect begins. Higher settings will produce a longer delay time before vibrato begins, while lower settings produce a shorter time.
Velocity Sens Off (Velocity Sensitivity Offset)	-63–+63	This changes the volume and cutoff frequency for each part according to the velocity with which the keys are pressed. If you want strongly played notes to raise the volume/cutoff frequency, set this parameter to positive (+) settings. If you want strongly played notes to lower the volume/cutoff frequency, use negative (-) settings. Set Velocity Sensitivity to "0" when you want sounds played at a fixed volume and cutoff frequency, regardless of the force with which the keys are played. **NOTE** Patches also contain a Velocity Sensitivity Offset setting (Velocity Sens: p. 91). The ultimate Velocity Sensitivity Offset value is the sum of the part's and the patch's Velocity Sensitivity Offsets. Accordingly, if the patch's Velocity Sensitivity Offset parameter is set to "127" (maximum), there will be no change in the part's Velocity Sensitivity Offset, even when this is set to a positive value.
Bend Range	0–24, PAT	Specifies the amount of pitch change in semitones (2 octaves) that will occur when the Pitch Bend Lever is moved. The amount of change when the lever is tilted is set to the same value for both left and right sides. If you want to use the Pitch Bend Range setting of the patch assigned to the part, set this to "PAT."
Key Fade Lower	0–127	Determines what will happen to the Part's level when a note that's lower than its specified keyboard range is played. Higher settings produce a more gradual change in volume. If you don't want the Tone to sound at all when a note below the keyboard range is played, set this parameter to 0.
Key Range Lower	C-1–UPPER	Specifies the lowest note that the tone will sound for each part.
Key Range Upper	LOWER–G9	Specifies the highest note that the tone will sound for each part. * It is not possible to set Lower to a value greater than the Upper value, or Upper to a value less than the Lower value.
Key Fade Upper	0–127	This determines what will happen to the Part's level when a note that's higher than its specified keyboard range is played. Higher settings produce a more gradual change in volume. If you don't want the Tone to sound at all when a note above the keyboard range is played, set this parameter to 0. 
Voice Reserve	0–63, FULL	Specifies the number of voices that reserved for each Part when more than 128 voices are played simultaneously. * It is not possible for the settings of all Parts to total an amount greater than 64. [Calculating the Number of Voices Being Used] The number of notes, or "voices," that the SonicCell can sound simultaneously depends on the number of Tones in the Patches you're using and the number of keys being pressed. For example, if you play one note using a Patch that consists of only one Tone, you'll use up one voice of polyphony. SonicCell Tones may use two Waveforms. If a Patch's Tone uses two Waveforms, the number of voices it requires is doubled. If two keys are pressed with a Patch that has four Tones, and each Tone uses two Waveforms, a total of sixteen voices are used. This number is obtained by performing the following calculation. Count the number of Tones with two Waveforms and multiply this number by 2. Add the number of Tones that use one Waveform. Multiply this total by the number of keys pressed. The SonicCell can play up to 128 Tones simultaneously. When you're using the SonicCell multitimbrally, keep this in mind, and adjust your Voice Reserve settings so that each Part is guaranteed at least the minimum number of voices it requires.
Receive Channel	1–16	Specifies the MIDI receive channel for each part.

Parameter	Value	Explanation
Receive Switch	OFF, ON	For each part, specify whether MIDI messages will be received (ON), or not (OFF).
Scale Tune	OFF, ON	The SonicCell allows you to use temperaments other than equal temperament. Press [CURSOR/VALUE] to access the Scale Tune screen (p. 72).

Scale Tune settings (Scale Tune screen)

In Performance mode you can specify a different scale tuning for each part. However, this setting will be common to the entire performance.

1. **In the Part Edit screen, select "Scale Tune" and press [CURSOR/VALUE].**
   The Scale Tune screen will appear.



2. **Turn [CURSOR/VALUE] to select the key that you want to edit, then press [CURSOR/VALUE].**
3. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**
4. **When you've finished editing, press [EXIT].**

Parameter	Value	Explanation
C, C#, D, Eb, E, F, F#, G, G#, A, Bb, B	-64–+63	Adjusts the pitch of each note in one-cent steps (1/100th of a semitone) relative to its equal-tempered pitch.

- **Equal Temperament**
  This tuning divides the octave into 12 equal parts, and is the most widely used method of temperament used in Western music.
- **Just Temperament (Tonic of C)**
  Compared with equal temperament, the principle triads sound pure in this tuning. However, this effect is achieved only in one key, and the triads will become ambiguous if you transpose.
- **Arabian Scale**
  In this scale, E and B are a quarter note lower and C#, F# and G# are a quarter-note higher compared to equal temperament. The intervals between G and B, C and E, F and G#, Bb and C#, and Eb and F# have a natural third- the interval between a major third and a minor third. On the SonicCell, you can use Arabian temperament in the three keys of G, C and F.

<Example>

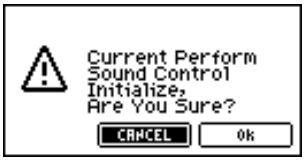
Note name	Equal Temperament	Just Temperament (tonic C)	Arabian Scale
C	0	0	-6
C#	0	-8	+45
D	0	+4	-2
Eb	0	+16	-12
E	0	-14	-51
F	0	-2	-8
F#	0	-10	+43
G	0	+2	-4
G#	0	+14	+47
A	0	-16	0
Bb	0	+14	-10
B	0	-12	-49

Sound Control Initialize

Initializes the values of only the following sound-related parameters for the current performance.

- Cutoff Offset, Resonance Offset, Attack Offset, Release Offset, Decay Offset, Vibrato Rate, Vibrato Depth, Vibrato Delay

When you select "Ctrl Init" from the Performance Menu screen (p. 58), a confirmation message will appear.

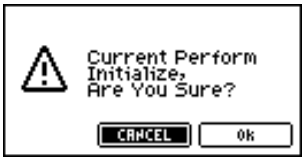


1. **If you want to carry out the initialization, select "OK" and press [CURSOR/VALUE].**
   If you decide not to execute, select "CANCEL" and press [CURSOR/VALUE].
   When initialization is completed, you'll be returned to the previous screen.

Performance Initialize

Initializes the settings of the current performance.

When you select "Perf Init" from the Performance Menu screen (p. 58), a confirmation message will appear.



1. **If you want to carry out the initialization, select "OK" and press [CURSOR/VALUE].**
   If you decide not to execute, select "CANCEL" and press [CURSOR/VALUE].
   When initialization is completed, you'll be returned to the previous screen.

Performance Write

Saves the current performance as user data.

When you select "Write" from the Performance Menu screen (p. 58), the Performance Name screen will appear.
In this screen you can assign a name (performance name) of up to twelve characters to the performance you're saving.

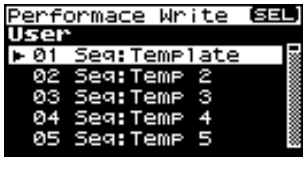
1. **Move the cursor to the location where you want to enter a character, and press [CURSOR/VALUE].**

2. **Turn [CURSOR/VALUE] to select the desired character, then press [CURSOR/VALUE] to enter that character.**
   You can press [MENU] to view convenient functions for text entry.
   Press [MENU] once again to return to the previous screen.

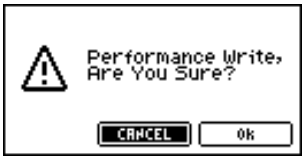
Function	Explanation
INSERT	Press [CURSOR/VALUE] to insert a space (blank) at the cursor location.
DELETE	Press [CURSOR/VALUE] to delete the character at the cursor location; subsequent characters will move forward.
UNDO	Revert to the unedited performance name.

3. **Repeat steps 1 and 2 as many times as necessary.**

4. **When you've finished entering the performance name, move the cursor to "WRITE" and press [CURSOR/VALUE].**
   The Performance Write screen will appear.



5. Turn [CURSOR/VALUE] to select the save-destination performance, then press [CURSOR/VALUE].
A confirmation message will appear.

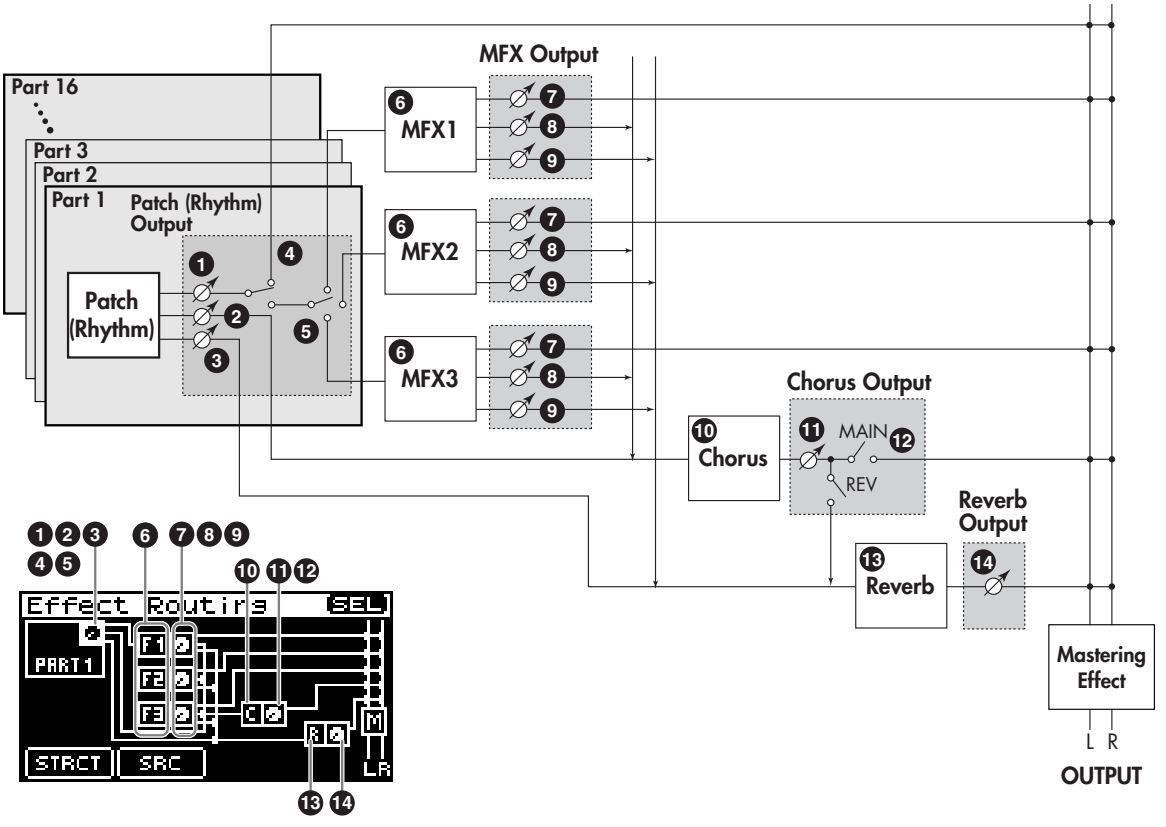


6. To write the performance into memory, select "OK" and press [CURSOR/VALUE].
If you decide you don't want to carry out the write, select "CANCEL" and press [CURSOR/VALUE].
Once the data has been written, you'll be returned to the previous screen.

Editing effects

In Performance mode you can use three multi-effects (MFX1, MFX2, MFX3), one chorus, and one reverb. For each of the three multi-effects, the chorus, and the reverb, you can specify whether it will operate according to the effect settings of the performance, or according to the effect settings of the patch or rhythm set assigned to the part you specify.
The three multi-effects can be used independently, or you can connect two or three of them in series.

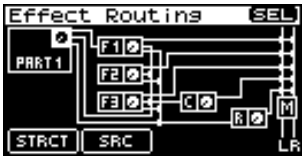
■ Signal flow



❶–❺	Make these settings in the Part Edit screen. ❶: Output Level, ❷: Chorus Send, ❸: Reverb Send, ❹: Output Assign, ❺: Output MFX	p. 69
❻	Make these settings in the MFX1–MFX3 screens. • Select the multi-effect type and edit the parameters.	p. 78
❼–❾	Make these settings in the MFX1–MFX3 Output screens. ❼: Output Level, ❽: Chorus Send Level, ❾: Reverb Send Level	p. 78
❿	Make these settings in the Chorus screen. • Select the chorus type and edit the parameters.	p. 78
⓫–⓬	Make these settings in the Chorus Output screen. ⓫: Output Level, ⓬: Output Select	p. 79
⓭	Make these settings in the Reverb screen. • Select the reverb type and edit the parameters.	p. 79
⓮	Make these settings in the Reverb Output screen. • Output Level	p. 79

■ Procedure

1. **From the MIDI INST screen or the Part View screen, press [EFFECTS].**
   The [EFFECTS] indicator will light, and the Effect Routing screen will appear.



2. **Turn [CURSOR/VALUE] to move the cursor to the parameter that you want to edit.**
3. **Press [CURSOR/VALUE].**

4. **Turn [CURSOR/VALUE] to move the cursor to the parameter that you want to edit.**
5. **Press [CURSOR/VALUE] to highlight the value.**
   If there is a "SELECT" indicator for the value field, you can press [CURSOR/VALUE] to move to the editing screen for that parameter.
6. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**
7. **When you've finished editing, press [EXIT].**
   The Part View screen will appear.

■ Menu screens during effect editing

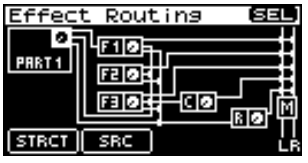
From the Effect Routing screen, press [MENU] to access the Menu screen.

The Menu screen is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left.

Press [MENU] once again to return to the Effect Routing screen.

Parameter	Value	Explanation
FX1–FX3 (MFX1–MFX3)	OFF, ON	Specifies whether MFX 1–3 will be used (ON) or not used (OFF).
CHO (Chorus Switch)	OFF, ON	Specifies whether chorus will be used (ON) or not used (OFF).
REV (Reverb Switch)	OFF, ON	Specifies whether Reverb will be used (ON) or not used (OFF).
MST (Mastering Effect Switch)	OFF, ON	Specifies whether Mastering Effect will be used (ON) or not used (OFF).
CTRL1–CTRL3 (MFX1–3 Control)		Make settings for controlling the multi-effects via MIDI. Press [CURSOR/VALUE] to access the MFX 1–3 Control screen (p. 81).
Write (Performance Write)		Saves the current performance as user data. Press [CURSOR/VALUE] to access the Performance Name screen (p. 73).
System		Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility		Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play		When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)		Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)		Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Selecting the item to edit (Effect Routing screen)

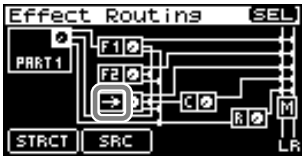


Parameter	Explanation
Part ⬚ **(Part Output)**	Edits the part settings. By moving the cursor to ⬚ and pressing [CURSOR/VALUE] you can move to the Part Edit screen (p. 69).
F1–F3 (MFX1–MFX3)	Edits the multi-effect 1–3 settings. Press [CURSOR/VALUE] to access the MFX1–3 screen (p. 78).
F1–F3 ⬚ **(MFX1–MFX3 Output)**	Edits output-related settings for multi-effects 1–3. By moving the cursor to ⬚ and pressing [CURSOR/VALUE] you can move to the MFX1–3 Output screen (p. 78).
C (Chorus)	Edits the chorus settings. Press [CURSOR/VALUE] to access the Chorus screen (p. 78).
C ⬚ **(Chorus Output)**	Edits output-related settings for chorus. By moving the cursor to ⬚ and pressing [CURSOR/VALUE] you can move to the Chorus Output screen (p. 79).
R (Reverb)	Edits the reverb settings. Press [CURSOR/VALUE] to access the Reverb screen (p. 79).
R ⬚ **(Reverb Output)**	Edits output-related settings for reverb. By moving the cursor to ⬚ and pressing [CURSOR/VALUE] you can move to the Reverb Output screen (p. 79).
M (Mastering Effect)	Edits the mastering effect settings. Press [CURSOR/VALUE] to access the Mastering Effect screen (p. 181).
STRCT (MFX Structure)	Specifies how MFX 1–3 will be combined. Press [CURSOR/VALUE] to access the MFX Structure screen (p. 80).
SRC (Effect Source)	Selects how effects will operate. Press [CURSOR/VALUE] to access the Effect Source screen (p. 80).

NOTE

If you've set MFX3 Location (p. 149) to "Input FX" in the In/Out Routing (p. 144), you won't be able to use MFX3 as a performance effect.

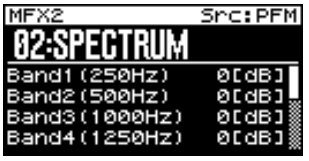
In this case, the MFX3 indication in the Effect Routing screen will be as follows.

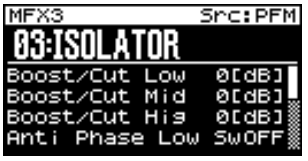


* MFX3-related settings will be displayed in screens other than the Effect Routing screen, and you'll be able to edit the values, but this will not affect the performance as long as MFX3 Location is set to Input FX.

Editing the multi-effects related settings (MFX1–3/MFX1–3 Output screens)

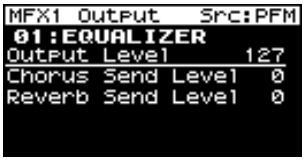
■ MFX1–3 screens

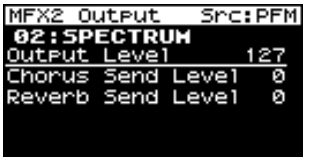




Parameter	Value	Explanation
00: THRU–78: SYMRESONANCE (MFX Type)		Selects the types of multi-effects that MFX1–MFX3 will use. Choose "00: THRU" if you don't want to apply a multi-effect.
Parameters for each MFX type		Edit the parameters for the selected MFX type. Refer to "Multi-Effects Parameter (MFX1–3, MFX)" (p. 192).

■ MFX1–3 Output screens





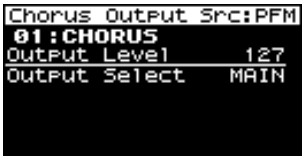
Parameter	Value	Explanation
Output Level	0–127	Adjusts the volume of the sound that has passed through the multi-effects. If you're applying a multi-effect, this specifies the depth of the multi-effect. If you're not applying a multi-effect, this specifies the volume of the original sound.
Chorus Send Level	0–127	Adjusts the amount of chorus for the sound that passes through multi-effects. If you don't want to add the Chorus effect, set it to "0.'
Reverb Send Level	0–127	Adjusts the amount of reverb for the sound that passes through multi-effects. If you don't want to add the Reverb effect, set it to "0."

Chorus-related settings (Chorus/Chorus Output screen)

■ Chorus screen

Parameter	Value	Explanation
00: OFF–03: GM2 CHORUS (Chorus Type)		Selects the types of chorus. Choose "00: OFF" if you don't want to apply a chorus.
Parameters for each chorus type		Edit the parameters for the selected chorus type. Refer to "Chorus Parameters" (p. 219).

■ Chorus Output screen .....



Parameter	Value	Explanation
Output Level	0–127	Adjusts the volume of the sound that has passed through chorus.
Output Select	MAIN, REV, M+R	Specifies how the sound routed through chorus will be output. **MAIN:** Output to the OUTPUT jacks in stereo. **REV:** Output to reverb in mono. **M+R:** Output to the OUTPUT jacks in stereo, and to reverb in mono.

Reverb-related settings (Reverb/Reverb Output screen)

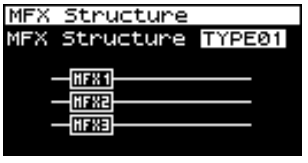
■ Reverb screen.....

Parameter	Value	Explanation
00: OFF–03: GM2 REVERB (Chorus Type)		Selects the types of reverb. Choose "00: OFF" if you don't want to apply a reverb.
Parameters for each reverb type		Edit the parameters for the selected reverb type. Refer to "Reverb Parameters" (p. 220).

■ Reverb Output screen .....

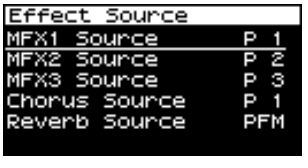
Parameter	Value	Explanation
Output Level	0–127	Adjusts the volume of the sound that has passed through reverb.

Changing how the multi-effects are combined (MFX Structure screen)



Parameter	Value	Explanation
MFX Structure	TYPE01–TYPE16	Specify how MFX1–3 will be connected. **NOTE** When TYPE05–TYPE10 is selected, the SonicCell can play a maximum of 64 sounds simultaneously.

Selecting how effects will operate (Effect Source screen)



Parameter	Value	Explanation
MFX1 Source	PFM, P1–P16	Selects the MFX1 settings that will be used by the performance. If you wish to use the performance settings, select "PFM." If you wish to use the settings of the patch/rhythm set assigned to one of the parts, select the part number (1–16).
MFX2 Source	PFM, P1–P16	Selects the MFX2 settings that will be used by the performance. If you wish to use the performance settings, select "PFM." If you wish to use the settings of the patch/rhythm set assigned to one of the parts, select the part number (1–16).
MFX3 Source	PFM, P1–P16	Selects the MFX3 settings that will be used by the performance. If you wish to use the performance settings, select "PFM." If you wish to use the settings of the patch/rhythm set assigned to one of the parts, select the part number (1–16).
Chorus Source	PFM, P1–P16	Selects the chorus settings that will be used by the performance. If you wish to use the performance settings, select "PFM." If you wish to use the settings of the patch/rhythm set assigned to one of the parts, select the part number (1–16).
Reverb Source	PFM, P1–P16	Selects the reverb settings that will be used by the performance. If you wish to use the performance settings, select "PFM." If you wish to use the settings of the patch/rhythm set assigned to one of the parts, select the part number (1–16).

Using MIDI to control the multi-effects (MFX1–3 Control screens)

Multi-Effects Control

If you wanted to change the volume of multi-effects sounds, the delay time of Delay, and the like, using an external MIDI device, you would need to send System Exclusive messages-MIDI messages designed exclusively for the SonicCell. However, System Exclusive messages tend to be complicated, and the amount of data that needs to be transmitted can get quite large.

For that reason, a number of the more typical of the SonicCell's multi-effects parameters have been designed so they accept the use of Control Change (or other) MIDI messages for the purpose of making changes in their values. For example, you can use the Pitch Bend lever to change the amount of distortion, or use the keyboard's touch to change the delay time of Delay. The parameters that can be changed are predetermined for each type of multi-effect; among the parameters described in "Multi-Effects Parameter (MFX1–3, MFX)" (p. 192), these are indicated by a "#."

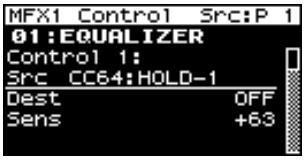
The function that allows you use MIDI messages to make these changes in realtime to the multi-effects parameters is called the Multi-effects Control.

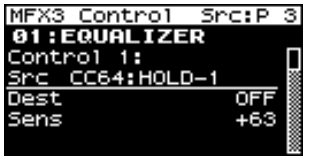
You can specify up to four controls for each multi-effect MFX 1–3.

When the multi-effects control is used, you can select the amount of control (Sens) applied, the parameter selected (Dest), and the MIDI message used (Src).

TIP

By using the Matrix Control (p. 95) instead of the Multi-effects Control, you can also change the parameters of some popular multi-effects in realtime.





Parameter	Value	Explanation
Control 1–4 Src (Source)	OFF, CC01–CC31, CC33–95, PITCH BEND, AFTERTOUCH, SYS CTRL1–4	Sets the MIDI message used to control the multi-effects parameter with the multi-effects control. **OFF:** Multi-effects control will not be used. **CC01–31, 33–95:** Controller numbers 1–31, 33–95 **PITCH BEND:** Pitch Bend **AFTERTOUCH:** Aftertouch **SYS CTRL1–4:** Use the System Control setting (p. 179).
Control 1–4 Dest (Destination)	Refer to "Multi-Effects Parameter" (p. 192)	Sets the multi-effects parameters to be controlled with the multi-effects control. The multi-effects parameters available for control will depend on the multi-effects type.
Control 1–4 Sens (Sensitivity)	-63–+63	Sets the amount of the multi-effects control's effect that is applied. If you wish to modify the selected parameter in a positive (+) direction—i.e., a higher value, toward the right, or faster, etc.—from its current setting, select a positive (+) value. If you wish to modify the selected parameter in a negative (-) direction–i.e., a lower value, toward the left, or slower, etc.—from its current setting, select a negative (-) value. Higher numbers produce a greater amount of change.
Control Channel	1–16, OFF	This determines the channel that will be used for reception when using the Multi-effects Control to modify multi-effects parameters in real time, when the MFX1–3 Src is set to "PFM." Set this to "OFF" when the Multi-effects Control is not being used.

Using the SonicCell in Patch Mode

Viewing the Patch Play screen

1. Press [MIDI INST] so its indicator is lit.
At the same time, the [PART VIEW] indicator will also light, and the Patch Play screen will appear.

* If Sound Mode (p. 84) is set to "Performance," the MIDI INST screen (p. 58) will appear.
In this case, simultaneously press [MIDI INST] and [PART VIEW] to switch to the Patch screen.

2. Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.

3. Press [CURSOR/VALUE] to highlight the value.

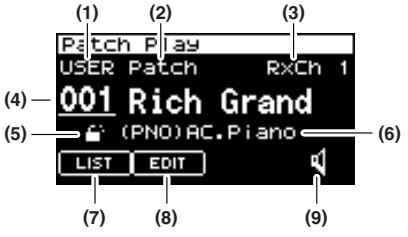
When you select "LIST" or "PATCH" and press [CURSOR/VALUE], an editing screen will appear.

4. Turn [CURSOR/VALUE] to edit the value.

5. When you've finished editing, press [CURSOR/VALUE].

If the patch type is Patch

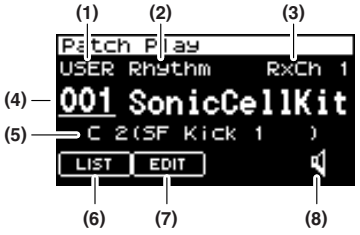
If in Patch mode you've set the current patch type to "Patch," the following screen will appear.



Parameter		Value	Explanation
(1)	**Patch group**	USER, PR-A–PR-G, GM XP-A, XP-B	Selects the patch group. **USER:** User **PR-A–PR-G:** Preset A–Preset G **GM:** General MIDI **XP-A, XP-B:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose XP-A, XP-B unless a wave expansion board is inserted in to the corresponding slot.
(2)	**Patch type**	Patch, Rhythm	Specifies whether the current part will use a patch or a rhythm set.
(3)	**Current part**	Part1–Part 16	Selects the part (current part) that will be affected by your operations.
(4)	**Patch number/name**	001–	Selects the patch.
(5)	**Category lock**	,	Specifies whether the category will be locked ( ) or not locked ( ) when you select patches. If you lock the category, only sounds that are within the category will appear when you select patches.
(6)	**Patch category**	----–CMB	Switches the category.
(7)	**LIST**		Press [CURSOR/VALUE] to access the Patch List screen (p. 85, p. 86).
(8)	**EDIT**		Press [CURSOR/VALUE] to access the Patch Edit screen (p. 89).
(9)	**Preview**	,	If you switch the preview icon ( ) to ( ), you'll be able to hear a preview sound played by that patch. MEMO The system Preview setting (p. 179) lets you specify how the preview will be sounded.

If the patch type is Rhythm Set

If in Patch mode you've set the current patch type to "Rhythm," the following screen will appear.



Parameter		Value	Explanation
(1)	**Rhythm Set group**	USER, PRST, GM, XP-A, XP-B	Selects the rhythm set group. **USER:** User **PRST:** Preset **GM:** General MIDI **XP-A, XP-B:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose XP-A, XP-B unless a wave expansion board is inserted in to the corresponding slot.
(2)	**Patch type**	Patch, Rhythm	Specifies whether the current part will use a patch or a rhythm set.
(3)	**Patch mode receive channel**	1–16	Specifies the channel of MIDI messages that will be received from an external MIDI device.
(4)	**Rhythm Set number/name**	001–	Selects the rhythm set.
(5)	**Editing key**	A0–C8	Within the currently selected rhythm set, selects the key that you'll be editing.
(6)	**LIST**		Press [CURSOR/VALUE] to access the Rhythm Set List screen (p. 87).
(7)	**EDIT**		Press [CURSOR/VALUE] to access the Rhythm Edit screen (p. 118).
(8)	**Preview**	,	If you switch the preview icon ( ) to ( ), you'll be able to hear a preview sound played by that rhythm set. MEMO The system Preview setting (p. 179) lets you specify how the preview will be sounded.

Viewing the menu screen (Patch Menu screen)

1. **Press [MIDI INST] so its indicator is lit.**
   The Patch Play screen will appear.
   If the Sound Mode is set to "Performance," the MIDI INST screen (p. 58) will appear.

2. **Press [MENU].**
   The Patch Menu screen will appear.
   The Patch Menu screen is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left.

3. **Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.**

4. **Press [CURSOR/VALUE] to access the corresponding screen.**

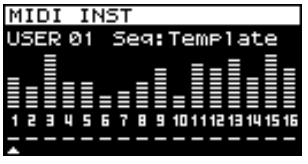
Parameter	Explanation
Tone Switch 1–4	Used to specify whether tones 1–4 will be used (ON) or not used (OFF).
Snd (Sound) Mode	Lets you switch between Patch mode and Performance mode. Press [CURSOR/VALUE] to access the Sound Mode screen.
Patch Init (Patch Initialize)	Initializes the settings of the current patch (p. 115).
Write (Patch Write)	Saves the current patch as user data. Press [CURSOR/VALUE] to access the Patch Name screen (p. 116).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Switching the sound mode (Sound Mode screen)

This specifies the mode of the MIDI sound module.
The current mode is highlighted.

1. **Turn [CURSOR/VALUE] to move the cursor, and press [CURSOR/VALUE] to specify the mode.**
   If you select "Patch" and press [CURSOR/VALUE], one of the following screens will appear depending on the Patch type setting (p. 82, p. 83).

If you select "Performance" and press [CURSOR/VALUE], the following screen will appear.



Selecting patches from a patch list

Selecting patches from a patch list by category (Patch List (Ctg) screen)

You can choose the patch from a list that's arranged by category.

* When the power is turned on, the Patch List (Ctg) screen is selected.

1. Display the Patch Play screen.

2. Select "LIST" and press [CURSOR/VALUE].
The Patch List (Ctg) screen will appear.

* If the Patch List (Grp) screen was displayed last, the Patch List (Grp) screen will appear.
In this case, press [MENU] to access the Group Select screen, select "CATEG LIST," then press [CURSOR/VALUE] to access the Patch List (Ctg) screen.

3. Turn [CURSOR/VALUE] to select a patch, and press [CURSOR/VALUE].
The patch will change, and you'll be returned to the Part View screen.

■ Menu screen.....

From the Patch List (Ctg) screen, press [MENU] to access the Category Select screen.
Press [MENU] once again to return to the Patch List (Ctg) screen.

Parameter	Explanation
PNO, KBD, GTR, BAS, ORC, BRS, SYN, VCL, WLD	Changes the category (major classification) and returns to the patch list screen organized by category. You can change the category by moving the cursor to the currently selected category (at the top of the screen) and pressing [CURSOR/VALUE]. **Major Classification** / **Category** **PNO:** AC.Piano, EL.Piano **KBD:** Keyboards, Bell, Mallet, Organ, Accordion, Harmonica **GTR:** AC.Guitar, EL.Guitar, Dist.Guitar **BAS:** Bass, Synth Bass **ORC:** Strings, Orchestra, Hit&Stab **BRS:** Wind, Flute, AC.Brass, Synth Brass, Sax **SYN:** Hard Lead, Soft Lead, Techno Synth, Pulsating, Synth FX, Other Synth **VCL:** Bright Pad, Soft Pad, Vox **WLD:** Plucked, Ethnic, Fretted, Percussion, Sound FX, Beat&Groove, Drums, Combination
GROUP LIST	Press [CURSOR/VALUE] to access the Patch List (Grp) screen (p. 86). * Once you move to the Patch List (Grp) screen, the Patch List (Grp) screen will appear when you select "LIST" in the Patch Play screen.

Selecting patches from a patch list by group (Patch List (Grp) screen)

You can choose the patch from a list that's arranged by group, such as USER or expansion board.

* When the power is turned on, the Patch List (Ctg) screen is selected.

1. **Display the Patch Play screen.**
2. **Select "LIST" and press [CURSOR/VALUE].**
   The Patch List (Ctg) screen will appear.
   * If the Patch List (Grp) was displayed last, the Patch List (Grp) screen will appear. Proceed to step 5.
3. **Press [MENU] to access the Category Select screen.**
4. **Choose "GROUP LIST" and press [CURSOR/VALUE].**
   The Patch List (Grp) screen will appear.

5. **Turn [CURSOR/VALUE] to select a patch, and press [CURSOR/VALUE].**
   The patch will change, and you'll be returned to the Patch Play screen.

■ Menu screen

From the Patch List (Grp) screen, press [MENU] to access the Group Select screen. Press [MENU] once again to return to the Patch List (Grp) screen.

Parameter	Explanation
USR, A–G, GM, EXA, EXB	Changes the group and returns to the patch list by group screen. **USR:** User **A–G:** Preset A–Preset G **GM:** General MIDI **EXA, EXB:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose EXA, EXB unless a wave expansion board is inserted in to the corresponding slot.
CATEG (Category) LIST	Press [CURSOR/VALUE] to access the Patch List (Ctg) screen (p. 85). * Once you move to the Patch List (Ctg) screen, the Patch List (Ctg) screen will appear when you select "LIST" in the Patch Play screen.

Selecting a rhythm set from a list (Rhythm Set List screen)

If the patch type is "Rhythm," you can choose a rhythm set from a list.

1. **Display the Patch Play screen.**
2. **Select "LIST" and press [CURSOR/VALUE].**
   Rhythm Set List screen will appear.

3. **Turn [CURSOR/VALUE] to select a rhythm set, and press [CURSOR/VALUE].**
   The patch will change, and you'll be returned to the Patch Play screen.

■ Menu screen

From the Rhythm Set List screen, press [MENU] to access the Group Select screen.
Press [MENU] once again to return to the Rhythm Set List screen.

Parameter	Explanation
USR, PRESET, GM, EXA, EXB	Changes the group and returns to the patch list by group screen. **USR:** User **PRESET:** Preset **GM:** General MIDI **EXA, EXB:** Wave Expansion Board A, Wave Expansion Board B * It is not possible to choose EXA, EXB unless a wave expansion board is inserted in to the corresponding slot.

Editing patches (Patch Edit screen)

1. **Press [MIDI INST].**
   [MIDI INST] and [PART VIEW] will light, and the Patch Play screen will appear.

2. **Turn [CURSOR/VALUE] to select "PATCH," then press [CURSOR/VALUE].**
   The Patch Edit screen will appear.

3. **Turn [CURSOR/VALUE] to select the item you want to edit, then press [CURSOR/VALUE].**
   The editing screen for the selected item will appear.

4. **Turn [CURSOR/VALUE] to select the parameter you want to edit, then press [CURSOR/VALUE].**
   The value of the selected parameter will be highlighted.

5. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**

■ Menu screens during patch editing

If you press [MENU] while editing a patch, the menu screen will appear.

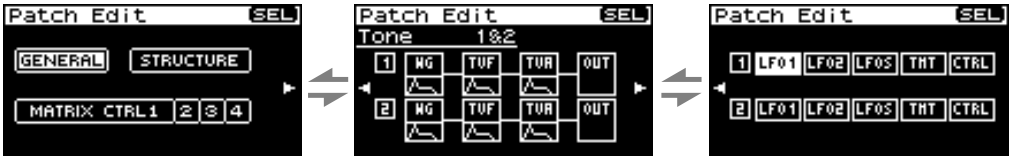
The Menu screen is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left.

Parameter	Explanation
Tone Select 1–4	Changes the current tone (the one targeted for editing), and returns to the previous screen.
Tone Switch 1–4	Used to specify whether tones 1–4 will be used (ON) or not used (OFF).
Tone Copy	Copies the settings of a patch's tone to one of the tones of the currently selected patch. Press [CURSOR/VALUE] to access the Patch Tone Copy screen (p. 115).
Patch Init **(Patch Initialize)**	Returns the current patch settings to their initial values (p. 115).
Write **(Patch Write)**	Saves the current patch as user data. Press [CURSOR/VALUE] to access the Patch Name screen (p. 116).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info **(SRX Information)**	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version **(Version Information)**	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

■ Patch Edit screen .....

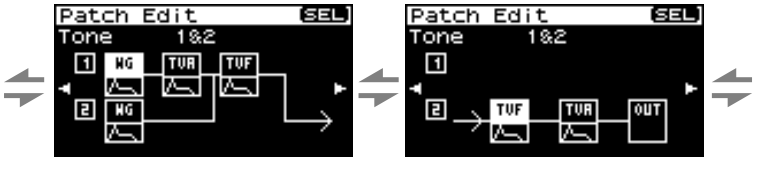
The Patch Edit screen is organized as follows.

You can turn [CURSOR/VALUE] to the right or left to switch between screens.

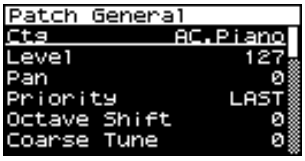


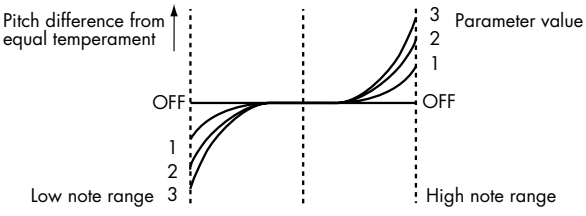
Parameter	Value	Explanation
GENERAL		Edits overall settings for the entire patch. Press [CURSOR/VALUE] to access the Patch General screen (p. 90).
STRUCTURE		Selects the combination of tones. Press [CURSOR/VALUE] to access the Patch Structure screen (p. 93).
MATRIX CTRL (Control) 1/2/3/4		Specifies matrix control settings. Press [CURSOR/VALUE] to access the Patch Mtrx Ctrl 1/2/3/4 screen (p. 95).
Tone	1&2, 3&4	Selects either 1 & 2 or 3 & 4 as the combination of tones that will be shown in the screen.
WG		Edits waveform-related settings. Press [CURSOR/VALUE] to access the Patch WG screen (p. 98).
WG  **(Pitch Envelope)**		Edits pitch envelope settings. By moving the cursor to  and pressing [CURSOR/VALUE] you can move to the Patch Pitch Env screen (p. 101).
TVF		Edits TVF settings. Press [CURSOR/VALUE] to access the Patch TVF screen (p. 102).
TVF  **(TVF Envelope)**		Edits TVF envelope settings. By moving the cursor to  and pressing [CURSOR/VALUE] you can move to the Patch TVF Env screen (p. 104).
TVA		Edits TVA settings. Press [CURSOR/VALUE] to access the Patch TVA screen (p. 105).
TVA  **(TVA Envelope)**		Edits TVA envelope settings. By moving the cursor to  and pressing [CURSOR/VALUE] you can move to the Patch TVA Env screen (p. 107).
OUT (Output)		Edits settings for the patch/tone output. Press [CURSOR/VALUE] to access the Patch Output screen (p. 108).
LFO 1/2		Edits LFO1,2 settings. Press [CURSOR/VALUE] to access the Patch LFO 1/2 screen (p. 109).
LFOS (Step LFO)		Edits step LFO settings. Press [CURSOR/VALUE] to access the Patch Step LFO screen (p. 112).
TMT (Tone Mix Table)		Specifies how the tones will be heard. Press [CURSOR/VALUE] to access the Patch TMT screen (p. 112).
CTRL (Control)		Edits controller-related settings. Press [CURSOR/VALUE] to access the Patch Ctrl screen (p. 114).

* If the Str Type (p. 93) is set to any value other than 1, two screens will be shown for WG–OUT.



Overall settings for the entire patch (Patch General screen)



Parameter	Value	Explanation
Ctg (Category)	refer to "Patch Category" (p. 63)	Specifies the type (category) of the patch.
Level	0–127	Specifies the volume of the Patch. * You can specify the level of each Tone in a Patch using the Tone Level (TVA p. 105).
Pan	L64–63R	Sets the stereo position of the Patch. L64 pans the Patch all the way to the left, 0 is center and 63R pans it hard right. * You can specify the pan setting for each Tone in a Patch using the Tone Pan (TVA p. 106). * While each Tone in a Patch has its own Pan position, the Patch pan setting shifts the entire Patch—including all of its Tones—leftward or rightward
Priority	LAST, LOUDEST	This determines how notes will be managed when the maximum polyphony is exceeded (128 voices). **LAST:** The last-played voices will be given priority, and currently sounding notes will be turned off in order, beginning with the first-played note. **LOUDEST:** The voices with the loudest volume will be given priority, and currently sounding notes will be turned off, beginning with the lowest-volume voice.
Octave Shift	-3–+3	Adjusts the pitch of the patch's sound up or down in units of an octave (+/-3 octaves).
Coarse Tune	-48–+48	Adjusts the pitch of the patch's sound up or down in semitone steps (+/-4 octaves).
Fine Tune ★	-50–+50	Adjusts the pitch of the patch's sound up or down in 1-cent steps (+/-50 cents). ★You can use matrix control to modify this. (p. 95)
Strech Tune (Strech Tune Depth)	OFF, 1–3	This setting allows you to apply "stretched tuning" to the patch. (Stretched tuning is a system by which acoustic pianos are normally tuned, causing the lower range to be lower and the higher range to be higher than the mathematical tuning ratios would otherwise dictate.) With a setting of "OFF," the patch's tuning will be equal temperament. A setting of "3" will produce the greatest difference in the pitch of the low and high ranges. The diagram shows the pitch change relative to equal temperament that will occur in the low and high ranges. This setting will have a subtle effect on the way in which chords resonate. 
Analog Feel (Analog Feel Depth)	0–127	Specifies the depth of 1/f modulation that is to be applied to the patch. (1/f modulation is a pleasant and naturally-occurring ratio of modulation that occurs in a babbling brook or rustling wind.) By adding this "1/f modulation," you can simulate the natural instability characteristic of an analog synthesizer.
Cutoff Offset	-63–+63	Cutoff Offset alters the cutoff frequency of the overall patch, while preserving the relative differences between the cutoff frequency values set for each tone in the Cutoff Frequency (p. 102). **NOTE** This value is added to the cutoff frequency value of a tone, so if the cutoff frequency value of any tone is already set to "127" (maximum), positive "+" settings here will not produce any change.

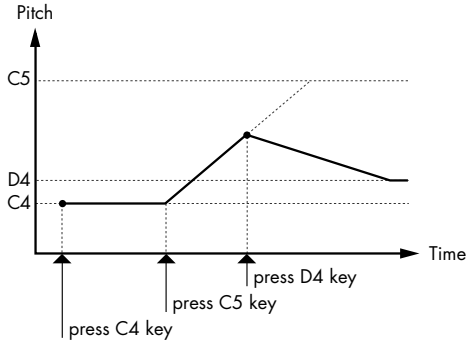
Parameter	Value	Explanation
Resonance Offset	-63–+63	Resonance Offset alters the resonance of the overall patch, while preserving the relative differences between the resonance values set for each tone in the Resonance (p. 103). * **Resonance:** emphasizes the overtones in the region of the cutoff frequency, adding character to the sound. **NOTE** This value is added to the resonance value of a tone, so if the resonance value of any tone is already set to "127" (maximum), positive "+" settings here will not produce any change.
Attack Offset (Attack Time Offset)	-63–+63	Attack Offset alters the attack time of the overall patch, while preserving the relative differences between the attack time values set for each tone in the A-Env Time 1 (p. 107), F-Env Time 1 (p. 105). * **Attack Time:** The time it takes for a sound to reach maximum volume after the key is pressed and sound begun. **NOTE** This value is added to the attack time value of a tone, so if the attack time value of any tone is already set to "127" (maximum), positive "+" settings here will not produce any change.
Release Offset (Release Time Offset)	-63–+63	Release Offset alters the release time of the overall patch, while preserving the relative differences between the release time values set for each tone in the A-Env Time 4 (p. 107), F-Env Time 4 (p. 105). * **Release Time:** The time from when you take your finger off the key until the sound disappears. **NOTE** This value is added to the release time value of a tone, so if the release time value of any tone is already set to "127" (maximum), positive "+" settings here will not produce any change.
Velocity Sens (Velocity Sensitivity Offset)	-63–+63	Velocity Sensitivity Offset alters the Velocity Sensitivity of the overall patch while preserving the relative differences between the Velocity Sensitivity values set for each tone in the parameters below. Cutoff V-Sens (p. 103) Level V-Sens (p. 105) * **Velocity:** Pressure with which the key is pressed. **NOTE** This value is added to the velocity sensitivity value of a tone, so if the velocity sensitivity value of any tone is already set to "+63" (maximum), positive "+" settings here will not produce any change.
Mono/Poly	MONO, POLY	Specifies whether the patch will play polyphonically (POLY) or monophonically (MONO). The "MONO" setting is effective when playing a solo instrument patch such as sax or flute. **MONO:** Only the last-played note will sound. **POLY:** Two or more notes can be played simultaneously.
Legato Switch	OFF, ON	This setting specifies whether the Legato Switch will be used (ON) or not (OFF). Legato Switch is valid when the Mono/Poly parameter is set to "MONO." With the Legato Switch "ON," pressing a key while continuing to press a previous key causes the note to change pitch to the pitch of the most recently pressed key, sounding all the while. This creates a smooth transition between notes, which is effective when you wish to simulate the hammering-on and pulling-off techniques used by a guitarist.
Legato Retriger (Retrigger)	OFF, ON	The setting determines whether sounds are replayed (ON) or not (OFF) when performing legato. The Legato Retrigger is valid when the Mono/Poly is set to "MONO" and the Legato Switch is set to "ON." Normally you will leave this parameter "ON." When "OFF," when one key is held down and another key is then pressed, only the pitch changes, without the attack of the latter key being played. Set this to "OFF" when performing wind and string phrases or when using modulation with the mono synth keyboard sound.

NOTE

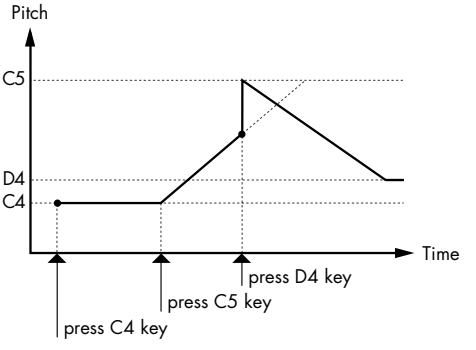
Let's say you have the Legato Switch set to "ON," and the Legato Retrigger set to "OFF." When you try to sound a legato (by pressing a higher key while a lower key is held down), the pitch may sometimes not be able to rise all the way to the intended pitch (stopping instead at an intermediate pitch). This can occur because the limit of pitch rise, as determined at the wave level, has been exceeded.
Additionally, if differing upper pitch limits are used for the waves of a Patch that uses multiple tones, it may stop being heard in MONO. When making large pitch changes, set the Legato Retrigger to "ON."

Parameter	Value	Explanation
Porta Sw (Portamento Switch)	OFF, ON	Specifies whether the portamento effect will be applied (ON) or not (OFF). * **Portamento** is an effect which smoothly changes the pitch from the first-played key to the next-played key. By applying portamento when the Mono/Poly is "MONO," you can simulate slide performance techniques on a violin or similar instrument.
Porta Mode (Portamento Mode)	NORMAL, LEGATO	Specifies the performance conditions for which portamento will be applied. **NORMAL:** Portamento will always be applied. **LEGATO:** Portamento will be applied only when you play legato (i.e., when you press the next key before releasing the previous key).
Porta Type (Portamento Type)	RATE, TIME	Specifies the type of portamento effect. **RATE:** The time it takes will depend on the distance between the two pitches. **TIME:** The time it takes will be constant, regardless of how far apart in pitch the notes are.
Porta Start (Portamento Type)	PITCH, NOTE	When another key is pressed during a pitch change produced by portamento, a new pitch change will begin. This setting specifies the pitch at which the change will begin.

PITCH:
Starts a new portamento when another key is pressed while the pitch is changing.

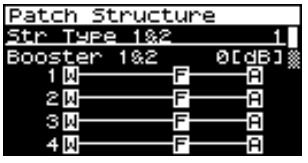


NOTE:
Portamento will begin anew from the pitch where the current change would end.



Porta Time (Portamento Time)	0–127	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.
Part Mod Sw (Part Modulation Depth Switch)	OFF, ON	Specifies whether the part's modulation depth range setting (the value specified by RPN) will be enabled (ON) or disabled (OFF).

Selecting how tones are combined (Patch Structure screen)

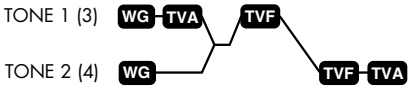


Parameter	Value	Explanation
Str (Structure) Type 1&2, 3&4	1–10	Determines how Tone 1 and 2, and Tone 3 and 4 are connected. The displayed symbols have the following meanings. **B:** Booster **R:** Ring Modulator
Booster 1&2, 3&4	0, +6, +12, +18	When a Structure Type of TYPE 3 or TYPE 4 is selected, you can adjust the depth of the booster. Higher settings will produce more distortion.

Type 1

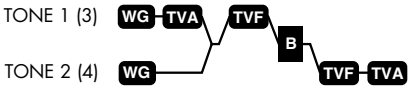
With this type, tones 1 and 2 (or 3 and 4) are independent. Use this type when you want to preserve PCM sounds or create and combine sounds for each tone.

Type 2



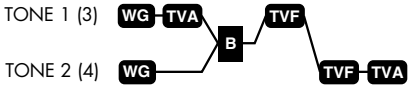
This type stacks the two filters together to intensify the characteristics of the filters. The TVA for tone 1 (or 3) controls the volume balance between the two tones.

Type 3



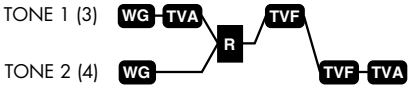
This type mixes the sound of tone 1 (3) and tone 2 (4), applies a filter, and then applies a booster to distort the waveform.

Type 4



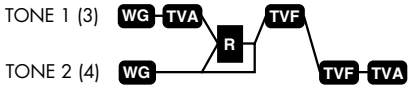
This type applies a booster to distort the waveform, and then combines the two filters. The TVA for tone 1 (or 3) controls the volume balance between the two tones and adjusts booster level.

Type 5



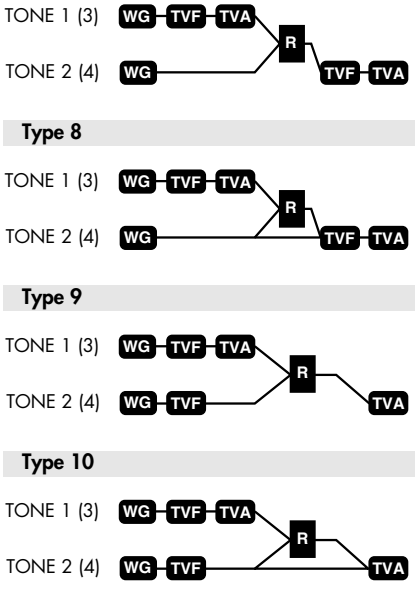
This type uses a ring modulator to create new overtones, and combines the two filters. The tone 1 (3) TVA will control the volume balance of the two tones, adjusting the depth of ring modulator.

Type 6



This type uses a ring modulator to create new overtones, and in addition mixes in the sound of tone 2 (4) and stacks the two filters. Since the ring-modulated sound can be mixed with tone 2 (4), tone 1 (3) TVA can adjust the amount of the ring-modulated sound.

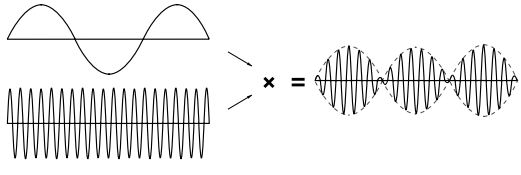
Parameter	Value	Explanation
Type 7		This type applies a filter to tone 1 (3) and ring-modulates it with tone 2 (4) to create new overtones.
Type 8		This type sends the filtered tone 1 (3) and tone 2 (4) through a ring modulator, and then mixes in the sound of tone 2 (4) and applies a filter to the result.
Type 9		This type passes the filtered sound of each tone through a ring modulator to create new overtones. The tone 1 (3) TVA will control the volume balance of the two tones, adjusting the depth of ring modulator.
Type 10		This type passes the filtered sound of each tone through a ring modulator to create new overtones, and also mixes in the sound of tone 2 (4). Since the ring-modulated sound can be mixed with tone 2 (4), tone 1 (3) TVA can adjust the amount of the ring-modulated sound.



- When TYPE 2–10 is selected and one tone of a pair is turned off, the other tone will be sounded as TYPE 1 regardless of the displayed setting.
- If you limit the keyboard area in which a tone will sound (Keyboard Range p. 112, p. 113) or limit the range of velocities for which it will sound (Velocity Range p. 113), the result in areas or ranges where the tone does not sound is just as if the tone had been turned off. This means that if TYPE 2–10 is selected and you create a keyboard area or velocity range in which one tone of a pair does not sound, notes played in that area or range will be sounded by the other tone as TYPE 1 regardless of the displayed setting.

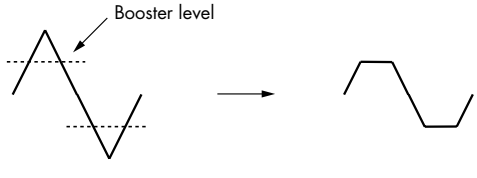
Ring Modulator

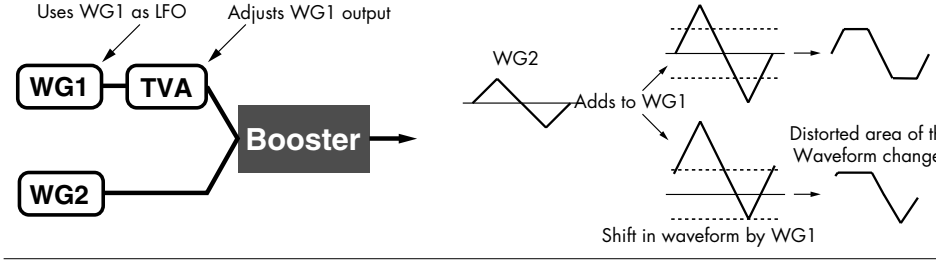
A ring modulator multiplies the waveforms of two tones with each other, generating many new overtones (in harmonic partials) which were not present in either waveform. (Unless one of the waveforms is a sine wave, evenly-spaced frequency components will not usually be generated.) As the pitch difference between the two waveforms changes the harmonic structure, the result will be an unpitched metallic sound. This function is suitable for creating metallic sounds such as bells.



Booster

The Booster is used to distort the incoming signal.
In addition to using this to create distortion, you can use the waveform (WG1) of one of the tones as an LFO which shifts the other waveform (WG2) upward or downward to create modulation similar to PWM (pulse width modulation). This parameter works best when you use it in conjunction with the Wave Gain (p. 98).





Settings for matrix control (Patch Mtrx Ctrl1–4 screens)

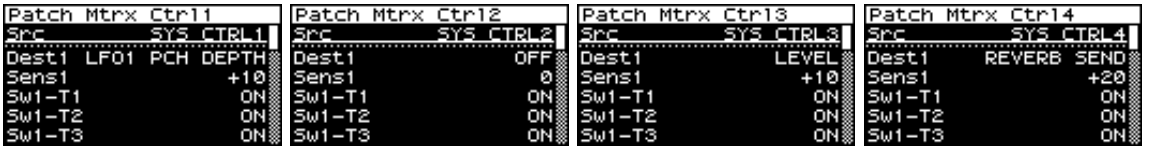
Matrix Control

Ordinarily, if you wanted to change tone parameters using an external MIDI device, you would need to send System Exclusive messages-MIDI messages designed exclusively for the SonicCell. However, System Exclusive messages tend to be complicated, and the amount of data that needs to be transmitted can get quite large.

For that reason, a number of the more typical of the SonicCell's tone parameters have been designed so they accept the use of Control Change (or other) MIDI messages for the purpose of making changes in their values. This provides you with a variety of means of changing the way patches are played. For example, you can use the Pitch Bend lever to change the LFO cycle rate, or use the keyboard's touch to open and close a filter.

The function which allows you use MIDI messages to make these changes in realtime to the tone parameters is called the "Matrix Control." Up to four Matrix Controls can be used in a single patch.

To use the Matrix Control, specify which MIDI message (Src) will be used to control which parameter (Dest), and how greatly (Sns), and the tone to which the effect is applied (Tone).



Parameter	Value	Explanation
Src (Control Source)		Sets the MIDI message used to change the tone parameter with the Matrix Control. **OFF:** Matrix control will not be used. **CC01–31, 33–95:** Controller numbers 1–31, 33–95 **PITCH BEND:** Pitch Bend **AFTERTOUCH:** Aftertouch **SYS CTRL1–4:** MIDI messages used as common matrix controls. **VELOCITY:** Velocity (pressure you press a key with) **KEYFOLLOW:** Keyfollow (keyboard position with C4 as 0) **TEMPO:** The system tempo (p. 177) or the tempo of an external MIDI sequencer. **LFO1:** LFO 1 **LFO2:** LFO 2 **PITCH ENV:** Pitch envelope **TVF ENV:** TVF envelope **TVA ENV:** TVA envelope cf. For more information about Control Change messages, please refer to "MIDI Implementation" (p. 246). MEMO Velocity and Keyfollow correspond to Note messages. TIP Although there are no MIDI messages for LFO 1 through TVA Envelope, they can be used as Matrix Control. In this case, you can change the tone settings in realtime by playing patches. • If you want to use common controllers for the entire SonicCell, select "SYS CTRL1"–"SYS CTRL4." MIDI messages used as System Control 1–4 are set with the Src1–4 (p. 179). NOTE There are parameters that determine whether or not Pitch Bend, Controller Number 11 (Expression) and Controller Number 64 (Hold 1) are received (p. 114). When these settings are "ON," and the MIDI messages are received, then when any change is made in the settings of the desired parameter, the Pitch Bend, Expression, and Hold 1 settings also change simultaneously. If you want to change the targeted parameters only, then set these to "OFF." • There are parameters that let you specify whether specific MIDI messages will be received for each channel in a performance (p. 72). When a patch with Matrix Control settings is assigned to a part, confirm that any MIDI messages used for the Matrix Control will be received. If the SonicCell is set up such that reception of MIDI messages is disabled, then the Matrix Control will not function.

Parameter	Value	Explanation
Dest (Control Destination)		Matrix Control Destination selects the tone parameter that is to be controlled when using the Matrix Control. The following parameters can be controlled. When not controlling parameters with the Matrix Control, set this to "OFF." Up to four parameters can be specified for each Matrix Control, and controlled simultaneously. MEMO In this manual, Parameters that can be controlled using the Matrix Control are marked with a "★." **● If you're not using Matrix Control** **OFF:** Matrix Control will not be used. **● Changing the Pitch** **PITCH:** Changes the pitch. **● Opening and Closing the Filter** **CUTOFF:** Changes the cutoff frequency. **RESONANCE:** Emphasizes the overtones in the region of the cutoff frequency, adding character to the sound. **● Changing the Volume and Pan** **LEVEL:** Changes the volume level. **PAN:** Changes the pan. **● Changing How the Effects Are Applied** **OUTPUT LEVEL:** Changes the volume of output levels. **CHORUS SEND:** Changes the amount of chorus. **REVERB SEND:** Changes the amount of reverb. **● Applying LFO to Modulate Sounds** **LFO1/LFO2 PCH DEPTH:** Changes the vibrato depth. **LFO1/LFO2 TVF DEPTH:** Changes the wah depth. **LFO1/LFO2 TVA DEPTH:** Changes the tremolo depth. **LFO1/LFO2 PAN DEPTH:** Changes the effect that the LFO will have on pan. **LFO1/LFO2 RATE:** Changes the LFO cycle rate. Changes the speed of the LFO cycles. The speed will not change if LFO Rate is set to "note." **● Changing the Pitch Envelope** **PIT ENV A-TIME:** Changes the Env Time 1 of the pitch envelope. **PIT ENV D-TIME:** Changes the Env Time 2 and Env Time 3 of the pitch envelope. **PIT ENV R-TIME:** Changes the Env Time 4 of the pitch envelope. **● Changing the TVF Envelope** **TVF ENV A-TIME:** Changes the Env Time 1 of the TVF envelope. **TVF ENV D-TIME:** Changes the Env Time 2 and Env Time 3 of the TVF envelope. **TVF ENV R-TIME:** Changes the Env Time 4 of the TVF envelope. **● Changing the TVF Envelope** **TVA ENV A-TIME:** Changes the Env Time 1 of the TVA envelope. **TVA ENV D-TIME:** Changes the Env Time 2 and Env Time 3 of the TVA envelope. **TVA ENV R-TIME:** Changes the Env Time 4 of the TVA envelope. **● Splitting Tones That Are Played** **TMT** TIP If the Matrix Control is used to split tones, set the TMT Velo Ctrl (p. 112) to "OFF," and the TMT Control Switch (p. 112) to "ON." • If the Matrix Control is used to split tones, we recommend setting the Matrix Control Sens to "+63." Selecting a lower value may prevent switching of the tones. Furthermore, if you want to reverse the effect, set the value to "-63." • If you want to use matrix control to switch smoothly between tones, use the Velo Fade Lower and Velo Fade Upper (p. 113). The higher the values set, the smoother the switch is between the tones.

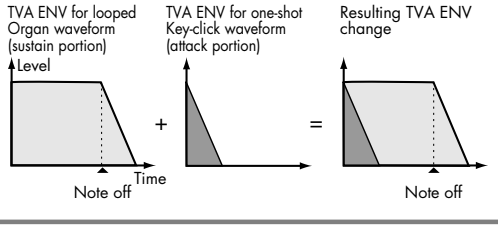
Parameter	Value	Explanation
Dest (Control Destination)		**● Changing the Depth of Frequency Modulation for FXM** **FXM DEPTH** **● Changing Specific Multi-Effects Parameters** **MFX CTRL1–4:** Change the parameter that was specified by MFX Control 1–4 Assign parameter. **NOTE** If you have not made the necessary settings for using the multi-effect, the multi-effect will not be applied even if you attempt to control it as a Matrix Control destination.
Sens (Control Sensitivity)	-63–+63	Sets the amount of the Matrix Control's effect that is applied. If you wish to modify the selected parameter in a positive (+) direction – i.e., a higher value, toward the right, or faster etc. – from its current setting, select a positive (+) value. If you wish to modify the selected parameter in a negative (-) direction – i.e., a lower value, toward the left, or slower etc. – from its current setting, select a negative (-) value. For either positive or negative settings, greater absolute values will allow greater amounts of change. Set this to "0" if you don't want to apply the effect.
Sw1-T1–T4–Sw4-T1–T4 (Tone Control Switch T1–T4)	OFF, ON, REVS	Matrix Control Tone selects the tone to which the effect is applied when using the Matrix Control. **OFF:** The effect will not be applied. **ON:** The effect will be applied. **REVS:** The effect will be applied in reverse.

■ Cautions When Selecting a Waveform

The sounds of the SonicCell are based on complex PCM waveforms, and if you attempt to make settings that are contrary to the type of the original waveform, the results will not be as you expect.
The internal waveforms of the SonicCell fall into the following two groups.

One-shot:
These waveforms contain sounds that have short decays. A one-shot waveform records the initial rise and fall of the sound. Some of the SonicCell's one-shot waveforms are sounds that are complete in themselves, such as percussive instrument sounds. The SonicCell also contains many other one-shot waveforms that are elements of other sounds. These include attack components such as piano-hammer sounds and guitar fret noises.

Looped:
These waveforms include sounds with long decays as well as sustained sounds. Loop waveforms repeatedly play back (loop) the portion of the waveform after the sound has reached a relatively steady state. The SonicCell's looped waveforms also include components of other sounds, such as piano-string resonant vibrations and the hollow sounds of brass instruments.
The following diagram shows an example of sound (electric organ) that combines one-shot and looped waveforms.

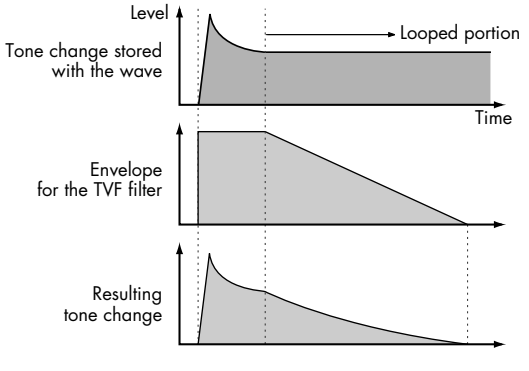


Cautions When Using a One-shot Waveform

It is not possible to use the envelope to modify a one-shot waveform to create a decay that is longer than the original waveform, or to turn it into a sustaining sound. If you were to program such an envelope, you would be attempting to shape a portion of the sound that simply doesn't exist, and the envelope would have no effect.

Cautions When Using a Loop Waveform

With many acoustic instruments such as piano and sax, extreme timbral changes occur during the first few moments of each note. This initial attack is what defines much of the instrument's character. For such waveforms, it is best to use the complex tonal changes of the attack portion of the waveform just as they are, and to use the envelope only to modify the decay portion. If you attempt to use the envelope to modify the attack portion as well, the characteristics of the original waveform may prevent you from getting the sound that you intend.



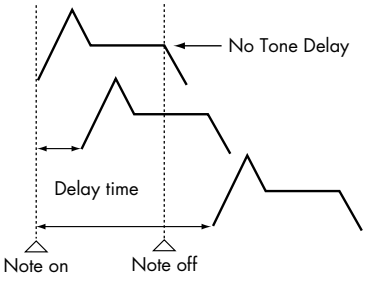
Waveform-related settings (Patch WG/Patch Pitch Env screen)

■ Patch WG screen

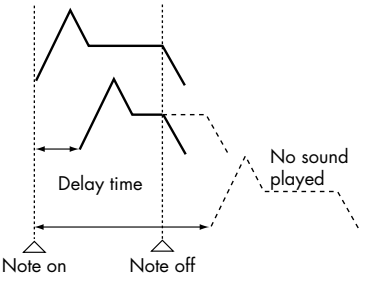
Parameter	Value	Explanation
Wave Group	INT, EXP	Selects the group for the waveform that is to be the basis of the tone. **INT:** Waveforms stored in internal memory **EXP:** Waveform stored in a Wave Expansion Board (SRX series) installed in EXP slots. * It's not possible to select EXP unless a wave expansion board is inserted into the corresponding slot.
Wave Bank	A, B ---	Selects the wave bank when the wave group is set to "EXP." **A:** Wave Expansion Board A **B:** Wave Expansion Board B * When the wave group is set to "INT," the "---" message appears and you cannot select a wave bank. * You cannot select a wave bank of a Wave Expansion Board that is not installed.
Wave No. L (MONO) **Wave No. R**	1–1401	Chooses the desired waveform. You can choose a separate waveform for the SonicCell's left and right channels. * For mono tones, assign a waveform to the L channel. No sound will be heard if a waveform is set for only the R channel. * In the case of a wave from a wave expansion board, the range (number of waveforms) will depend on the board you've selected.
Wave Gain	-6, 0, +6, +12	Sets the gain (amplification) of the waveform. The value changes in 6 dB (decibel) steps—an increase of 6 dB doubles the waveform's gain. If you intend to use the Booster (p. 94) to distort the waveform's sound, set this parameter to its maximum value.
Wave Tempo Sync	OFF, ON	When you wish to synchronize a Phrase Loop to the clock (tempo), set this to "ON." This is valid only when a separately sold wave expansion board is installed, and a waveform that indicates a tempo (BPM) is selected as the sample for a tone. **NOTE** If a waveform from a wave expansion board is selected for the tone, turning the Wave Tempo Sync parameter "ON" will cause pitch-related settings and FXM-related settings to be ignored. • When the Wave Tempo Sync is set to "ON," set the Tone Delay Time (p. 100) to "0." With other settings, a delay effect will be applied, and you will be not be able to play as you expect. **Phrase Loop** Phrase loop refers to the repeated playback of a phrase that's been pulled out of a song (e.g., by using a sampler). One technique involving the use of Phrase Loops is the excerpting of a Phrase from a pre-existing song in a certain genre, for example dance music, and then creating a new song with that Phrase used as the basic motif. This is referred to as "Break Beats."
FXM Switch	OFF, ON	This sets whether FXM will be used (ON) or not (OFF). **FXM** FXM (Frequency Cross Modulation) uses a specified waveform to apply frequency modulation to the currently selected waveform, creating complex overtones. This is useful for creating dramatic sounds or sound effects.

Parameter	Value	Explanation
FXM Color	1–4	Specifies how FXM will perform frequency modulation. Higher settings result in a grainier sound, while lower settings result in a more metallic sound.
FXM Depth ★	0–16	Specifies the depth of the modulation produced by FXM. ★You can use matrix control to modify this. (p. 95)
Tone Delay Mode	NORM, HOLD, OFFN, OFFD	Selects the type of tone delay. **Tone Delay** This produces a time delay between the moment a key is pressed (or released), and the moment the tone actually begins to sound. You can also make settings that shift the timing at which each tone is sounded. This differs from the Delay in the internal effects, in that by changing the sound qualities of the delayed tones and changing the pitch for each tone, you can also perform arpeggio-like passages just by pressing one key. You can also synchronize the tone delay time to the tempo of the external MIDI sequencer.

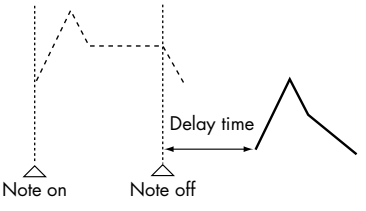
NORM:
The tone begins to play after the time specified in the Delay Time parameter has elapsed.



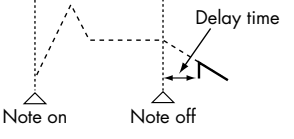
HOLD:
Although the tone begins to play after the time specified in the Delay Time parameter has elapsed, if the key is released before the time specified in the Delay Time parameter has elapsed, the tone is not played.



OFFN:
Rather than being played while the key is pressed, the tone begins to play once the period of time specified in the Delay Time parameter has elapsed after release of the key. This is effective in situations such as when simulating noises from guitars and other instruments.

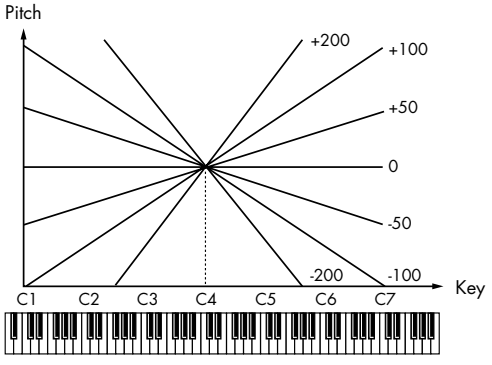


OFFD:
Rather than being played while the key is pressed, the tone begins to play once the period of time specified in the Delay Time parameter has elapsed after release of the key. Here, however, changes in the TVA Envelope begin while the key is pressed, which in many cases means that only the sound from the release portion of the envelope is heard.



- If you have selected a waveform that is a decay-type sound (i.e., a sound that fades away naturally even if the key is not released), selecting "OFFN" or "OFFD" may result in no sound being heard.
- If you don't wish to use Tone Delay, set Tone Delay to "NORM" and Tone Delay Time to "0."

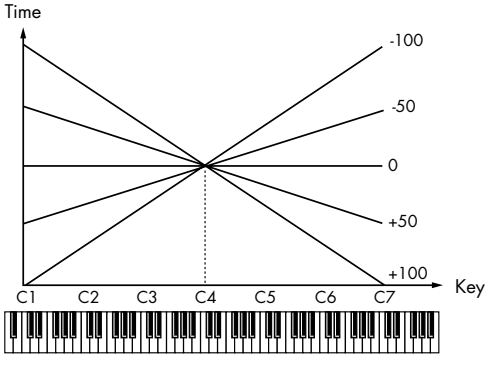
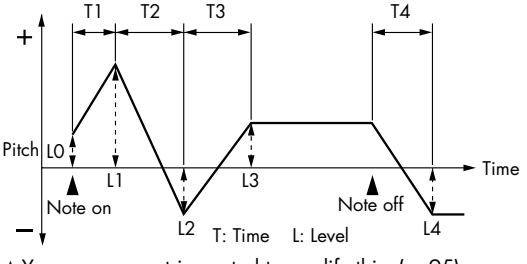
MEMO
If the Str Type (p. 93) set in the range of "2"–"10," the output of tones 1 and 2 will be combined into tone 2, and the output of tones 3 and 4 will be combined into tone 4. For this reason, tone 1 will follow the settings of tone 2, and tone 3 will follow the settings of tone 4.

Parameter	Value	Explanation
Tone Delay Time	0127, Note (* 1)	Specifies the time from when the key is pressed (or if the Delay Mode parameter is set to "OFF-N" or "OFF-D," the time from when the key is released) until when the tone will sound. Tone Delay Time specifies the beat length for the synchronized tempo when the tempo that specifies the elapsed time until the tone is sounded (Patch Tempo) is synchronized with the tempo set in an external MIDI sequencer. (Example) For a tempo of 120 (120 quarter notes occur in 1 minute (60 seconds)) 𝅗𝅥 (half note) 1 second (60/60= 1 (second)) ♩ (quarter note) 0.5 seconds (60/120= 0.5 (seconds)) ♪ (eighth note) 0.25 seconds (60/240= 0.25 (seconds))
Tone Coarse Tune ★	-48–+48	Adjusts the pitch of the tone's sound up or down in semitone steps (+/-4 octaves). ★You can use matrix control to modify this. (p. 95)
Tone Fine Tune ★	-50–+50	Adjusts the pitch of the tone's sound up or down in 1-cent steps (+/-50 cents). * One cent is 1/100th of a semitone. ★You can use matrix control to modify this. (p. 95)
Random Pch Dpth (Random Pitch Depth)	0–9, 10–90, 100–1200	This specifies the width of random pitch deviation that will occur each time a key is pressed. If you do not want the pitch to change randomly, set this to "0." These values are in units of cents (1/100th of a semitone).
Pitch Keyfollow	-200–+200	This specifies the amount of pitch change that will occur when you play a key one octave higher (i.e., 12 keys upward on the keyboard). If you want the pitch to rise one octave as on a conventional keyboard, set this to "+100." If you want the pitch to rise two octaves, set this to "+200." Conversely, set this to a negative value if you want the pitch to fall. With a setting of "0," all keys will produce the same pitch. 
Bend Range Up	0–+48	Specifies the degree of pitch change in semitones when the Pitch Bend lever is all the way right. For example, if this parameter is set to "12," the pitch will rise one octave when the pitch bend lever is moved to the right-most position.
Bend Range Down	0– -48	Specifies the degree of pitch change in semitones when the Pitch Bend lever is all the way left. For example if this is set to "-48" and you move the pitch bend lever all the way to the left, the pitch will fall 4 octaves.

*1 Note values

𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯	Sixty-fourth-note triplet	𝅘𝅥𝅯	Sixty-fourth note	𝅘𝅥𝅰𝅘𝅥𝅰𝅘𝅥𝅰	Thirty-second-note triplet	𝅘𝅥𝅰	Thirty-second note	𝅘𝅥𝅰𝅘𝅥𝅰𝅘𝅥𝅰	Sixteenth-note triplet	𝅘𝅥𝅰.	Dotted thirty-second note
𝅘𝅥𝅯	Sixteenth note	♪3	Eighth-note triplet	𝅘𝅥𝅯.	Dotted sixteenth note	♪	Eighth note	♩3	Quarter-note triplet	♪.	Dotted eighth note
♩	Quarter note	𝅗𝅥3	Half-note triplet	♩.	Dotted quarter note	𝅗𝅥	Half note	𝅝3	Whole-note triplet	𝅗𝅥.	Dotted half note
𝅝	Whole note	𝅜3	Double-note triplet	𝅝.	Dotted whole note	𝅜	Double note				

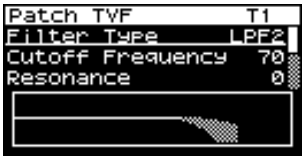
■ Patch Pitch Env screen.....

Parameter	Value	Explanation
P-Env Depth (Pitch Envelope Depth)	-12–+12	Adjusts the effect of the Pitch Envelope. Higher settings will cause the pitch envelope to produce greater change. Negative (-) settings will invert the shape of the envelope.
P-Env V-Sens (Pitch Envelope Velocity Sensitivity)	-63–+63	Keyboard playing dynamics can be used to control the depth of the pitch envelope. If you want the pitch envelope to have more effect for strongly played notes, set this parameter to a positive (+) value. If you want the pitch envelope to have less effect for strongly played notes, set this to a negative (-) value.
P-Env T1 V-Sens (Pitch Envelope Time 1 Velocity Sensitivity)	-63–+63	This allows keyboard dynamics to affect the Time 1 of the Pitch envelope. If you want Time 1 to be speeded up for strongly played notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
P-Env T4 V-Sens (Pitch Envelope Time 4 Velocity Sensitivity)	-63–+63	Use this parameter when you want key release speed to affect the Time 4 value of the pitch envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
P-Env Time KF (Pitch Envelope Time Keyfollow)	-100–+100	Use this setting if you want the pitch envelope times (Time 2–Time 4) to be affected by the keyboard location. Based on the pitch envelope times for the C4 key, positive (+) settings will cause notes higher than C4 to have increasingly shorter times, and negative (-) settings will cause them to have increasingly longer times. Larger settings will produce greater change. 
P-Env Time 1–4 ★ (Pitch Envelope Time 1–4)	0–127	Specify the pitch envelope times (Time 1–Time 4). Higher settings will result in a longer time until the next pitch is reached. (For example, Time 2 is the time over which the pitch changes from Level 1 to Level 2.)  ★You can use matrix control to modify this. (p. 95)

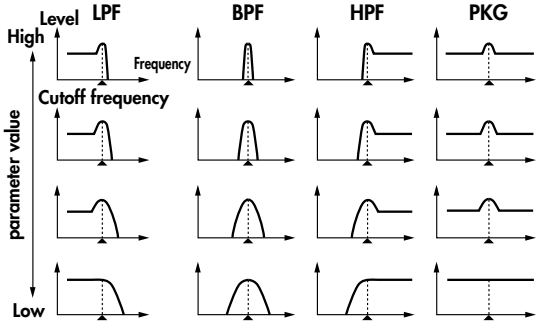
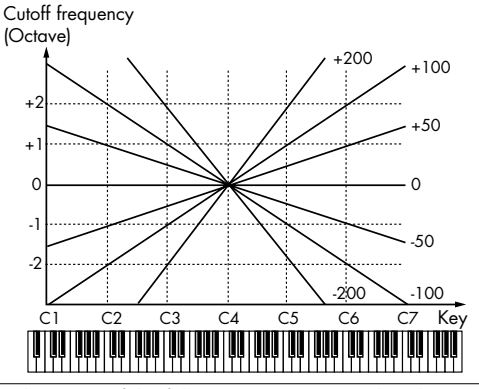
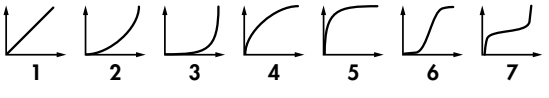
Parameter	Value	Explanation
P-Env Level 0–4 (Pitch Envelope Level 0–4)	-63–+63	Specify the pitch envelope levels (Level 0–Level 4). It determines how much the pitch changes from the reference pitch (the value set with Coarse Tune or Fine Tune on the Pitch screen) at each point. Positive (+) settings will cause the pitch to be higher than the standard pitch, and negative (-) settings will cause it to be lower.

TVF settings (Patch TVF/Patch TVF Env screen)

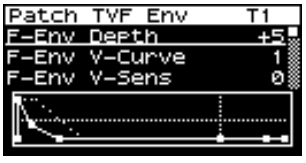
■ Patch TVF screen .....

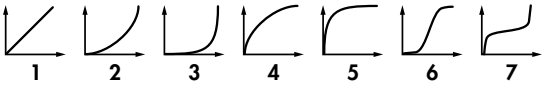
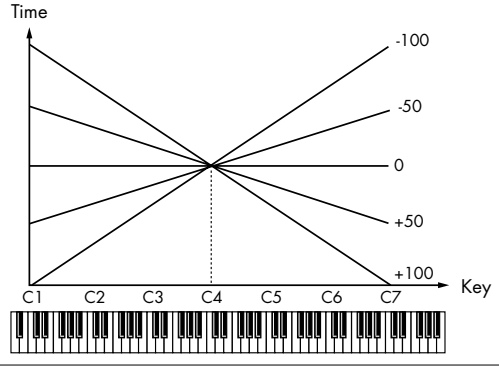


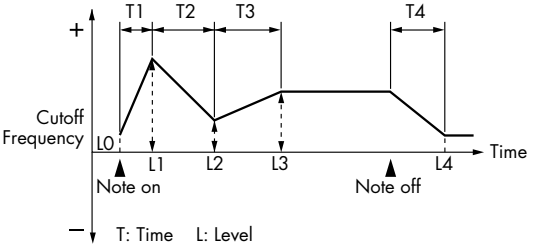
Parameter	Value	Explanation
Filter Type		Selects the type of filter. A filter cuts or boosts a specific frequency region to change a sound's brightness, thickness, or other qualities. **OFF:** No filter is used. **LPF:** Low Pass Filter. This reduces the volume of all frequencies above the Cutoff Frequency in order to round off, or un-brighten the sound. This is the most common filter used in synthesizers. **BPF:** Band Pass Filter. This leaves only the frequencies in the region of the cutoff frequency (Cutoff Frequency), and cuts the rest. This can be useful when creating distinctive sounds. **HPF:** High Pass Filter. This cuts the frequencies in the region below the Cutoff Frequency. This is suitable for creating percussive sounds emphasizing their higher tones. **PKG:** Peaking Filter. This emphasizes the frequencies in the region of the Cutoff Frequency. You can use this to create wah-wah effects by employing an LFO to change the cutoff frequency cyclically. **LPF2:** Low Pass Filter 2. Although frequency components above the Cutoff Frequency are cut, the sensitivity of this filter is half that of the LPF. This makes it a comparatively warmer low pass filter. This filter is good for use with simulated instrument sounds such as the acoustic piano. **LPF3:** Low Pass Filter 3. Although frequency components above the Cutoff Frequency are cut, the sensitivity of this filter changes according to the Cutoff frequency. While this filter is also good for use with simulated acoustic instrument sounds, the nuance it exhibits differs from that of the LPF2, even with the same TVF Envelope settings. **NOTE** If you set "LPF2" or "LPF3," the setting for the Resonance (p. 103).
Cutoff Frequency ★	0–127	Selects the frequency at which the filter begins to have an effect on the waveform's frequency components. • With "LPF/LPF2/LPF3" selected for the Filter Type, lower cutoff frequency settings reduce a tone's upper harmonics for a more rounded, warmer sound. Higher settings make it sound brighter. • If "BPF" is selected, harmonic components will change depending on the TVF Cutoff Frequency setting. This can be useful when creating distinctive sounds. • With "HPF" selected, higher Cutoff Frequency settings will reduce lower harmonics to emphasize just the brighter components of the sound. • With "PKG" selected, the harmonics to be emphasized will vary depending on Cutoff Frequency setting. TIP To edit the overall patch while preserving the relative differences in the Cutoff Frequency values set for each tone, set the Cutoff Offset (p. 90). ★You can use matrix control to modify this. (p. 95)

Parameter	Value	Explanation
Resonance ★	0–127	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. TIP To edit the overall patch while preserving the relative differences in the Resonance values set for each tone, set the Resonance Offset (p. 91).  ★You can use matrix control to modify this. (p. 95)
Cutoff Freq KF (Cutoff Frequency keyfollow)	-200–+200	Use this parameter if you want the cutoff frequency to change according to the key that is pressed. Relative to the cutoff frequency at the C4 key (center C), positive (+) settings will cause the cutoff frequency to rise for notes higher than C4, and negative (-) settings will cause the cutoff frequency to fall for notes higher than C4. Larger settings will produce greater change. 
Cutoff V-Curve (Cutoff Frequency Velocity Curve)	FIXED, 1–7	Selects one of the following seven curves that determine how keyboard playing dynamics (velocity) influence the cutoff frequency. Set this to "FIXED" if you don't want the Cutoff frequency to be affected by the keyboard velocity. 
Cutoff V-Sens (Cutoff frequency Velocity Sensitivity)	-63–+63	Use this parameter when changing the cutoff frequency to be applied as a result of changes in playing velocity. If you want strongly played notes to raise the cutoff frequency, set this parameter to positive (+) settings. If you want strongly played notes to lower the cutoff frequency, use negative (-) settings. TIP To edit the overall patch while preserving the relative differences in the Cutoff V-Sens values set for each tone, set the Velocity Sens (p. 91). However, this setting is shared by the Level V-Sens (p. 105).
Resonance V-Sens (Resonance Velocity Sensitivity)	-63–+63	This allows keyboard velocity to modify the amount of Resonance. If you want strongly played notes to have a greater Resonance effect, set this parameter to positive (+) settings. If you want strongly played notes to have less Resonance, use negative (-) settings.

■ Patch TVF Env screen .....

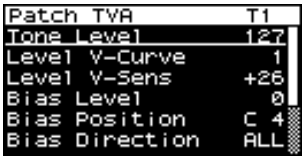


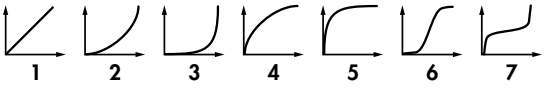
Parameter	Value	Explanation
F-Env Depth (TVF Envelope Depth)	-63–+63	Specifies the depth of the TVF envelope. Higher settings will cause the TVF envelope to produce greater change. Negative (-) settings will invert the shape of the envelope.
F-Env V-Curve (TVF Envelope Velocity Curve)	FIX, 1–7	Selects one of the following 7 curves that will determine how keyboard playing dynamics will affect the TVF envelope. Set this to "FIX" if you don't want the TVF Envelope to be affected by the keyboard velocity. 
F-Env V-Sens (TVF Envelope Velocity Sensitivity)	-63–+63	Specifies how keyboard playing dynamics will affect the depth of the TVF envelope. Positive (+) settings will cause the TVF envelope to have a greater effect for strongly played notes, and negative (-) settings will cause the effect to be less.
F-Env T1 V-Sens (TVF Envelope Time 1 Velocity Sensitivity)	-63–+63	This allows keyboard dynamics to affect the Time 1 of the TVF envelope. If you want Time 1 to be speeded up for strongly played notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
F-Env T4 V-Sens (TVF Envelope Time 4 Velocity Sensitivity)	-63–+63	The parameter to use when you want key release speed to control the Time 4 value of the TVF envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
F-Env Time KF (TVF Envelope Time Keyfollow)	-100–+100	Use this setting if you want the TVA envelope times (Time 2–Time 4) to be affected by the keyboard location. Based on the TVF envelope times for the C4 key (center C), positive (+) settings will cause notes higher than C4 to have increasingly shorter times, and negative (-) settings will cause them to have increasingly longer times. Larger settings will produce greater change. 

Parameter	Value	Explanation
F-Env Time1–4 ★ (TVF Envelope Time 1–4)	0–127	Specify the TVF envelope times (Time 1–Time 4). Higher settings will lengthen the time until the next cutoff frequency level is reached. (For example, Time 2 is the time over which Level 1 will change to Level 2.)  ★You can use matrix control to modify this. (p. 95)
F-Env Level0–4 (TVF Envelope Level 0–4)	0–127	Specify the TVF envelope levels (Level 0–Level 4). These settings specify how the cutoff frequency will change at each point, relative to the standard cutoff frequency (the cutoff frequency value specified in the TVF screen).

TVA settings (Patch TVA/Patch TVA Env screen)

■ Patch TVA screen

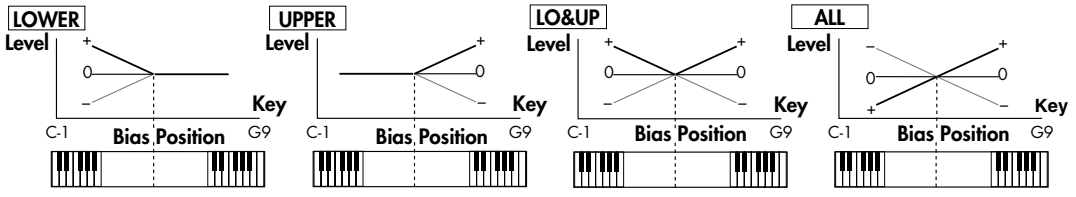


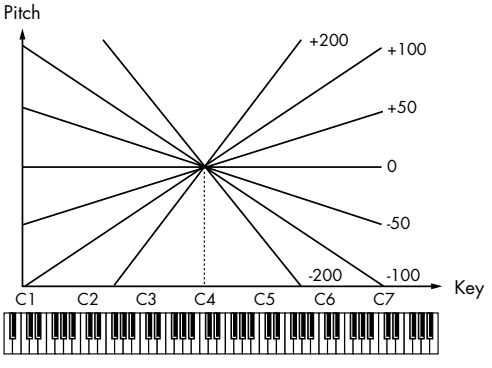
Parameter	Value	Explanation
Tone Level ★	0–127	Sets the volume of the tone. This setting is useful primarily for adjusting the volume balance between tones. ★You can use matrix control to modify this. (p. 95)
Level V-Curve (TVA Level Velocity Curve)	FIX, 1–7	You can select from seven curves that determine how keyboard playing strength will affect the volume. If you do not want the volume of the tone to be affected by the force with which you play the key, set this to "FIX." 
Level V-Sens (TVA Level Velocity Sensitivity)	-63–+63	Set this when you want the volume of the tone to change depending on the force with which you press the keys. Set this to a positive (+) value to have the changes in tone volume increase the more forcefully the keys are played; to make the tone play more softly as you play harder, set this to a negative (-) value. TIP If you wish to make adjustments to the entire patch while maintaining the relative values of Level V-Sens among tones, adjust the Velocity Sens (p. 91). However, this setting is shared by the Cutoff V-Sens (p. 103).
Bias Level	-100–+100	Adjusts the angle of the volume change that will occur in the selected Bias Direction. Larger settings will produce greater change. Negative (-) values will invert the change direction.
Bias Position	C-1–G9	Specifies the key relative to which the volume will be modified.

Parameter	Value	Explanation
Bias Direction	LOWER, UPPER, LO&UP, ALL	Selects the direction in which change will occur starting from the Bias Position. **LOWER:** The volume will be modified for the keyboard area below the Bias Point. **UPPER:** The volume will be modified for the keyboard area above the Bias Point. **LO&UP:** The volume will be modified symmetrically toward the left and right of the Bias Point. **ALL:** The volume changes linearly with the bias point at the center.

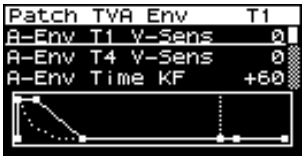
Bias

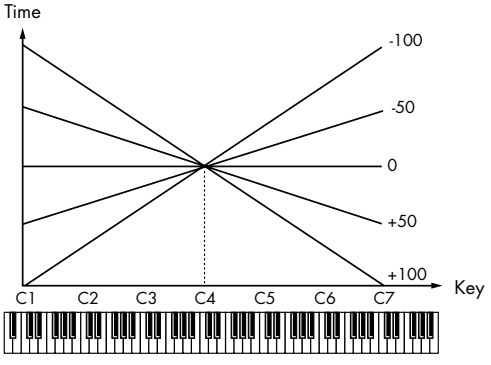
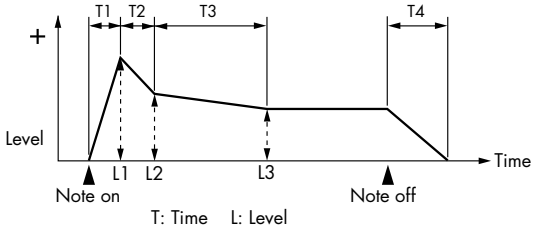
Bias causes the volume to be affected by the keyboard position. This is useful for changing volume through keyboard position (pitch) when playing acoustic instruments.



Tone Pan ★	L64–0–63R	Sets the pan of the tone. "L64" is far left, "0" is center, and "63R" is far right. ★You can use matrix control to modify this. (p. 95)
Pan Keyfollow	-100–+100	Use this parameter if you want key position to affect panning. Positive (+) settings will cause notes higher than C4 key (center C) to be panned increasingly further toward the right, and negative (-) settings will cause notes higher than C4 key (center C) to be panned toward the left. Larger settings will produce greater change. 
Random Pan Depth	0–63	Use this parameter when you want the stereo location to change randomly each time you press a key. Higher settings will produce a greater amount of change.
Alter (Alternate) Pan Depth	L63–63R	This setting causes panning to be alternated between left and right each time a key is pressed. Higher settings will produce a greater amount of change. "L" or "R" settings will reverse the order in which the pan will alternate between left and right. For example if two tones are set to "L" and "R" respectively, the panning of the two tones will alternate each time they are played. **NOTE** When any value from Type "2"–"10" is selected for the Str Type (p. 93) in the Pan Keyfollow, Random Pan Depth, Alter Pan Depth settings, the output of tones 1 and 2 are joined in tone 2, and the output of tones 3 and 4 are joined in tone 4. For this reason, tone 1 will follow the settings of tone 2, and tone 3 will follow the settings of tone 4.

■ Patch TVA Env screen.....



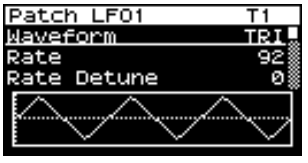
Parameter	Value	Explanation
A-Env T1 V-Sens (TVA Envelope Time 1 Velocity Sensitivity)	-63–+63	This allows keyboard dynamics to affect the Time 1 of the TVA envelope. If you want Time 1 to be speeded up for strongly played notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
A-Env T4 V-Sens (TVA Envelope Time 4 Velocity Sensitivity)	-63–+63	The parameter to use when you want key release speed to control the Time 4 value of the TVA envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
A-Env Time KF (TVA Envelope Time Keyfollow)	-100–+100	Use this setting if you want the TVA envelope times (Time 2–Time 4) to be affected by the keyboard location. Based on the TVA envelope times for the C4 key (center C), positive (+) settings will cause notes higher than C4 to have increasingly shorter times, and negative (-) settings will cause them to have increasingly longer times. Larger settings will produce greater change. 
A-Env Time1–4 ★ (TVA Envelope Time 1–4)	0–127	Specify the TVA envelope times (Time 1– Time 4). Higher settings will lengthen the time until the next volume level is reached. (For example, Time 2 is the time over which Level 1 will change to Level 2.) ★You can use matrix control to modify this. (p. 95)
A-Env Level1–3 (TVA Envelope Level 1–3)	0–127	Specify the TVA envelope levels (Level 1–Level 3). These settings specify how the volume will change at each point, relative to the standard volume (the Tone Level value specified in the TVA screen). 

Patch/Tone output-related settings (Patch Output screen)

Parameter	Value	Explanation
Pat Out Assign (Patch Output Assign)	MFX, L+R, L, R, TONE	Specifies how the direct sound of each patch will be output. **MFX:** Output in stereo through multi-effects. You can also apply chorus or reverb to the sound that passes through multi-effects. **L+R:** Output to the OUTPUT jacks in stereo without passing through multi-effects. **L, R:** Output to the OUTPUT L jack or OUTPUT R jack in mono without passing through multi-effects. **TONE:** Outputs according to the settings for each tone. * If you've made settings so that sounds are separately routed to the OUTPUT L jack and OUTPUT R jack, but no plug is actually inserted in the OUTPUT R jack, the sounds routed to OUTPUT L and OUTPUT R will be mixed and output from the OUTPUT L jack.
Tone Out (Output) Assign	MFX, L+R, L, R	Specifies how the direct sound of each tone will be output. **MFX:** Output in stereo through multi-effects. You can also apply chorus or reverb to the sound that passes through multi-effects. **L+R:** Output to the OUTPUT jacks in stereo without passing through multi-effects. **L, R:** Output to the OUTPUT L jack or OUTPUT R jack in mono without passing through multi-effects. * If the Pat Out Assign is set to anything other than "TONE," these settings will be ignored. * When the Str Type has a setting of Type "2"–"10," the outputs of tones 1 and 2 will be combined with tone 2, and the outputs of tones 3 and 4 will be combined with tone 4. For this reason, tone 1 will follow the settings. * If you've made settings so that sounds are separately routed to the OUTPUT L jack and OUTPUT R jack, but no plug is actually inserted in the OUTPUT R jack, the sounds routed to OUTPUT L and OUTPUT R will be mixed and output from the OUTPUT L jack. * Sounds are output to chorus and reverb in mono at all times. * The output destination of the signal after passing through the chorus is set with the Output Select (p. 135).
Tone Out (Output) Level	0–127	Set the level of the signal that is sent to the output destination specified by Tone Out Assign.
Cho Send (MFX) (Tone Chorus Send Level (Output=MFX))	0–127	Specifies the level of the signal sent to the chorus for each tone if the tone is sent through MFX.
Rev Send (MFX) (Tone Reverb Send Level (Output=MFX))	0–127	Specifies the level of the signal sent to the reverb for each tone if the tone is sent through MFX.
Cho Send (nonMFX) (Tone Chorus Send Level (Output=non MFX))	0–127	Sets the level of the signal sent to chorus for each tone if the tone is not sent through MFX.
Rev Send (nonMFX) (Tone Reverb Send Level (Output=non MFX))	0–127	Sets the level of the signal sent to reverb for each tone if the tone is not sent through MFX.

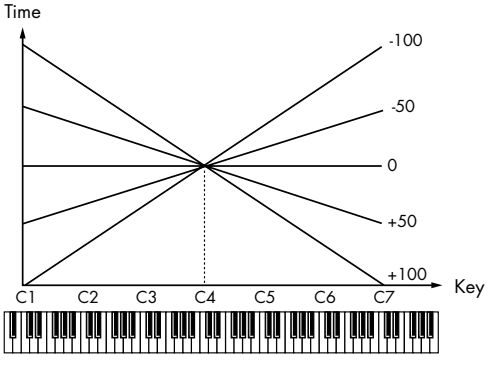
LFO settings (Patch LFO1, 2/Patch Step LFO screen)

■ Patch LFO1, 2 screens



MEMO
An LFO (Low Frequency Oscillator) causes change over a cycle in a sound. Each tone has two LFOs (LFO1/LFO2), and these can be used to cyclically change the pitch, cutoff frequency and volume to create modulation-type effects such as vibrato, wah and tremolo. Both LFOs have the same parameters so only one explanation is needed.

Parameter	Value	Explanation
Waveform		Selects the waveform of the LFO. **SIN:** Sine wave **TRI:** Triangle wave **SAW-U:** Sawtooth wave **SAW-D:** Sawtooth wave (negative polarity) **SQR:** Square wave **RND:** Random wave **BND-U:** Once the attack of the waveform output by the LFO is allowed to develop in standard fashion, the waveform then continues without further change. **BND-D:** Once the decay of the waveform output by the LFO is allowed to develop in standard fashion, the waveform then continues without further change. **TRP:** Trapezoidal wave **S&H:** Sample & Hold wave (one time per cycle, LFO value is changed) **CHAOS:** Chaos wave **VSIN:** Modified sine wave. The amplitude of the sine wave is randomly varied once each cycle of the waveform. **STEP:** A waveform generated by the data specified in LFO Step 1–16. This produces a fixed pattern of stepwise change, like that created by a step modulator. **NOTE** If you set this to "BND-U" or "BND-D," you must turn the Key Trigger to "ON." If this is "OFF," it will have no effect.
Rate ★	0–127, Note (Refer to p. 100 for available note values.)	Adjusts the modulation rate, or speed, of the LFO. LFO Rate sets the beat length for the synchronized tempo is synchronized with the tempo set in an external MIDI sequencer. (Example) For a tempo of 120 (120 quarter notes occur in 1 minute (60 seconds)) **Setting** — **LFO Rate** 𝅗𝅥 (half note) — 1 second (60/60= 1 (second)) ♩ (quarter note) — 0.5 seconds (60/120= 0.5 (seconds)) ♪ (eighth note) — 0.25 seconds (60/240= 0.25 (seconds)) **NOTE** This setting will be ignored if the Waveform parameter is set to "CHAOS." ★You can use matrix control to modify this. (p. 95)
Rate Detune	0–127	LFO Rate Detune makes subtle changes in the LFO cycle rate (Rate parameter) each time a key is pressed. Higher settings will cause greater change. This parameter is invalid when Rate is set to "note."
Offset	-100, -50, 0, +50, +100	Raises or lowers the LFO waveform relative to the central value (pitch or cutoff frequency). Positive (+) settings will move the waveform so that modulation will occur from the central value upward. Negative (-) settings will move the waveform so that modulation will occur from the central value downward.

Parameter	Value	Explanation
Delay Time	0–127	Delay Time (LFO Delay Time) specifies the time elapsed before the LFO effect is applied (the effect continues) after the key is pressed (or released). TIP When using violin, wind, or certain other instrument sounds in a performance, rather than having vibrato added immediately after the sounds are played, it can be effective to add the vibrato after the note is drawn out somewhat. If you set the Delay Time in conjunction with the Pitch Depth and Rate, the vibrato will be applied automatically following a certain interval after the key is pressed. This effect is called Delay Vibrato. cf. After referring to "How to Apply the LFO" (p. 111), change the setting until the desired effect is achieved.
Delay Time KF (Keyfollow)	-100–100	Adjusts the value for the Delay Time parameter depending on the key position, relative to the C4 key (center C). To decrease the time that elapses before the LFO effect is applied (the effect is continuous) with each higher key that is pressed in the upper registers, select a positive value; to increase the elapsed time, select a negative value. Larger settings will produce greater change. If you do not want the elapsed time before the LFO effect is applied (the effect is continuous) to change according to the key pressed, set this to "0." 
Fade Mode	ON <, ON >, OFF <, OFF >	Specifies how the LFO will be applied. cf. After referring to "How to Apply the LFO" (p. 111), change the setting until the desired effect is achieved.
Fade Time	0–127	Specifies the time over which the LFO amplitude will reach the maximum (minimum). cf. After referring to "How to Apply the LFO" (p. 111), change the setting until the desired effect is achieved.

Parameter	Value	Explanation

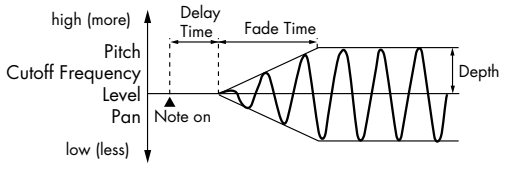
How to Apply the LFO

● Apply the LFO gradually after the key is pressed

Fade Mode: ON <

Delay Time: The time from when the keyboard is played until the LFO begins to be applied.

Fade Time: The time over which the LFO amplitude will reach the maximum after the Delay Time has elapsed.

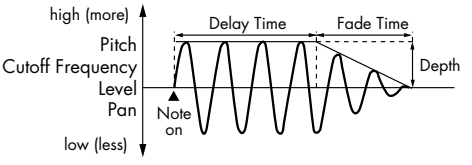


● Apply the LFO immediately when the key is pressed, and then gradually begin to decrease the effect

Fade Mode: ON >

Delay Time: The time that the LFO will continue after the keyboard is played.

Fade Time: The time over which the LFO amplitude will reach the minimum after the Delay Time has elapsed.

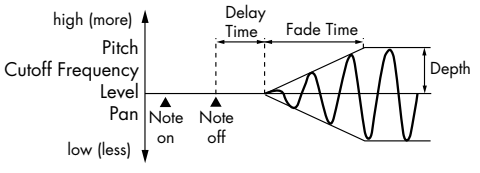


● Apply the LFO gradually after the key is released

Fade Mode: OFF <

Delay Time: The time from when the keyboard is released until the LFO begins to be applied.

Fade Time: The time over which the LFO amplitude will reach the maximum after the Delay Time has elapsed.

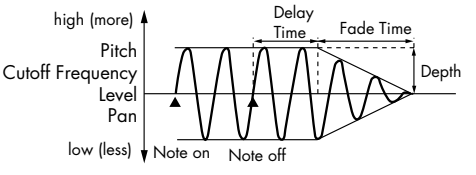


● Apply the LFO from when the key is pressed until it is released, and gradually begin to decrease the effect when the key is released

Fade Mode: OFF >

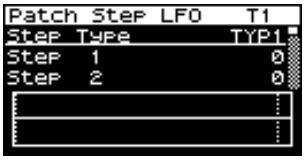
Delay Time: The time that the LFO will continue after the keyboard is released.

Fade Time: The time over which the LFO amplitude will reach the minimum after the Delay Time has elapsed.



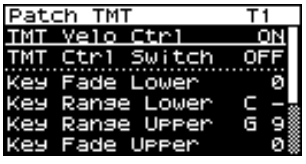
Key Trigger	OFF, ON	This specifies whether the LFO cycle will be synchronized to begin when the key is pressed (ON) or not (OFF).
Pitch Depth ★	-63–+63	Specifies how deeply the LFO will affect pitch. ★You can use matrix control to modify this. (p. 95)
TVF Depth ★	-63–+63	Specifies how deeply the LFO will affect the cutoff frequency. ★You can use matrix control to modify this. (p. 95)
TVA Depth ★	-63–+63	Specifies how deeply the LFO will affect the volume. ★You can use matrix control to modify this. (p. 95)
Pan Depth ★	-63–+63	Specifies how deeply the LFO will affect the pan. **TIP** Positive (+) and negative (-) settings for the Depth result in differing kinds of change in pitch and volume. For example, if you set the Depth to a positive (+) value for one tone, and set another tone to the same numerical value, but make it negative (-), the modulation phase for the two tones will be the reverse of each other. This allows you to shift back and forth between two different tones, or combine it with the Pan setting to cyclically change the location of the sound image. **NOTE** When the Str Type (p. 93) is set to any value from "2" through "10," the output of tones 1 and 2 will be combined into tone 2, and the output of tones 3 and 4 will be combined into tone 4. This applies to the Pan Depth settings. For this reason, tone 1 will follow the settings of tone 2, and tone 3 will follow the settings of tone 4. ★You can use matrix control to modify this. (p. 95)

■ Patch Step LFO screen.....



Parameter	Value	Explanation
Step Type	TYP1, TYP2	When generating an LFO waveform from the data specified in LFO Step1–16, specify whether the level will change abruptly at each step (TYP1) or will be connected linearly (TYP2).
Step 1–16	-36–+36	Specifies the data for the Step LFO. If the LFO Pitch Depth is +63, each +1 unit of the step data corresponds to a pitch of +50 cents.

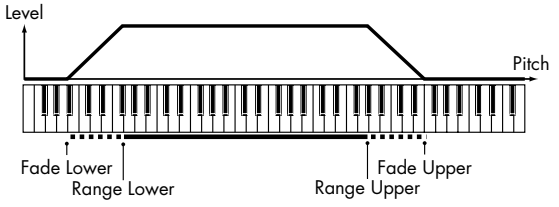
Specifies how the tones will be heard (Patch TMT screen)



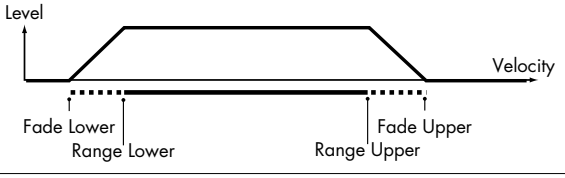
MEMO
You can vary the way in which each tone will sound depending on the force with which you play the keyboard, the range of notes on the keyboard, and via MIDI messages. These settings are collectively called the "Tone Mix Table (TMT)."

Parameter	Value	Explanation
Parameters common to all tones		
TMT Velo Ctrl (TMT Velocity Control Switch)	OFF, ON, RANDOM, CYCLE	TMT Velo Ctrl determines whether a different tone is played (ON) or not (OFF) depending on the force with which the key is played (velocity). When set to "RANDOM," the patch's constituent tones will sound randomly, regardless of any Velocity messages. When set to "CYCLE," the patch's constituent tones will sound consecutively, regardless of any Velocity messages. **NOTE** You can also switch between tones by using matrix control (p. 95) as an alternative to using TMT Velo Ctrl. However, you can't use TMT Velo Ctrl and matrix control at the same time. If you want to use matrix control, turn TMT Velo Ctrl "OFF." If you want to use TMT Velo Control, turn matrix control "OFF."
TMT Ctrl Switch (TMT Control Switch)	OFF, ON	Use the Matrix Control to enable (ON), or disable (OFF) sounding of different tones. **NOTE** Alternatively, you can switch tones on/off by using TMT Velo Ctrl. However, you can't use TMT Velo Ctrl and matrix control at the same time. If you want to use matrix control, turn TMT Velo Ctrl "OFF." If you want to use TMT Velo Control, turn matrix control "OFF."
Parameters set on an individual tone basis		
Key Fade Lower (Keyboard Fade Width Lower)	0–127	This determines what will happen to the tone's level when a note that's lower than the tone's specified keyboard range is played. Higher settings produce a more gradual change in volume. If you don't want the tone to sound at all when a note below the keyboard range is played, set this parameter to "0."
Key (Keyboard) Range Lower	C-1–UPPER	Specifies the lowest note that the tone will sound for each tone.

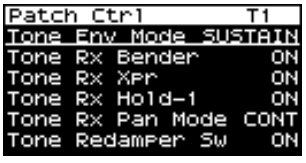
Parameter	Value	Explanation
Key (Keyboard) Range Upper	Lower–G9	Specifies the highest note that the tone will sound for each tone. **NOTE** If you attempt to raise the lower key higher than the upper key, or to lower the upper key below the lower key, the other value will be automatically modified to the same setting.
Key Fade Upper (Keyboard Fade Width Upper)	0–127	This determines what will happen to the tone's level when a note that's higher than the tone's specified keyboard range is played. Higher settings produce a more gradual change in volume. If you don't want the tone to sound at all when a note below the keyboard range is played, set this parameter to "0."



Velo Fade Lower (Velocity Fade Width Lower)	0–127	This determines what will happen to the tone's level when the tone is played at a velocity lower than its specified velocity range. Higher settings produce a more gradual change in volume. If you want notes played outside the specified key velocity range to not be sounded at all, set this to "0."
Velo (Velocity) Range Lower	1–UPPER	This sets the lowest velocity at which the tone will sound. Make these settings when you want different tones to sound in response to notes played at different strengths.
Velo (Velocity) Range upper	LOWER–127	This sets the highest velocity at which the tone will sound. Make these settings when you want different tones to sound in response to notes played at different strengths. **NOTE** If you attempt to set the Lower velocity limit above the Upper, or the Upper below the Lower, the other value will automatically be adjusted to the same setting. **MEMO** When using the Matrix Control to have different tones played, set the lowest value (Lower) and highest value (Upper) of the value of the MIDI message used.
Velo Fade Upper (Velocity Fade Width Upper)	0–127	This determines what will happen to the tone's level when the tone is played at a velocity greater than its specified velocity range. Higher settings produce a more gradual change in volume. If you want notes played outside the specified key velocity range to not be sounded at all, set this to "0."



Controller-related settings (Patch Ctrl screen)



Parameter	Value	Explanation
Tone Env (Envelope) Mode	NO-SUS, SUSTAIN	When a loop waveform (p. 97) is selected, the sound will normally continue as long as the key is pressed. If you want the sound to decay naturally even if the key remains pressed, set this to "NO-SUS." **NOTE** If a one-shot type Wave (p. 97) is selected, it will not sustain even if this parameter is set to "SUSTAIN."
Tone Rx Bender (Tone Receive Pitch Bend Switch)	OFF, ON	For each tone, specify whether MIDI Pitch Bend messages will be received (ON), or not (OFF).
Tone Rx Xpr (Tone Receive Expression Switch)	OFF, ON	For each tone, specify whether MIDI Expression messages will be received (ON), or not (OFF).
Tone Rx Hold-1 (Tone Receive Hold Switch)	OFF, ON	For each tone, specify whether MIDI Hold-1 messages will be received (ON), or not (OFF). **NOTE** If "NO-SUS" is selected for Tone Env Mode, this setting will have no effect.
Tone Rx Pan Mode (Tone Receive Pan Mode)	CONT, K-ON	For each tone, specify how pan messages will be received. **CONT:** Whenever Pan messages are received, the stereo position of the tone will be changed. **K-ON:** The pan of the tone will be changed only when the next note is played. If a pan message is received while a note is sounding, the panning will not change until the next key is pressed. **NOTE** The channels cannot be set so as not to receive Pan messages.
Tone Redamper Sw (Switch)	OFF, ON	You can specify, on an individual tone basis, whether or not the sound will be held when a Hold 1 message is received after a key is released, but before the sound has decayed to silence. If you want to sustain the sound, set this "ON." When using this function, also set the Rx Hold-1 "ON." This function is effective for piano sounds.

Tone Copy

This operation copies tone settings from a patch to one of the tones in the currently selected patch.

From the Patch Edit menu screen (p. 88), select "Tone Copy." The Patch Tone Copy screen will appear.

1. Select the copy-source tone and copy-destination tone.

Parameter	
(1)	Group of the copy-source patch
(2)	Copy-source patch
(3)	Copy-source tone
(4)	Copy-destination tone

* The copy-destination patch is the patch that's selected in the temporary area (p. 57).

2. Move the cursor to "COPY" and press [CURSOR/VALUE].
A confirmation message will appear.

3. To execute the copy, select "OK" and press [CURSOR/VALUE].
If you decide not to execute the copy, select "CANCEL" and press [CURSOR/VALUE].
Once the copy has been completed, you'll be returned to the previous screen.

Patch Initialize

Returns the current patch settings to their initial values.

From the Patch Edit menu screen (p. 88), select "Patch Init." A confirmation message will appear.

1. To execute the initialization, select "OK" and press [CURSOR/VALUE].
If you decide not to initialize, select "CANCEL" and press [CURSOR/VALUE].
When initialization is finished, you'll be returned to the previous screen.

Patch Write

Saves the current patch as user data.

From the Patch Edit menu screen (p. 88), select "Write" to access the Patch Name screen.
In this screen you can assign a name (patch name) of up twelve characters to the patch you're going to save.

1. **Move the cursor to the location where you want to enter a character, and press [CURSOR/VALUE].**

2. **Turn [CURSOR/VALUE] to select the desired character, then press [CURSOR/VALUE] to enter that character.**
   You can press [MENU] to view convenient functions for text entry.
   Press [MENU] once again to return to the previous screen.

Function	Explanation
INSERT	Press [CURSOR/VALUE] to insert a space (blank) at the cursor location.
DELETE	Press [CURSOR/VALUE] to delete the character at the cursor location; subsequent characters will move forward.
UNDO	Revert to the unedited patch name.

3. **Repeat steps 1 and 2 as many times as necessary.**

4. **When you've finished entering the patch name, move the cursor to "WRITE" and press [CURSOR/VALUE].**
   The Patch Write screen will appear.

5. **Turn [CURSOR/VALUE] to select the save-destination patch, then press [CURSOR/VALUE].**
   A confirmation message will appear.

6. **To write the patch into memory, select "OK" and press [CURSOR/VALUE].**
   If you decide you don't want to carry out the write, select "CANCEL" and press [CURSOR/VALUE].
   Once the data has been written, you'll be returned to the previous screen.

Editing rhythm sets (Rhythm Edit screen)

1. **Press [MIDI INST].**
   [MIDI INST] and [PART VIEW] will light, and the Patch Play screen will appear.
   If the patch type is set to "Patch," change it to "Rhythm."

2. **Turn [CURSOR/VALUE] to select "EDIT," then press [CURSOR/VALUE].**
   The Rhythm Edit screen will appear.

3. **Turn [CURSOR/VALUE] to select the item you want to edit, then press [CURSOR/VALUE].**
   The editing screen for the selected item will appear.

4. **Turn [CURSOR/VALUE] to select the parameter you want to edit, then press [CURSOR/VALUE].**
   The value of the selected parameter will be highlighted.

5. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**

■ Menu screens during rhythm editing

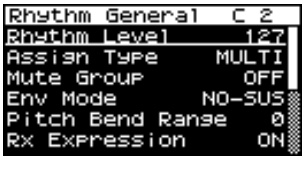
If you press [MENU] while editing a patch, the menu screen will appear.
The Menu screen is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left.

Parameter	Explanation
Sel 1–4 (Wave Select 1–4)	Changes the current wave (the one targeted for editing), and returns to the previous screen.
Sw 1–4 (Wave Switch 1–4)	Used to individually specify whether waves 1–4 will be used (ON) or not used (OFF).
Key Select	Selects the key that you'll be editing.
TON COPY (Rhythm Tone Copy)	Copies the settings of a rhythm tone to a rhythm tone in the currently selected rhythm set. Press [CURSOR/VALUE] to access the Rhythm Tone Copy screen (p. 130).
TON INIT (Rhythm Tone Initialize)	Returns the settings of just a specific key in the current rhythm set to their initial values (p. 130).
RHY INIT (Rhythm Set Initialize)	Returns the settings of the current rhythm set to their initial values (p. 130).
Write (Rhythm Set Write)	Saves the current rhythm set as user data. Press [CURSOR/VALUE] to access the Rhythm Set Name screen (p. 131).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

■ Rhythm Edit screen .....

Parameter	Explanation
General	Edits overall settings for the entire rhythm set. Press [CURSOR/VALUE] to access the Rhythm General screen.
WG	Edits waveform-related settings. Press [CURSOR/VALUE] to access the Rhythm Wave screen (p. 120).
WMT	Specifies how each rhythm tone will sound. Press [CURSOR/VALUE] to access the Rhythm WMT screen (p. 122).
PCH	Edits pitch-related settings for each rhythm tone. Press [CURSOR/VALUE] to access the Rhythm Pitch screen (p. 122).
PCH  **(Pitch Envelope)**	Edits pitch envelope settings. By moving the cursor to  and pressing [CURSOR/VALUE] you can move to the Rhythm Pitch Env screen (p. 123).
TVF	Edits TVF settings. Press [CURSOR/VALUE] to access the Rhythm TVF screen (p. 124).
TVF  **(TVF Envelope)**	Edits TVF envelope settings. By moving the cursor to  and pressing [CURSOR/VALUE] you can move to the Rhythm TVF Env screen (p. 126).
TVA	Edits TVA settings. Press [CURSOR/VALUE] to access the Rhythm TVA screen (p. 127).
TVA  **(TVA Envelope)**	Edits TVA envelope settings. By moving the cursor to  and pressing [CURSOR/VALUE] you can move to the Rhythm TVA Env screen (p. 128).
OUT (Output)	Edits output-related settings for the rhythm set/rhythm tones. Press [CURSOR/VALUE] to access the Rhythm Output screen (p. 129).

Edits overall settings for the entire rhythm set (Rhythm General screen)



Parameter	Value	Explanation
Rhythm Level (Rhythm Set Level)	0–127	Sets the volume of the rhythm set. TIP The volume levels of the tones from which the rhythm set is composed is set with the Tone Level (p. 127). The volume levels of the Waves from which the rhythm tone is composed is set with the Wave Level (p. 121).
Assign Type	MULTI, SINGLE	Specifies how sounds are to be produced when you press the same key successively. **MULTI:** New sounds will be layered onto the currently playing sounds. **SINGLE:** The currently playing sound will be stopped before the new sound begins.

Parameter	Value	Explanation
Mute Group	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 rhythm tones that are not allowed to sound simultaneously. Up to 31 Mute Groups can be used. rhythm tones that are not belong to any such group should be set to "OFF."
Env Mode (Rhythm Tone Envelope Mode)	NO-SUS, SUSTAIN	When a loop waveform (p. 97) is selected, the sound will normally continue as long as the key is pressed. If you want the sound to decay naturally even if the key remains pressed, set this to "NO-SUS." **NOTE** If the One Shot Mode (p. 97) is ON, it will not sustain even if this parameter is set to "SUSTAIN."
Pitch Bend Range (Rhythm Tone Pitch Bend Range)	0–48	Specifies the amount of pitch change in semitones (4 octaves) that will occur when the Pitch Bend Lever is moved. The amount of change when the lever is tilted is set to the same value for both left and right sides.
Rx Expression (Rhythm Tone Receive Expression Switch)	OFF, ON	For each rhythm tone, specify whether MIDI Expression messages will be received (ON), or not (OFF).
Rx Hold-1 (Rhythm Tone Receive Hold-1 Switch)	OFF, ON	For each rhythm tone, specify whether MIDI Hold-1 messages will be received (ON), or not (OFF). **NOTE** If "NO-SUS" is selected for Env Mode, this setting will have no effect.
Rx Pan (Rhythm Tone Receive Pan Mode)	CONTINUOUS, KEY-ON	For each rhythm tone, specify how pan messages will be received. **CONTINUOUS:** Whenever Pan messages are received, the stereo position of the tone will be changed. **KEY-ON:** The pan of the tone will be changed only when the next note is played. If a pan message is received while a note is sounding, the panning will not change until the next key is pressed. **NOTE** The channels cannot be set so as not to receive Pan messages.
One Shot Mode	OFF, ON	The sound will play back until the end of the waveform (or the end of the envelope, whichever comes first). The result will be the same as when the envelope's Tone Env Mode is set to NO-SUS.
Relative Level	-64–+63	Corrects for the volume of the rhythm tone. This parameter is set by the key-based controller system exclusive message. Normally, you should leave it set to 0. **NOTE** If the rhythm tone level is set to 127, the volume will not increase beyond that point.
Rhythm Tone Name	12 characters	You can assign a name of up to twelve characters to the currently selected rhythm tone. **1. Move the cursor to the location at which you want to enter a character, then press [CURSOR/VALUE].** **2. Turn [CURSOR/VALUE] to select the character you want to enter, then press [CURSOR/VALUE].**

Waveform-related settings (Rhythm Wave screen)

Parameter	Value	Explanation
Wave Group	INT, EXP	Select the groups containing the Waves comprising the rhythm tone. **INT:** Waveforms stored in internal memory **EXP:** Waveform stored in a Wave Expansion Board (SRX series) installed in EXP slots. * It's not possible to select EXP unless a wave expansion board is inserted into the corresponding slot.
Wave Bank	A, B ---	Selects the wave bank when the wave group is set to "EXP." **A:** Wave Expansion Board A **B:** Wave Expansion Board B * When the wave group is set to "INT," the "---" message appears and you cannot select a wave bank. * You cannot select a wave bank of a Wave Expansion Board that is not installed.
Wave No. L (MONO) **Wave No. R**	1–1401	This selects the Waves comprising the rhythm tone. You can choose a separate waveform for the SonicCell's left and right channels. * For mono tones, assign a waveform to the L channel. No sound will be heard if a waveform is set for only the R channel. * In the case of a wave from a wave expansion board, the range (number of waveforms) will depend on the board you've selected.
Wave Gain	-6, 0, +6, +12	Sets the gain (amplification) of the waveform. The value changes in 6 dB (decibel) steps—an increase of 6 dB doubles the waveform's gain.
Wave Tempo Sync	OFF, ON	When you wish to synchronize a Phrase Loop to the clock (tempo), set this to "ON." This is valid only when a separately sold wave expansion board is installed, and a waveform that indicates a tempo (BPM) is selected as a rhythm tone. **NOTE** If a waveform from a wave expansion board is selected for the tone, turning the Wave Tempo Sync parameter "ON" will cause pitch-related settings and FXM-related settings to be ignored. **Phrase Loop** Phrase loop refers to the repeated playback of a phrase that's been pulled out of a song (e.g., by using a sampler). One technique involving the use of Phrase Loops is the excerpting of a Phrase from a pre-existing song in a certain genre, for example dance music, and then creating a new song with that Phrase used as the basic motif. This is referred to as "Break Beats."
FXM Switch	OFF, ON	This sets whether FXM will be used (ON) or not (OFF). **FXM** FXM (Frequency Cross Modulation) uses a specified waveform to apply frequency modulation to the currently selected waveform, creating complex overtones. This is useful for creating dramatic sounds or sound effects.
FXM Color	1–4	Specifies how FXM will perform frequency modulation. Higher settings result in a grainier sound, while lower settings result in a more metallic sound.

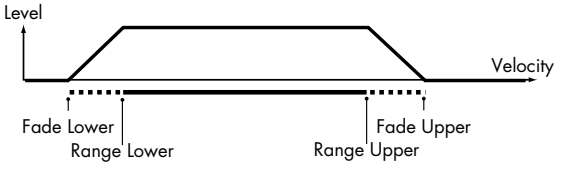
Parameter	Value	Explanation
FXM Depth	0–16	Specifies the depth of the modulation produced by FXM. **NOTE** When the Tempo Sync is set to "ON," settings related to Pitch (p. 122) and FXM are disabled.
Wave Coarse Tune	-48–+48	Adjusts the pitch of the waveform's sound up or down in semitone steps (+/-4 octaves). TIP The Coarse Tune of the entire rhythm tone is set by the Tone Coarse Tune (p. 122).
Wave Fine Tune	-50–+50	Adjusts the pitch of the waveform's sound up or down in 1-cent steps (+/-50 cents). * One cent is 1/100th of a semitone. TIP The Fine Tune of the entire rhythm tone is set by the Tone Fine Tune (p. 123).
Wave Level	0–127	You can set the volume of the waveform. TIP The volume level of each rhythm tone is set with the Tone Level; the volume levels of the entire rhythm set is set with the Rhythm Level (p. 118).
Wave Pan	L64–0–63R	This specifies the pan of the waveform. "L64" is far left, "0" is center, and "63R" is far right.
Wave Rnd Pan Sw (Wave Random Pan Switch)	OFF, ON	Use this setting to cause the waveform's panning to change randomly each time a key is pressed (ON) or not (OFF). * The range of the panning change is set by the Random Pan Depth (p. 127).
Alter Pan Sw (Wave Alternate Pan Switch)	OFF, ON, REVS	This setting causes panning of the waveform to be alternated between left and right each time a key is pressed. Set Alter Pan Sw to "ON" to pan the Wave according to the Alter Pan Depth settings, or to "REV" when you want the panning reversed. If you do not want the panning to change each time a key is pressed, set this to "OFF."

Specifying how a rhythm tone will be heard (Rhythm WMT screen)

MEMO

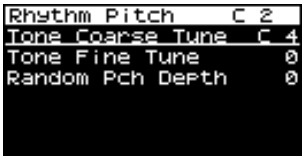
You can use your keyboard playing dynamics to control the four waveforms assigned to the rhythm tone. These settings are collectively called the "Wave Mix Table (WMT)."

Parameter	Value	Explanation
WMT Velo Ctrl (WMT Velocity Control Switch)	OFF, ON, RANDOM	WMT Velocity Control determines whether a different rhythm tone is played (ON) or not (OFF) depending on the force with which the key is played (velocity). When set to "RANDOM," the rhythm set's constituent rhythm tones will sound randomly, regardless of any Velocity messages.
Velo Fade Lower (Velocity Fade Width Lower)	0–127	This determines what will happen to the tone's level when the tone is played at a velocity lower than its specified velocity range. Higher settings produce a more gradual change in volume. If you want notes played outside the specified key velocity range to not be sounded at all, set this to "0."
Velo (Velocity) Range Lower	1–UPPER	This sets the lowest velocity at which the waveform will sound. Make these settings when you want different waveforms to sound in response to notes played at different strengths.
Velo (Velocity) Range Upper	LOWER–127	This sets the highest velocity at which the waveform will sound. Make these settings when you want different waveforms to sound in response to notes played at different strengths. **NOTE** If you attempt to set the Lower velocity limit above the Upper, or the Upper below the Lower, the other value will automatically be adjusted to the same setting.
Velo Fade Upper (Velocity Fade Width Upper)	0–127	This determines what will happen to the tone's level when the tone is played at a velocity greater than its specified velocity range. Higher settings produce a more gradual change in volume. If you want notes played outside the specified key velocity range to not be sounded at all, set this to "0."



Pitch-related rhythm tone settings (Rhythm Pitch/Rhythm Pch Env screen)

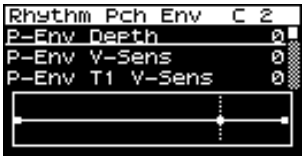
■ Rhythm Pitch screen

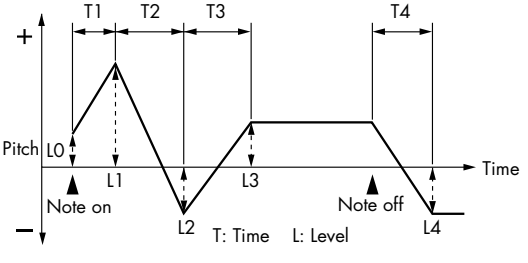


Parameter	Value	Explanation
Tone Coarse Tune (Rhythm Tone Coarse Tune)	C-1–G9	Selects the pitch at which a rhythm tone sounds. TIP Set the coarse tuning for Waves comprising the rhythm tones with the Wave Coarse Tune (p. 121).

Parameter	Value	Explanation
Tone Fine Tune (Rhythm Tone Fine Tune)	-50–+50	Adjusts the pitch of the rhythm tone's sound up or down in 1-cent steps (+/-50 cents). * One cent is 1/100th of a semitone. TIP Set the fine tuning for Waves comprising the rhythm tones with the Wave Fine Tune (p. 121).
Random Pch Dpth (Random Pitch Depth)	0–9, 10–90, 100–1200	This specifies the width of random pitch deviation that will occur each time a key is pressed. If you do not want the pitch to change randomly, set this to "0." These values are in units of cents (1/100th of a semitone).

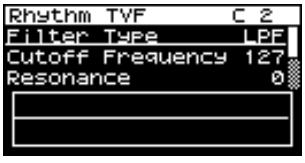
■ Rhythm Pch Env screen .....



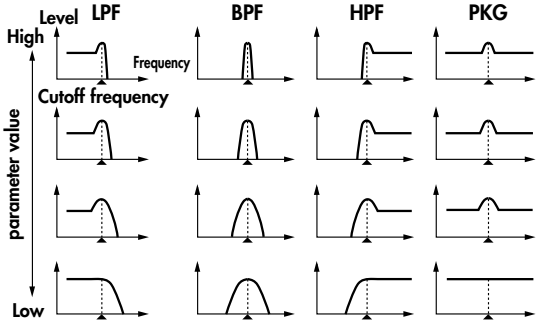
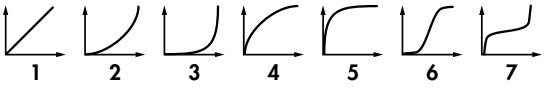
Parameter	Value	Explanation
P-Env Depth (Pitch Envelope Depth)	-12–+12	Adjusts the effect of the Pitch Envelope. Higher settings will cause the pitch envelope to produce greater change. Negative (-) settings will invert the shape of the envelope.
P-Env V-Sens (Pitch Envelope Velocity Sensitivity)	-63–+63	Keyboard playing dynamics can be used to control the depth of the pitch envelope. If you want the pitch envelope to have more effect for strongly played notes, set this parameter to a positive (+) value. If you want the pitch envelope to have less effect for strongly played notes, set this to a negative (-) value.
P-Env T1 V-Sens (Pitch Envelope Time 1 Velocity Sensitivity)	-63–+63	This allows keyboard dynamics to affect the Time 1 of the Pitch envelope. If you want Time 1 to be speeded up for strongly played notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
P-Env T4 V-Sens (Pitch Envelope Time 4 Velocity Sensitivity)	-63–+63	Use this parameter when you want key release speed to affect the Time 4 value of the pitch envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
P-Env Time 1–4 (Pitch Envelope Time 1–4)	0–127	Specify the pitch envelope times (Time 1–Time 4). Higher settings will result in a longer time until the next pitch is reached. (For example, Time 2 is the time over which the pitch changes from Level 1 to Level 2.) 
P-Env Level 0–4 (Pitch Envelope Level 0–4)	-63–+63	Specify the pitch envelope levels (Level 0–Level 4). It determines how much the pitch changes from the reference pitch (the value set with Coarse Tune or Fine Tune on the Pitch screen) at each point. Positive (+) settings will cause the pitch to be higher than the standard pitch, and negative (-) settings will cause it to be lower.

TVF settings (Rhythm TVF/Rhythm TVF Env screen)

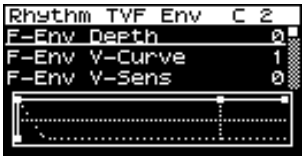
■ Rhythm TVF screen .....

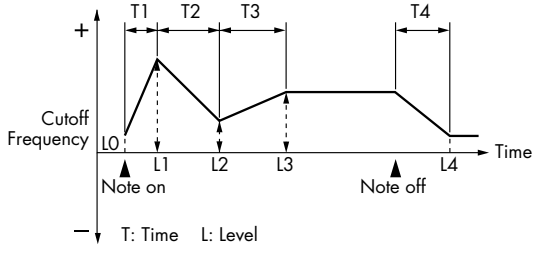


Parameter	Value	Explanation
Filter Type		Selects the type of filter. A filter cuts or boosts a specific frequency region to change a sound's brightness, thickness, or other qualities. **OFF:** No filter is used. **LPF:** Low Pass Filter. This reduces the volume of all frequencies above the Cutoff Frequency in order to round off, or un-brighten the sound. This is the most common filter used in synthesizers. **BPF:** Band Pass Filter. This leaves only the frequencies in the region of the cutoff frequency (Cutoff Frequency), and cuts the rest. This can be useful when creating distinctive sounds. **HPF:** High Pass Filter. This cuts the frequencies in the region below the Cutoff Frequency. This is suitable for creating percussive sounds emphasizing their higher tones. **PKG:** Peaking Filter. This emphasizes the frequencies in the region of the Cutoff Frequency. You can use this to create wah-wah effects by employing an LFO to change the cutoff frequency cyclically. **LPF2:** Low Pass Filter 2. Although frequency components above the Cutoff Frequency are cut, the sensitivity of this filter is half that of the LPF. This makes it a comparatively warmer low pass filter. This filter is good for use with simulated instrument sounds such as the acoustic piano. **LPF3:** Low Pass Filter 3. Although frequency components above the Cutoff Frequency are cut, the sensitivity of this filter changes according to the Cutoff frequency. While this filter is also good for use with simulated acoustic instrument sounds, the nuance it exhibits differs from that of the LPF2, even with the same TVF Envelope settings. **NOTE** If you set "LPF2" or "LPF3," the setting for the Resonance (p. 125).
Cutoff Frequency	0–127	Selects the frequency at which the filter begins to have an effect on the waveform's frequency components. • With "LPF/LPF2/LPF3" selected for the Filter Type, lower cutoff frequency settings reduce a tone's upper harmonics for a more rounded, warmer sound. Higher settings make it sound brighter. • If "BPF" is selected, harmonic components will change depending on the TVF Cutoff Frequency setting. This can be useful when creating distinctive sounds. • With "HPF" selected, higher Cutoff Frequency settings will reduce lower harmonics to emphasize just the brighter components of the sound. • With "PKG" selected, the harmonics to be emphasized will vary depending on Cutoff Frequency setting.

Parameter	Value	Explanation
Resonance	0–127	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. 
Cutoff V-Curve (Cutoff Frequency Velocity Curve)	FIXED, 1–7	Selects one of the following seven curves that determine how keyboard playing dynamics (velocity) influence the cutoff frequency. Set this to "FIXED" if you don't want the Cutoff frequency to be affected by the keyboard velocity. 
Cutoff V-Sens (Cutoff frequency Velocity Sensitivity)	-63–+63	Use this parameter when changing the cutoff frequency to be applied as a result of changes in playing velocity. If you want strongly played notes to raise the cutoff frequency, set this parameter to positive (+) settings. If you want strongly played notes to lower the cutoff frequency, use negative (-) settings.
Resonance V-Sens (Resonance Velocity Sensitivity)	-63–+63	This allows keyboard velocity to modify the amount of Resonance. If you want strongly played notes to have a greater Resonance effect, set this parameter to positive (+) settings. If you want strongly played notes to have less Resonance, use negative (-) settings.

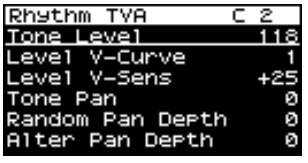
■ Rhythm TVF Env screen .....

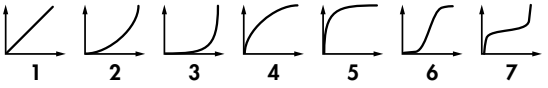


Parameter	Value	Explanation
F-Env Depth (TVF Envelope Depth)	-63–+63	Specifies the depth of the TVF envelope. Higher settings will cause the TVF envelope to produce greater change. Negative (-) settings will invert the shape of the envelope.
F-Env V-Curve (TVF Envelope Velocity Curve)	FIX, 1–7	Selects one of the following 7 curves that will determine how keyboard playing dynamics will affect the TVF envelope. Set this to "FIX" if you don't want the TVF Envelope to be affected by the keyboard velocity. 
F-Env V-Sens (TVF Envelope Velocity Sensitivity)	-63–+63	Specifies how keyboard playing dynamics will affect the depth of the TVF envelope. Positive (+) settings will cause the TVF envelope to have a greater effect for strongly played notes, and negative (-) settings will cause the effect to be less.
F-Env T1 V-Sens (TVF Envelope Time 1 Velocity Sensitivity)	-63–+63	This allows keyboard dynamics to affect the Time 1 of the TVF envelope. If you want Time 1 to be speeded up for strongly played notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
F-Env T4 V-Sens (TVF Envelope Time 4 Velocity Sensitivity)	-63–+63	The parameter to use when you want key release speed to control the Time 4 value of the TVF envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
F-Env Time1–4 (TVF Envelope Time 1–4)	0–127	Specify the TVF envelope times (Time 1–Time 4). Higher settings will lengthen the time until the next cutoff frequency level is reached. (For example, Time 2 is the time over which Level 1 will change to Level 2.) 
F-Env Level0–4 (TVF Envelope Level 0–4)	0–127	Specify the TVF envelope levels (Level 0–Level 4). These settings specify how the cutoff frequency will change at each point, relative to the standard cutoff frequency (the cutoff frequency value specified in the TVF screen).

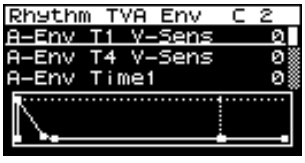
TVA settings (Rhythm TVA/Rhythm TVA Env screen)

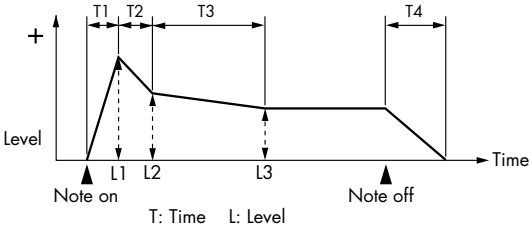
■ Rhythm TVA screen



Parameter	Value	Explanation
Tone Level	0–127	Sets the volume of the rhythm tone. This setting is useful primarily for adjusting the volume balance between rhythm tones. TIP The volume levels of the Waves from which the rhythm tone is composed is set with the Wave Level (p. 121).
Level V-Curve (TVA Level Velocity Curve)	FIX, 1–7	You can select from seven curves that determine how keyboard playing strength will affect the volume. If you do not want the volume of the tone to be affected by the force with which you play the key, set this to "FIXED."  1 2 3 4 5 6 7
Level V-Sens (TVA Level Velocity Sensitivity)	-63–+63	Set this when you want the volume of the tone to change depending on the force with which you press the keys. Set this to a positive (+) value to have the changes in tone volume increase the more forcefully the keys are played; to make the tone play more softly as you play harder, set this to a negative (-) value.
Tone Pan	L64–0–63R	Sets the pan of the tone. "L64" is far left, "0" is center, and "63R" is far right. TIP Set the Pan for Waves comprising the rhythm tones with the Wave Pan (p. 121).
Random Pan Depth	0–63	Use this parameter when you want the stereo location to change randomly each time you press a key. Higher settings will produce a greater amount of change. NOTE This will affect only waves whose Wave Rnd Pan Sw (p. 121) is ON.
Alter (Alternate) Pan Depth	L63–63R	This setting causes panning to be alternated between left and right each time a key is pressed. Higher settings will produce a greater amount of change. "L" or "R" settings will reverse the order in which the pan will alternate between left and right. For example if two tones are set to "L" and "R" respectively, the panning of the two tones will alternate each time they are played. NOTE This will affect only waves whose Alter Pan Sw (p. 121) is ON or REVS.

■ Rhythm TVA Env screen .....



Parameter	Value	Explanation
A-Env T1 V-Sens (TVA Envelope Time 1 Velocity Sensitivity)	-63–+63	This allows keyboard dynamics to affect the Time 1 of the TVA envelope. If you want Time 1 to be speeded up for strongly played notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
A-Env T4 V-Sens (TVA Envelope Time 4 Velocity Sensitivity)	-63–+63	The parameter to use when you want key release speed to control the Time 4 value of the TVA envelope. If you want Time 4 to be speeded up for quickly released notes, set this parameter to a positive (+) value. If you want it to be slowed down, set this to a negative (-) value.
A-Env Time1–4 (TVA Envelope Time 1–4)	0–127	Specify the TVA envelope times (Time 1– Time 4). Higher settings will lengthen the time until the next volume level is reached. (For example, Time 2 is the time over which Level 1 will change to Level 2.)
A-Env Level1–3 (TVA Envelope Level 1–3)	0–127	Specify the TVA envelope levels (Level 1–Level 3). These settings specify how the volume will change at each point, relative to the standard volume (the Tone Level value specified in the TVA screen). 

Output-related settings for the rhythm set and rhythm tones (Rhythm Output screen)

Parameter	Value	Explanation
Rhy Out Assign (Rhythm Output Assign)	MFX, L+R, L, R, TONE	Specifies for each rhythm set how the direct sound will be output. **MFX:** Output in stereo through multi-effects. You can also apply chorus or reverb to the sound that passes through multi-effects. **L+R:** Output to the OUTPUT jacks in stereo without passing through multi-effects. **L, R:** Output to the OUTPUT L jack or OUTPUT R jack in mono without passing through multi-effects. **TONE:** Outputs according to the settings for each tone. * If you've made settings so that sounds are separately routed to the OUTPUT L jack and OUTPUT R jack, but no plug is actually inserted in the OUTPUT R jack, the sounds routed to OUTPUT L and OUTPUT R will be mixed and output from the OUTPUT L jack.
Tone Out (Output) Assign	MFX, L+R, L, R	Specifies how the direct sound of each tone will be output. **MFX:** Output in stereo through multi-effects. You can also apply chorus or reverb to the sound that passes through multi-effects. **L+R:** Output to the OUTPUT jacks in stereo without passing through multi-effects. **L, R:** Output to the OUTPUT L jack or OUTPUT R jack in mono without passing through multi-effects. * If the Rhy Out Assign is set to anything other than "TONE," these settings will be ignored. * When the Str Type has a setting of Type "2"–"10," the outputs of tones 1 and 2 will be combined with tone 2, and the outputs of tones 3 and 4 will be combined with tone 4. For this reason, tone 1 will follow the settings. * If you've made settings so that sounds are separately routed to the OUTPUT L jack and OUTPUT R jack, but no plug is actually inserted in the OUTPUT R jack, the sounds routed to OUTPUT L and OUTPUT R will be mixed and output from the OUTPUT L jack. * Sounds are output to chorus and reverb in mono at all times. * The output destination of the signal after passing through the chorus is set with the Output Select (p. 135).
Tone Out Level (Rhythm Tone Output Level)	0–127	Set the level of the signal that is sent to the output destination specified by Tone Out Assign.
Cho Send (MFX) (Rhythm Tone Chorus Send Level (Output=MFX))	0–127	Specifies the level of the signal sent to the chorus for each rhythm tone if the rhythm tone is sent through MFX.
Rev Send (MFX) (Rhythm Tone Reverb Send Level (Output=MFX))	0–127	Specifies the level of the signal sent to the reverb for each rhythm tone if the rhythm tone is sent through MFX.
Cho Send (nonMFX) (Rhythm Tone Chorus Send Level (Output=non MFX))	0–127	Sets the level of the signal sent to chorus for each rhythm tone if the rhythm tone is not sent through MFX.
Rev Send (nonMFX) (Tone Reverb Send Level (Output=non MFX))	0–127	Sets the level of the signal sent to reverb for each rhythm tone if the rhythm tone is not sent through MFX.

Rhythm Tone Copy

Copies the settings of a rhythm tone to a rhythm tone in the currently selected rhythm set.

From the Rhythm Edit menu screen (p. 117), select "TON COPY." The Rhythm Tone Copy screen will appear.

1. Select the copy-source tone and copy-destination tone.

Parameter	
(1)	Group of the copy-source rhythm set
(2)	Copy-source rhythm set
(3)	Copy-source rhythm tone
(4)	Copy-destination rhythm tone

* The copy-destination rhythm set is the rhythm set that's selected in the temporary area (p. 57).

2. Move the cursor to "COPY" and press [CURSOR/VALUE].
A confirmation message will appear.

3. To execute the copy, select "OK" and press [CURSOR/VALUE].
If you decide not to execute the copy, select "CANCEL" and press [CURSOR/VALUE].
Once the copy has been completed, you'll be returned to the previous screen.

Rhythm Tone Initialize

Returns the settings of just a specific key in the current rhythm set to their initial values

From the Rhythm Edit menu screen (p. 117), select "TON INIT." The Rhythm Tone Init screen will appear.

1. Turn [CURSOR/VALUE] to select the key (A0–C8) that you want to initialize.

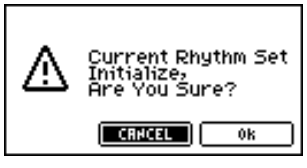
2. Move the cursor to "INIT" and press [CURSOR/VALUE].
A confirmation message will appear.

3. To execute the initialization, select "OK" and press [CURSOR/VALUE].
If you decide not to initialize, select "CANCEL" and press [CURSOR/VALUE].
When initialization is finished, you'll be returned to the previous screen.

Rhythm Set Initialize

Returns the settings of the current rhythm set to their initial values

From the Rhythm Edit menu screen (p. 117), select "RHY INIT." A confirmation message will appear.



1. To execute the initialization, select "OK" and press [CURSOR/VALUE].
If you decide not to initialize, select "CANCEL" and press [CURSOR/VALUE].
When initialization is finished, you'll be returned to the previous screen.

Rhythm Set Write

Saves the current rhythm set as user data.

From the Rhythm Edit menu screen (p. 117), select "Write" to access the Rhythm Set Name screen.
In this screen you can assign a name (rhythm set name) of up twelve characters to the rhythm set you're going to save.

1. **Move the cursor to the location where you want to enter a character, and press [CURSOR/VALUE].**

2. **Turn [CURSOR/VALUE] to select the desired character, then press [CURSOR/VALUE] to enter that character.**
   You can press [MENU] to view convenient functions for text entry.
   Press [MENU] once again to return to the previous screen.

Function	Explanation
INSERT	Press [CURSOR/VALUE] to insert a space (blank) at the cursor location.
DELETE	Press [CURSOR/VALUE] to delete the character at the cursor location; subsequent characters will move forward.
UNDO	Revert to the unedited rhythm set name.

3. **Repeat steps 1 and 2 as many times as necessary.**

4. **When you've finished entering the rhythm set name, move the cursor to "WRITE" and press [CURSOR/VALUE].**
   The Rhythm Set Write screen will appear.

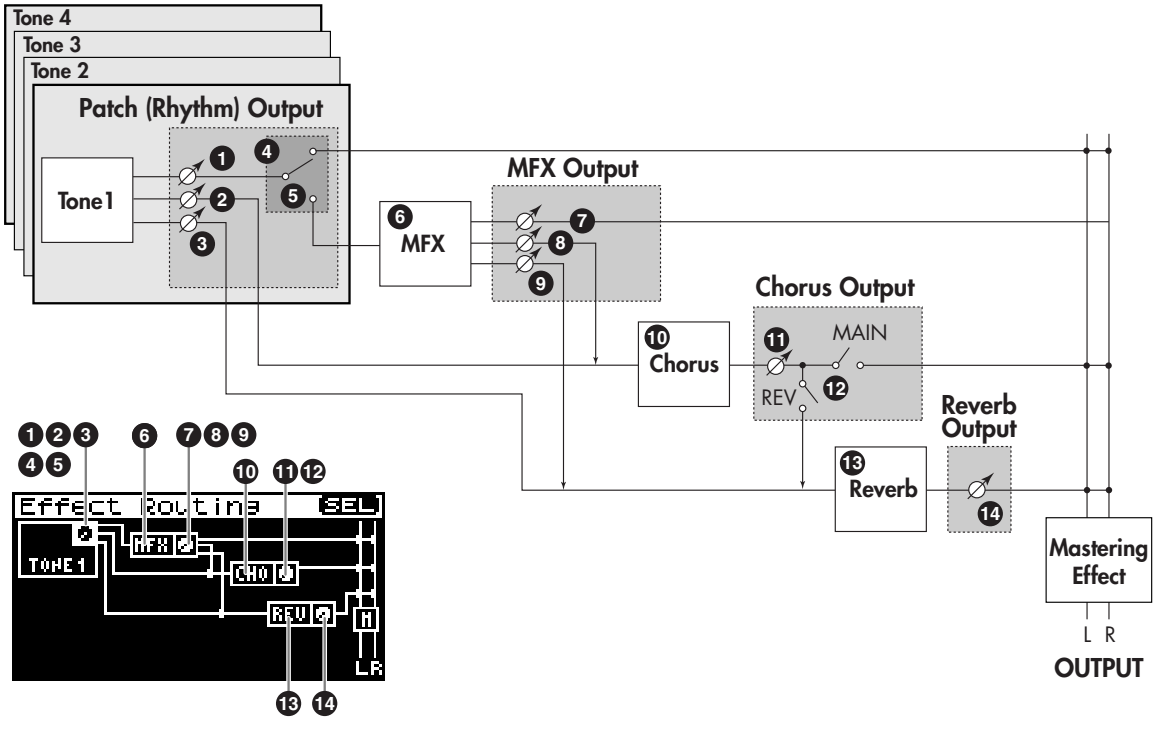
5. **Turn [CURSOR/VALUE] to select the save-destination rhythm set, then press [CURSOR/VALUE].**
   A confirmation message will appear.

6. **To write the rhythm set into memory, select "OK" and press [CURSOR/VALUE].**
   If you decide you don't want to carry out the write, select "CANCEL" and press [CURSOR/VALUE].
   Once the data has been written, you'll be returned to the previous screen.

Editing the effects (Patch/Rhythm Set)

In Patch mode you can use multi-effects, chorus, and reverb.

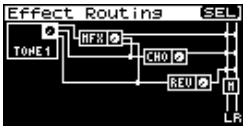
■ Signal flow

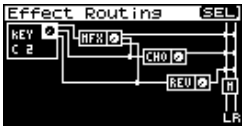


❶–❺	If the patch type is Patch, make these settings in the Patch Output screen. ❶: Tone Out Level, ❷: Cho Send (MFX) / Cho Send (non MFX), ❸: Rev Send (MFX) / Rev Send (non MFX), ❹: Pat Out Assign, ❺: Tone Out Assign	p. 108
	If the patch type is Rhythm, make these settings in the Rhythm Output screen. ❶: Tone Out Level, ❷: Cho Send (MFX) / Cho Send (non MFX), ❸: Rev Send (MFX) / Rev Send (non MFX), ❹: Rhy Out Assign, ❺: Tone Out Assign	p. 129
❻	Make these settings in the MFX screen. • Select the multi-effect type and edit the parameters.	p. 134
❼–❾	Make these settings in the MFX Output screen. ❼: Output Level, ❽: Chorus Send Level, ❾: Reverb Send Level	p. 135
❿	Make these settings in the Chorus screen. • Select the chorus type and edit the parameters.	p. 135
⓫–⓬	Make these settings in the Chorus Output screen. ⓫: Output Level, ⓬: Output Select	p. 135
⓭	Make these settings in the Reverb screen. • Select the reverb type and edit the parameters.	p. 136
⓮	Make these settings in the Reverb Output screen. • Output Level	p. 136

■ Procedure

1. **In the Patch Edit screen, press [EFFECTS].**
   The [EFFECTS] indicator will light, and the Effect Routing screen will appear.





2. **Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.**
3. **Press [CURSOR/VALUE] to highlight the value.**
   If a parameter has a "SELECT" indication in the value field, you can press [CURSOR/VALUE] to access the setting screen.
4. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**
5. **When you've finished editing, press [EXIT].**
   The Patch Edit screen will appear.

■ Menu screens for effect editing

From the Effect Edit screen, you can press [MENU] to access the Patch Effect menu screen or Rhythm Effect menu screen.

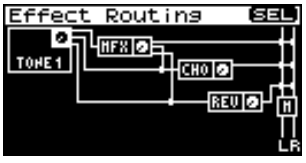
The Patch Effect menu screen and Rhythm Effect menu screen are structured as shown at the right.

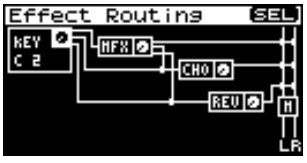
You can turn [CURSOR/VALUE] to the right or left to switch between screens.

Press [MENU] once again to return to the previous screen.

Parameter	Value	Explanation
MFX (MFX Switch)	OFF, ON	Specifies whether MFX will be used (ON) or not used (OFF).
CHO (Chorus Switch)	OFF, ON	Specifies whether chorus will be used (ON) or not used (OFF).
REV (Reverb Switch)	OFF, ON	Specifies whether Reverb will be used (ON) or not used (OFF).
MST (Mastering Effect Switch)	OFF, ON	Specifies whether Mastering Effect will be used (ON) or not used (OFF).
MFX CTRL (MFX Control)		Edits MFX control settings. Press [CURSOR/VALUE] to access the MFX Control screen (p. 137).
Write (Patch/Rhythm Set Write)		Saves the current patch or rhythm set as user data. Press [CURSOR/VALUE] to access the Patch Name screen (p. 116) or Rhythm Set Name screen (p. 131).
System		Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility		Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play		When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)		Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)		Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Selecting the item to edit (Effect Routing screen)





Parameter	Explanation
Tone ⊡ (Tone Output) * Patch Type: Patch	Edits output-related settings for the patch/tone. By moving the cursor to ⊡ and pressing [CURSOR/VALUE] you can move to the Patch Output screen (p. 108).
Key ⊡ (Rhythm Output) * Patch Type: Rhythm	Edits output-related settings for the rhythm set/rhythm tone. By moving the cursor to ⊡ and pressing [CURSOR/VALUE] you can move to the Rhythm Output screen (p. 129).
MFX	Edits multi-effect settings. Press [CURSOR/VALUE] to access the MFX screen (p. 134).
MFX ⊡ (MFX Output)	Edits settings for the multi-effect output. By moving the cursor to ⊡ and pressing [CURSOR/VALUE] you can move to the MFX Output screen (p. 135).
CHO (Chorus)	Edits chorus settings. Press [CURSOR/VALUE] to access the Chorus screen (p. 135).
CHO ⊡ (Chorus Output)	Edits settings for the chorus output. By moving the cursor to ⊡ and pressing [CURSOR/VALUE] you can move to the Chorus Output screen (p. 135).
REV (Reverb)	Edits reverb settings. Press [CURSOR/VALUE] to access the Reverb screen (p. 136).
REV ⊡ (Reverb Output)	Edits settings for the reverb output. By moving the cursor to ⊡ and pressing [CURSOR/VALUE] you can move to the Reverb Output screen (p. 136).
M (Mastering Effect)	Edits mastering effect settings. Press [CURSOR/VALUE] to access the Mastering Effect screen (p. 181).

Multi-effect settings (MFX/MFX Output screen)

■ MFX screen .....

Parameter	Value	Explanation
00: THRU–78: SYMRESONANCE (MFX Type)		Selects the type of multi-effect used by MFX. Choose "00: THRU" if you don't want to apply a multi-effect.
Parameters for each MFX type		Edit the parameters for the selected MFX type. Refer to "Multi-Effects Parameter (MFX1–3, MFX)" (p. 192).

■ MFX Output screen

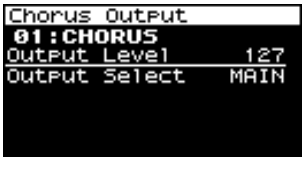
Parameter	Value	Explanation
Output Level	0–127	Adjusts the volume of the sound that has passed through the multi-effects. If you're applying a multi-effect, this specifies the depth of the multi-effect. If you're not applying a multi-effect, this specifies the volume of the original sound.
Chorus Send Level	0–127	Adjusts the amount of chorus for the sound that passes through multi-effects. If you don't want to add the Chorus effect, set it to "0.'
Reverb Send Level	0–127	Adjusts the amount of reverb for the sound that passes through multi-effects. If you don't want to add the Reverb effect, set it to "0."

Chorus settings (Chorus/Chorus Output screens)

■ Chorus screen

Parameter	Value	Explanation
00: OFF–03: GM2 CHORUS (Chorus Type)		Selects the types of chorus. Choose "00: OFF" if you don't want to apply a chorus.
Parameters for each chorus type		Edit the parameters for the selected chorus type. Refer to "Chorus Parameters" (p. 219).

■ Chorus Output screen



Parameter	Value	Explanation
Output Level	0–127	Adjusts the volume of the sound that has passed through chorus.
Output Select	MAIN, REV, M+R	Specifies how the sound routed through chorus will be output. **MAIN:** Output to the OUTPUT jacks in stereo. **REV:** Output to reverb in mono. **M+R:** Output to the OUTPUT jacks in stereo, and to reverb in mono.

Reverb settings (Reverb/Reverb Output screens)

■ Reverb screen

Parameter	Value	Explanation
00: OFF–03: GM2 REVERB (Reverb Type)		Selects the types of reverb. Choose "00: OFF" if you don't want to apply a reverb.
Parameters for each reverb type		Edit the parameters for the selected reverb type. Refer to "Reverb Parameters" (p. 220).

■ Reverb Output screen

Parameter	Value	Explanation
Output Level	0–127	Adjusts the volume of the sound that has passed through reverb.

Controlling the multi-effects via MIDI (MFX Control screen)

Multi-Effects Control

If you wanted to change the volume of multi-effects sounds, the delay time of Delay, and the like, using an external MIDI device, you would need to send System Exclusive messages-MIDI messages designed exclusively for the SonicCell. However, System Exclusive messages tend to be complicated, and the amount of data that needs to be transmitted can get quite large.

For that reason, a number of the more typical of the SonicCell's multi-effects parameters have been designed so they accept the use of Control Change (or other) MIDI messages for the purpose of making changes in their values. For example, you can use the Pitch Bend lever to change the amount of distortion, or use the keyboard's touch to change the delay time of Delay. The parameters that can be changed are predetermined for each type of multi-effect; among the parameters described in "Multi-Effects Parameter (MFX1–3, MFX)" (p. 192), these are indicated by a "#."

The function that allows you use MIDI messages to make these changes in realtime to the multi-effects parameters is called the Multi-effects Control.

You can use up to four multi-effect controls in a patch or rhythm set.

When the multi-effects control is used, you can select the amount of control (Sens) applied, the parameter selected (Dest), and the MIDI message used (Source).

TIP

By using the Matrix Control (p. 95) instead of the Multi-effects Control, you can also change the parameters of some popular multi-effects in realtime.

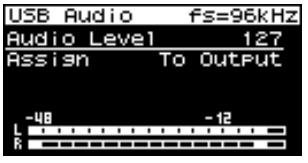
Parameter	Value	Explanation
Control 1–4 Src (Source)	OFF, CC01–CC31, CC33–95, PITCH BEND, AFTERTOUCH, SYS CTRL1–4	Sets the MIDI message used to control the multi-effects parameter with the multi-effects control. **OFF:** Multi-effects control will not be used. **CC01–31, 33–95:** Controller numbers 1–31, 33–95 **PITCH BEND:** Pitch Bend **AFTERTOUCH:** Aftertouch **SYS CTRL1–4:** Use the System Control setting (p. 179).
Control 1–4 Dest (Destination)	Refer to "Multi-Effects Parameter" (p. 192)	Sets the multi-effects parameters to be controlled with the multi-effects control. The multi-effects parameters available for control will depend on the multi-effects type.
Control 1–4 Sens	-63–+63	Sets the amount of the multi-effects control's effect that is applied. If you wish to modify the selected parameter in a positive (+) direction—i.e., a higher value, toward the right, or faster, etc.—from its current setting, select a positive (+) value. If you wish to modify the selected parameter in a negative (-) direction—i.e., a lower value, toward the left, or slower, etc.—from its current setting, select a negative (-) value. Higher numbers produce a greater amount of change.

Audio Connections

Using the SonicCell with your computer (USB AUDIO)

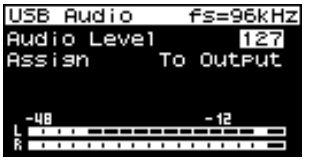
Basic operation

1. **Press [USB AUDIO] so its indicator is lit.**
   The USB Audio screen will appear.



2. **Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.**

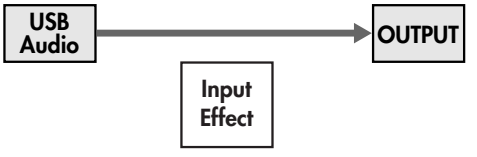
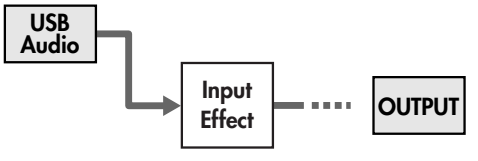
3. **Press [CURSOR/VALUE] to highlight the value.**



4. **Turn [CURSOR/VALUE] to edit the value.**

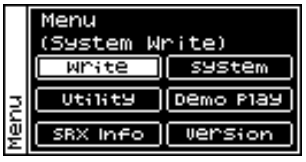
5. **When you've finished editing the value, press [CURSOR/VALUE].**

MEMO
To save the setting, press [MENU] to access the menu screen, and choose "Write" (System Write) to execute the Write operation (System Write: p. 150).

Parameter	Value	Explanation
Audio level	0–127	This specifies the volume of the input from USB, and the volume at which the SMF/Audio File Player (p. 167) will play audio files.
Assign	To Output, To Input FX	**Specifies where the input signal is to be sent.** **To Output:** Sent to OUTPUT.  **To Input FX:** Sent to the input effect.  MEMO Use the "In/Out Routing" (p. 144) to specify how the signal that has passed through the input effect will be output.

NOTE
Input/output of USB audio and MIDI messages cannot be used at the same time that the SMF/Audio File Player (p. 167) is playing.

Accessing the Menu screen



From the USB Audio screen, press [MENU] to access the Menu screen.
Press [MENU] once again to return to the USB Audio screen.

Parameter	Explanation
Write (System Write)	Saves the current settings as system settings (p. 150).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Inputting sound from an external device (INPUT)

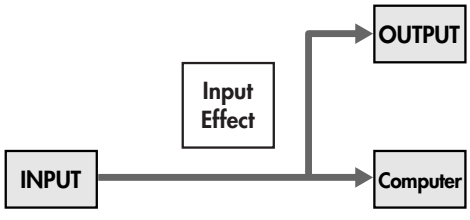
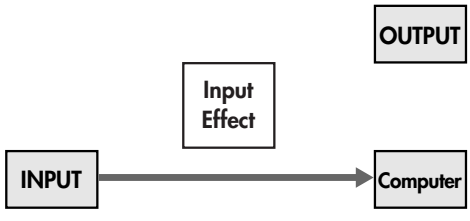
Basic operation

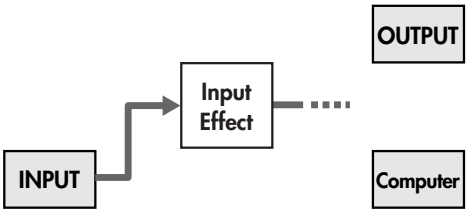
1. **Press [INPUT] so its indicator is lit.**
   The Input screen will appear.

2. **Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.**
3. **Press [CURSOR/VALUE] to highlight the value.**

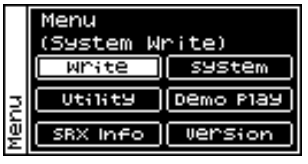
4. **Turn [CURSOR/VALUE] to edit the value.**
5. **When you've finished editing the value, press [CURSOR/VALUE].**

MEMO
To save the setting, press [MENU] to access the menu screen, and choose "Write" (System Write) to execute the Write operation (System Write: p. 150).

Parameter	Value	Explanation
Phantom Power	OFF, ON	Turns phantom power on/off. Turn this "ON" if you've connected a phantom-powered condenser mic to the MIC INPUT jack. **NOTE** • You must turn phantom power "OFF" unless a condenser mic that requires phantom power is connected. Supplying phantom power to a dynamic mic will cause malfunctions. For details on mic specifications, refer to the owner's manual for the mic you're using. • Before you switch phantom power on/off, you must turn the front panel [VOLUME] knob to "0." If you turn phantom power on/off with the volume raised, high-volume noise will be produced, possibly damaging your amp or speakers. • When you turn the power on, the phantom power will always be OFF.
Assign	To COM+Output, To COM, To Input FX	**Specifies where the input signal is to be sent.** **To COM+ Output:** Sent to computer and OUTPUT.  **To COM:** Output to the computer. 

Parameter	Value	Explanation
Assign	To COM+Output, To COM, To Input FX	**To Input FX:** Sent to the input effect.  MEMO Use the "In/Out Routing" (p. 144) to specify how the signal that has passed through the input effect will be output.

Accessing the Menu screen



From the Input screen, press [MENU] to access the Menu screen.
Press [MENU] once again to return to the Input screen.

Parameter	Explanation
Write **(System Write)**	Saves the current settings as system settings (p. 150).
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info **(SRX Information)**	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version **(Version Information)**	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Input/output and effect settings (In/Out Routing)

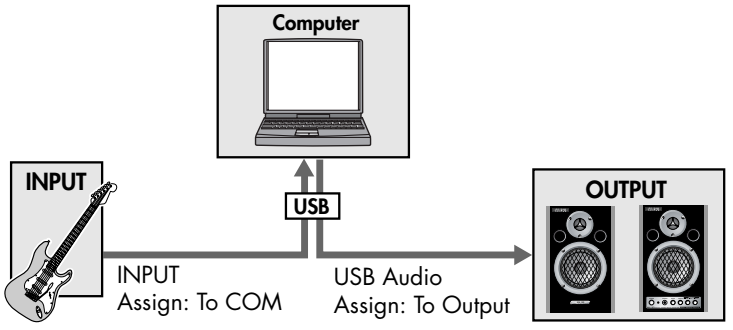
You can specify how the input signal from an external source or USB will be processed by the effects and then output when the [INPUT] or [USB AUDIO] indicator is lit. These settings are called "In/Out Routing."

Here are some examples of what you can do.

You can use your computer to apply an effect to the audio received via INPUT

You can use an effect on your computer to process the sound of your guitar, and listen to the resulting sound from monitors (speakers) connected to OUTPUT.

(Example)



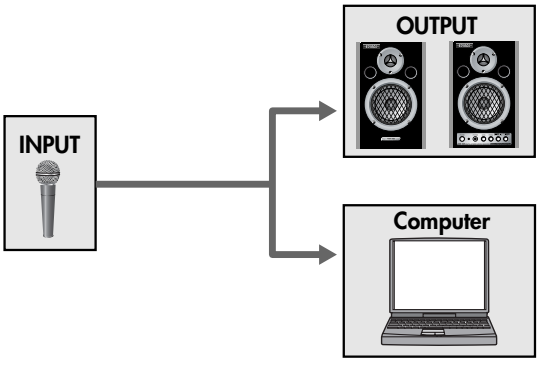
Settings

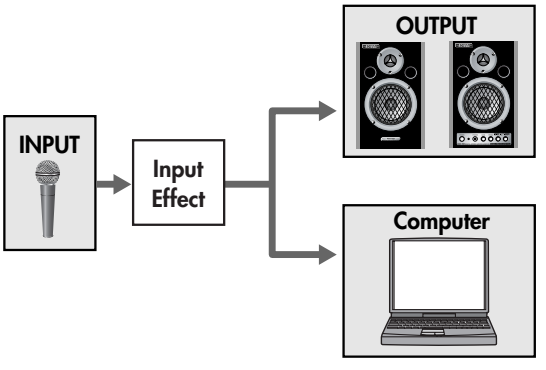
INPUT: Assign (p. 142) = To COM
USB Audio: Assign (p. 140) = To Output

Use an "input effect" that's dedicated to INPUT/USB

The sound that's received at INPUT or USB can be sent directly out without change, or processed by a dedicated "input effect."

(Example)





Settings

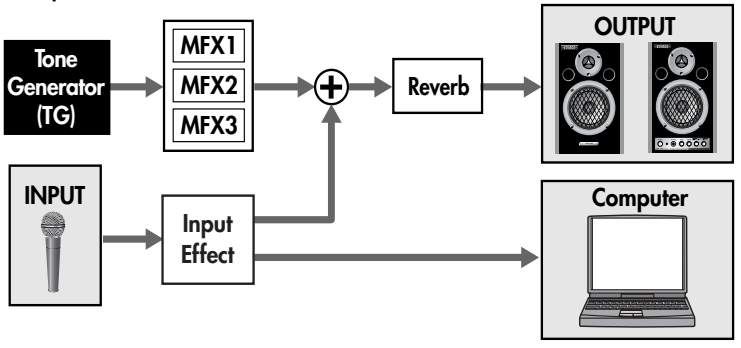
INPUT: Assign (p. 142) = To COM+ Output

Assign (p. 142) = To Input FX
Input Effect (p. 147)

Listen to the effect-processed sound from your speakers, while recording the unprocessed sound on your computer

You can use the chorus/reverb that's assigned to a performance/patch. In other words, the effect will depend on the performance/patch that's selected.
You can also use the mastering effect. In addition, you can choose how the signal that passes through the input effect will be output. For example, you could listen to the vocal with reverb, while recording the vocal "dry" (without reverb) for later processing.

(Example)



Settings

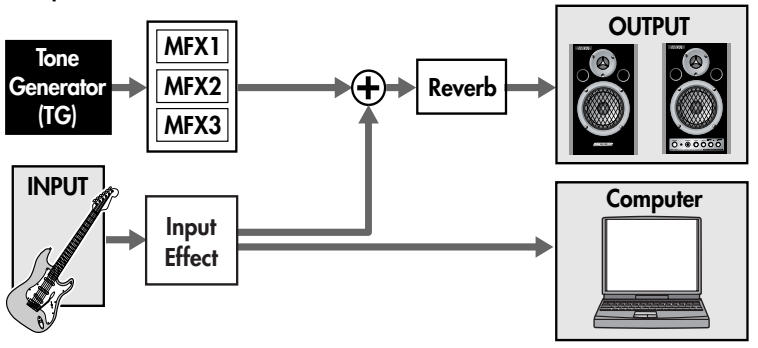
Tone Generator: Performance mode
INPUT: Assign (p. 142) = To Input FX
To Computer: Type (p. 148) = Input FX

Input Effect (p. 147)
MFX1–3 (p. 78)
Reverb (p. 79)

Applying an effect such as distortion to the sound of a guitar connected to INPUT

When using the sound module in Performance mode, the MFX3 (multi-effect 3) of the performance can be used as an effect for the INPUT/USB input. Since the multi-effects provided include guitar-type effects, such as distortion, overdrive, and guitar amp simulator, this is convenient when you want to apply an effect to the guitar that's connected to INPUT.
You can also record the distorted guitar sound on your computer, or apply reverb as well.

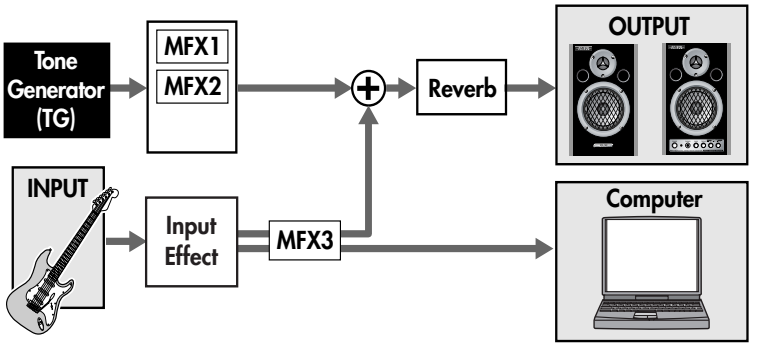
(Example)



Settings

Tone Generator: Performance mode
INPUT: Assign (p. 142) = To Input FX
To Computer: Type (p. 148) = Input FX
MFX3 Location: Type (p. 149) = TG

Input Effect (p. 147)
MFX1–3 (p. 78)
Reverb (p. 79)



Settings

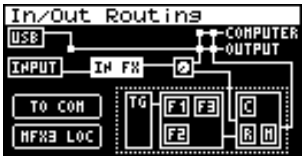
Tone Generator: Performance mode
INPUT: Assign (p. 142) = To Input FX
To Computer: Type (p. 148) = Input FX
MFX3 Location: Type (p. 149) = Input FX

Input Effect (p. 147)
MFX1–3 (p. 78)
Reverb (p. 79)

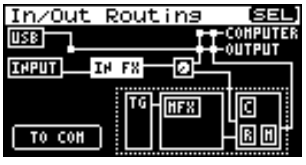
■ Procedure

1. **Press [INPUT] or [USB AUDIO] so its indicator is lit.**
   The Input screen or USB Audio screen will appear.
2. **Press [EFFECTS] so its indicator is lit.**
   The In/Out Routing screen will appear.

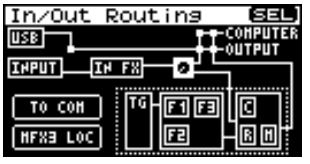
   (Performance mode)



   (Patch mode)



3. **Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.**

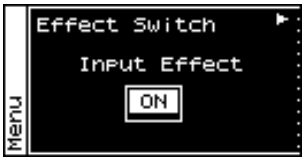


4. **Turn [CURSOR/VALUE] to move the cursor to the parameter you want to edit.**

5. **Press [CURSOR/VALUE] to highlight the value.**
6. **Turn [CURSOR/VALUE] to edit the value.**
7. **When you've finished editing, press [CURSOR/VALUE].**
   Press [EXIT] or [EFFECTS] to access the In/Out Routing screen.

■ Menu screens when editing In/Out Routing

If you're in a screen that's related to the In/Out routing, pressing [MENU] will bring up the Effect Switch screen. The Effect Switch screen is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left.
Press [MENU] once again to return to the previous screen.



Parameter	Value	Explanation
Input Effect (Input Effect Switch)	OFF, ON	Specifies whether input effects will be used (ON) or not used (OFF).
Write (System Write)		Saves the current settings as system settings (p. 150).
System		Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility		Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play		When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)		Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)		Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

Selecting the item to edit (In/Out Routing screen)

Parameter	Explanation
IN FX (Input Effect)	Edits the input effect settings. Press [CURSOR/VALUE] to access the Input Effect screen.
(Input Effect output)	Edits the output settings for the input effect. By moving the cursor to and pressing [CURSOR/VALUE] you can move to the Input FX Output screen (p. 148).
F3 (MFX3)	Edits the MFX3 settings. Press [CURSOR/VALUE] to access the MFX 3 screen (p. 78). * This is not shown in Patch mode. * This is not shown if the MFX 3 Location "Type" (p. 149) is set to TG.
TO COM (To Computer)	Selects the signal that is sent to the computer. Press [CURSOR/VALUE] to access the To Computer screen (p. 148).
MFX3 LOC (MFX3 Location)	Specifies how MFX3 will be used. Press [CURSOR/VALUE] to access the MFX 3 Location screen (p. 149). * This is not shown in Patch mode.

Input effect settings (Input Effect/Input FX Output screen)

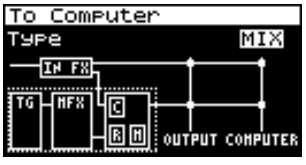
■ Input Effect screen.....

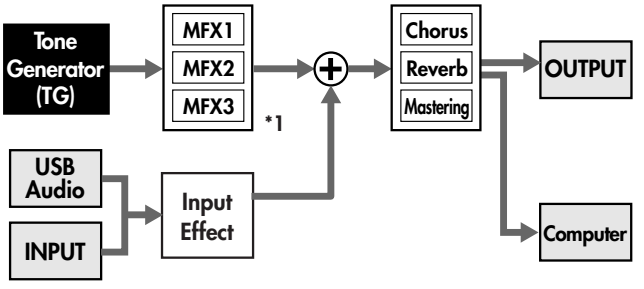
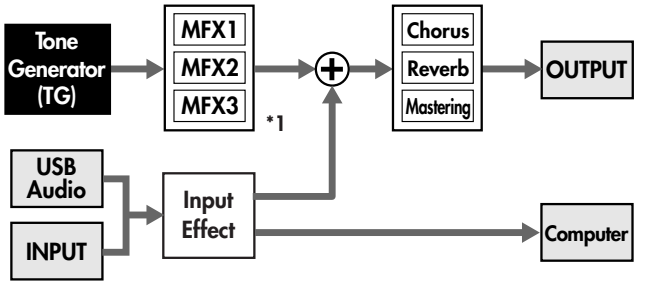
Parameter	Value	Explanation
Input effect type	Selects the input effect type. **1: EQUALIZER** Adjusts the tone of the low-frequency and high-frequency ranges. **2: ENHANCER** Modifies the harmonic content of the high-frequency range to add sparkle to the sound. **3: COMPRESSOR** Restrains high levels and boosts low levels to make the overall volume more consistent. **4: LIMITER** Compresses the sound when it exceeds a specified volume, to keep distortion from occurring. **5: NOISE SUPPRESSOR** Suppresses noise during periods of silence. **6: CENTER CANCELER** Removes the sounds that are localized at the center of the stereo input. This is a convenient way to eliminate a vocal.	
Parameters for each input effect type	Here you can edit the parameters of the selected input effect type. Refer to "Input Effect Parameters" (p. 221).	

■ Input FX Output screen .....

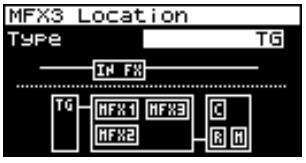
Parameter	Value	Explanation
Output Level	0–127	Set the level of the signal that is sent to the OUTPUT.
Chorus Send Level	0–127	Adjusts the amount of chorus for the sound. If you don't want to add the Chorus effect, set it to "0."
Reverb Send Level	0–127	Adjusts the amount of reverb for the sound. If you don't want to add the Reverb effect, set it to "0."

Selecting the signal sent to your computer (To Computer screen)

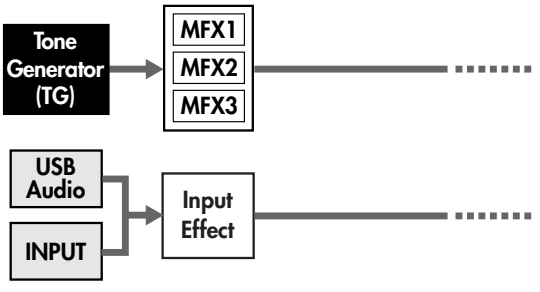
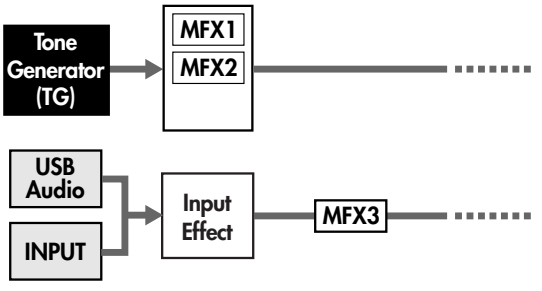


Parameter	Value	Explanation
Type	MIX, Input FX	**Selects the signal sent to your computer.** **MIX:** The signals of the internal tone generator and external input (USB audio, INPUT) will be sent.  **Input FX:** The external input signal (USB audio, INPUT) unprocessed by the chorus/reverb/mastering effects will be sent.  *1 If you're in Patch mode, this will be only MFX.

Specifies how MFX3 will be used (MFX3 Location screen)



NOTE
This screen won't appear in Patch mode.

Parameter	Value	Explanation
Type	TG, Input FX	**Specifies how MFX3 will be used.** **TG:** MFX3 will be used as the effect applied to the SonicCell's tone generator (TG).  **Input FX:** MFX3 will be connected following the input effect. You'll be able to use MFX3 on the audio input via INPUT and USB.  **NOTE** If this is set to Input FX, you won't be able to use MFX3 on the performance. **Editing the MFX3 settings** If you've selected the Input FX setting, the In/Out Routing screen will show "F3." By choosing "F3" you can move to the MFX3 screen and edit the MFX3 settings. However, this will edit the MFX3 settings of the currently selected performance.

Saving the MFX3 settings

If you've edited the MFX3 effect type or parameter values, those settings will be saved as settings of the **currently selected performance**.
To save the settings, from the MFX3 screen, press [MENU] to access the menu screen, and then choose "Write" (Performance Write). (Performance Write: p. 73)

* In/Out routing settings are saved as system settings. (System Write: p. 150)

System Write

This saves the current system settings.

In the menu screen (p. 141, p. 143, p. 146), choose “Write” (System Write) and you'll see a confirmation message.

1. **If you want to write the settings, select “OK” and press [CURSOR/VALUE].**
   If you decide not to write the settings, select “CANCEL” and press [CURSOR/VALUE].
   Once the settings have been written, you’ll be returned to the previous screen.

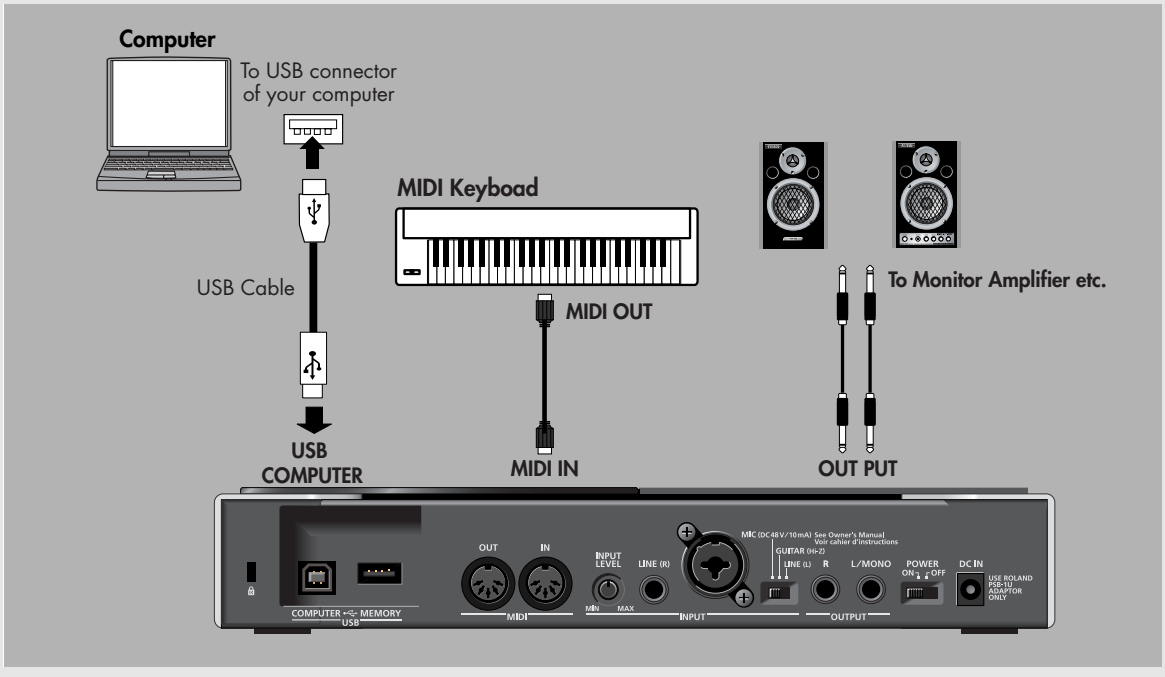
Using the plug-in version of SonicCell Editor

This chapter explains how to use the plug-in version of SonicCell Editor as a plug-in module in your VSTi or AU compatible host application.
The plug-in version of SonicCell Editor is a plug-in module that lets you edit the SonicCell's parameters from within your host application. The results of your editing can be saved in a project file of your host application.

NOTE

- In Performance mode, part 'n' of the SonicCell will normally be MIDI channel 'n'.
- In Patch mode, the SonicCell's MIDI channel will normally be 1.
- If you've changed the MIDI channel setting, please substitute the actual channel for any MIDI channel appearing in this explanation.
- Functionality may be limited depending on the host application you're using. For details, refer to the owner's manual of your host application.
- You can't use the stand-alone version and plug-in version of SonicCell Editor at the same time.
- The SonicCell Editor plug-in version cannot be plugged into multiple tracks of the same project at the same time.
- The SonicCell Editor plug-in version cannot be plugged into multiple projects at the same time.

Connection example



SONAR LE

Installing the driver and SonicCell Editor

Before you continue, install the driver, SonicCell Editor, Librarian, and Playlist Editor as described on p. 33–p. 36.

- The stand-alone version of the editor, the librarian, and the playlist editor will be installed in C:\Program Files\Roland\SonicCellEditor.
- The plug-in version of the editor (subsequently referred to as "the plug-in") will be copied to C:\Program Files\Roland.

Installing SONAR LE

Here's how to install the included SONAR LE into your computer.

NOTE

In order to perform the following procedure, you'll need to log onto Windows as a user whose account type is Administrator.

1. **Place the SONAR LE installation CD-ROM into your CD-ROM drive.**

   The installer will start up automatically. Proceed with the installation as directed by the on-screen instructions.

* If the installer doesn't start up automatically, please start it up using the following procedure.

   1. From the Windows Start menu, choose "My Computer."
   2. The drives detected by your computer will be displayed; double-click the CD-ROM drive.

Windows Vista users:

The message "An unidentified program wants access to your computer" will appear. Click [Allow].

* When the "Installation Complete" dialog box appears, clear the "Launch SONAR LE" check box, and click [Finish]. If you failed to clear the check box and the program started up, close SONAR LE.

Windows Vista users:

If you're using SONAR LE on Windows Vista, you'll need to make user account control settings after installing SONAR LE.

1. **After installing SONAR LE, right-click the "SONAR LE" icon that was created on your desktop, and choose "Properties" from the menu that appears.**
2. **Click the "Compatibility" tab to open the Compatibility page.**
3. **In the "Privilege level" area, select "Run this program as an administrator."**
4. **Click "OK" to close Properties.**

NOTE

When you start up SONAR LE on Windows Vista, a message of "An unidentified program wants access to your computer" will appear. Click [Allow] to start up SONAR LE.

Updating the VST Adapter

In order to register the software in SONAR LE, you'll need to update VST Adapter.

NOTE

In order to perform the following procedure, you'll need to log onto Windows as a user whose account type is Administrator.

1. **Close all currently running software.**
2. **In the SonicCell Editor CD, navigate to the "Sonar Utility\VST Adapter updater" folder and double-click "VSTAdapter453Update_E.exe" to start up the installer.**

   Windows Vista users:

   The message "An unidentified program wants access to your computer" will appear; click [Allow].
3. **Proceed with the installation as directed by the on-screen instructions.**
4. **When the update is complete, the "Wrap VST Plugins" will run automatically.**
   In this case, click [Cancel] to exit the wizard.

Initial MIDI and audio device settings for SONAR LE

1. **Double-click the SONAR LE icon on your desktop to start up SONAR LE.**

   The "Wave Profiler (WDM Kemel Streaming)" dialog box will appear.
2. **Click [Yes] to execute audio device detection. When the process has been completed, click [Close].**

* If the "Wave Profiler(WDM Kemel Streaming)" dialog box does not open automatically, select the SONAR LE "Options" menu command "Audio" to open the "Audio Options" dialog box, and in the "General" tab, click [Wave Profiler (WDM Kemel Streaming)].

3. **The "Online Registration" dialog box will open. Select "Please remind me to register later.," and click [OK].**

   For details on activation, refer to online Help for SONAR LE.
4. **The "Tip of the Day" will appear; click [Close] to close the dialog box.**

5. A message telling you that "No MIDI Outputs Selected"; click [Choose MIDI Outputs Now] to open the "MIDI Devices" dialog box.

* If the message "No MIDI Outputs Selected" does not appear, select SONAR LE's Option menu command "MIDI Devices" to open the "MIDI Devices" dialog box.

6. In the MIDI Devices dialog box, click to make only the following items highlighted.

Input	Output
Roland SonicCell	Roland SonicCell

7. Once you've made the above selections, click [OK] to close the dialog box.

8. The "Quick Start" dialog box will open; click "Close."
SONAR LE has now started up. Next, you need to make the audio device settings.

9. From the "Options" menu, select the "Audio" command to open the "Audio Options" dialog box.

10. Open the "Drivers" tab.
For both "Input Drivers" and "Output Drivers," click the device names so that only "Roland SonicCell" is highlighted for each.

11. Once you've made the device settings, click [OK] to close the dialog box.

* If a message suggests that you restart SONAR LE, restart SONAR LE.

12. Once again, select the "Options" menu command "Audio" to open the "Audio Options" dialog box.

13. In the "General" tab, set "Audio Driver Bit Depth" to "24."
This completes the device settings.

14. In the "Audio Options" dialog box, click [OK] to close the dialog box.

* If a message suggests that you restart SONAR LE, restart SONAR LE.

Registering the plug-in in SONAR LE

For details about registering a plug-in in SONAR LE, refer to the online help for Cakewalk VST Adapter.

1. Open the "Cakewalk VST Configuration Wizard: Search Paths" dialog box.

Windows XP users

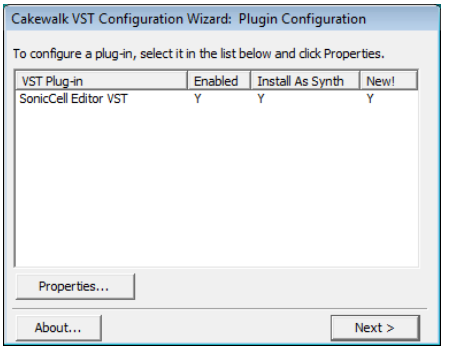
From the Start menu, choose "All Programs" - "Cakewalk" - "Cakewalk VST Adapter 4" - "Cakewalk VST Adapter 4," and click [Next].

Windows Vista users

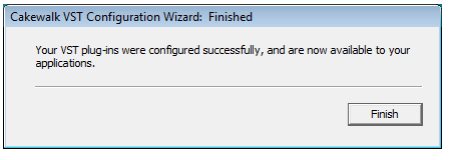
From the Start menu, choose "All Programs" - "Cakewalk" - "Cakewalk VST Adapter 4," and then inside it right-click "Cakewalk VST Adapter 4."
From the menu that appears, choose [Run as administrator].
A message stating that "An unidentified program wants access to your computer" will appear; click [Allow] and click [Next].

2. Click [Add], add "(the folder to which you copied the plug-in)\Roland," and then click [Next].
Normally, this will be C:\Program Files\Roland.
If a message indicates "MIDI devices aren't set up correctly," click [OK].

3. When the "Cakewalk VST Configuration Wizard: Plugin Configuration" dialog box opens, click [Next].



4. When the "Cakewalk VST Configuration Wizard: Finished" dialog box appears, click [Finish].



Connections and settings

1. **Use a USB cable to connect the SonicCell to your computer.**
2. **If necessary, use a MIDI cable to connect your MIDI keyboard to the SonicCell.**
3. **Turn on the power of the SonicCell.**
   If the SonicCell is not connected correctly, SonicCell Editor may not operate correctly.
   Make sure that you switch on the SonicCell's power before you start up SONAR LE.

* Don't disconnect the USB cable connected to the SonicCell while SONAR LE is running.

Settings for the SonicCell

If you've connected a MIDI keyboard or other MIDI device to the SonicCell's MIDI IN, set the USB-MIDI Thru (p. 177) setting on the SonicCell module to ON.
If this is ON, MIDI messages arriving at MIDI IN will be sent without change to your computer via USB MIDI.

Settings for SONAR LE

Here we will use the SonicCell as a USB-MIDI interface for SONAR LE. Turn on the MIDI Thru setting.
If this is on, the MIDI messages received by SONAR LE will be sent back to the SonicCell's sound generator.
For details on SONAR LE settings, refer to th online help for SONAR LE.

1. **Start up SONAR LE.**
2. **Specify the SonicCell as the USB-MIDI interface for SONAR LE.**
   For details on how to make this setting, refer to the online help for SONAR LE.
3. **From the menu, choose "Options" - "Global" to open the "Global Options" dialog box.**
4. **Select the "General" tab.**
5. **Select the "Always Echo Current MIDI Track" check box, and click [OK].**

Starting up SonicCell Editor

1. **Start up SONAR LE.**
2. **From the menu, choose "File" - "Close" to close the project that was loaded at start-up.**
3. **From the menu, choose "File" - "New" to open the "New Project File" dialog box.**
4. **Choose "Blank (no tracks or buses)" as the template, and click [OK].**
5. **From the menu, choose "Insert" - "Audio Track" to add an audio track.**
6. **Right-click the FX field located at the right of the Track Pane of the audio track.**
7. **From the menu that appears, choose "DXi Synth" - "VST SonicCell Editor VST."**
   The plug-in version of SonicCell Editor will start up.
8. **If a message indicates "MIDI devices aren't set up correctly," click [OK].**
9. **In SonicCell Editor, select the menu button "Setup" - "Set Up MIDI Devices" to open the "Set Up MIDI Devices" dialog box.**
10. **In SonicCell Input/Output, choose "Roland SonicCell" and click [OK].**
11. **In SonicCell Editor, click [READ].**
    This will load the settings from the SonicCell into the editor.

NOTE

Steps 8–11 are needed only when starting the editor for the first time. The second and subsequent times, the SonicCell settings will be loaded into the editor from the port you specified.

Adding a MIDI track

1. **From the menu, choose "Insert" - "MIDI Track" to add a MIDI track.**
2. **Specify the channel of the MIDI track.**

   If using Performance mode:

   As the MIDI track's input, choose "Roland SonicCell" - "MIDI Ch. n (the number of the part you will record)."
   As the MIDI track's output, choose "Roland SonicCell."
   As the MIDI track's MIDI Ch, choose 'n' (the number of the part you will record).

   If using Patch mode:

   As the MIDI track's input, choose "Roland SonicCell" - "MIDI Ch.1."
   As the MIDI track's output, choose "Roland SonicCell."
   As the MIDI track's MIDI Ch, choose "1."
3. **Click the record-enable button in the track view.**

Selecting a patch

If using Performance mode:

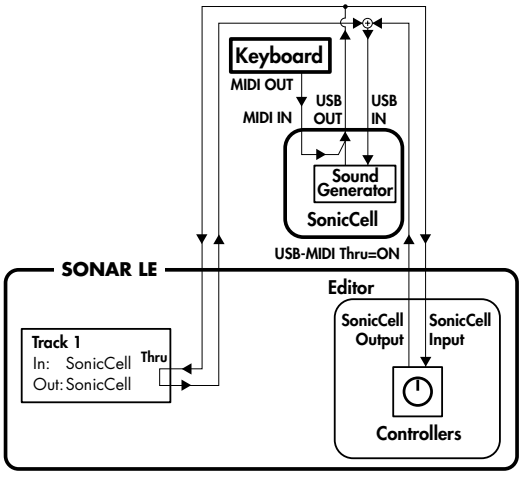
1. **In the upper part of SonicCell Editor's main window, click "PART" [n (number of the part to record)].**
2. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**
3. **Choose the desired patch from the menu that appears.**

If using Patch mode:

1. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**
2. **Choose the desired patch from the menu that appears.**

Editing patch parameters

You can edit the patch parameters as desired.
The following illustration shows the relationship between the SonicCell module, your MIDI keyboard, SonicCell Editor, and SONAR LE.



You can edit the values by clicking (and dragging) the buttons, sliders, and knobs.
For details on editing the parameters, refer to "SonicCell Editor Manual."
Select the menu button "Help" - "SonicCell Editor Manual"
SONAR LE's "Track 2" (the MIDI track you added) corresponds to "Track 1" in the illustration.

MEMO
If playing the keyboard does not produce sound, make sure that you've selected the MIDI track you added. MIDI Thru is enabled for the selected MIDI track.

Recording MIDI data

Here's how to record your playing.
If you connect a MIDI keyboard to the SonicCell, you'll be able to record musical data from the keyboard.

If using Performance mode:

Set the MIDI channel of your MIDI keyboard to match the number of the part you want to record.

If using Patch mode:

Set the MIDI channel of your MIDI keyboard to 1.

1. **Click the record button in the Transport Toolbar, and play your MIDI keyboard.**
2. **Click the stop button in the Transport Toolbar to stop recording.**

Saving the project file

The SONAR LE project file also includes SonicCell Editor's performance data and patch data.
This means that if you save your project file, you normally won't need to save data in SonicCell Editor.

From the menu, choose "File" - "Save."

Opening a project file

SONAR LE project files include SonicCell Editor's performance data and patch data.
This means that when you open a project file, you normally won't need to open data in SonicCell Editor.

If using Performance mode:

1. **Close SONAR LE.**

2. **On the SonicCell module, select a different performance than the one you're currently using.**
   This is so you can verify that the performance data is reproduced when you open a project.

3. **Double-click the project file you saved earlier; SONAR LE will start up.**
   SonicCell Editor will start up along with the project. The performance data saved in the project file will be reproduced on the SonicCell module.

If using Patch mode:

1. **Close SONAR LE.**

2. **On the SonicCell module, select a different patch than the one you're currently using.**
   This is so you can verify that the patch data is reproduced when you open a project.

3. **Double-click the project file you saved earlier; SONAR LE will start up.**
   SonicCell Editor will open along with the project. The patch data saved in the project file will be reproduced on the SonicCell module.

NOTE

If you're using Windows Vista and you double-click a project file to start up SONAR LE, the following error message will appear.
"Windows cannot find '(project file path)'. Make sure you typed the name correctly, and then try again."
Simply close the error message that was displayed, and continue using SONAR LE.

Recording multiple parts

If you're using Performance mode, you can edit and save the parameters for multiple SonicCell parts.

1. **Repeat the following steps for the desired number of parts.**
   "Adding a MIDI track" (p. 154)
   "Selecting a patch" (p. 155)
   "Editing patch parameters" (p. 155)
   "Recording MIDI data" (p. 155)

2. **Finally, execute "Save the project file" to save the multiple SonicCell parts along with the musical data.**

SONAR 6.2

Installing the driver and SonicCell Editor

Before you continue, install the driver, SonicCell Editor, Librarian, and Playlist Editor as described on p. 33–p. 36.

- The stand-alone version of the editor, the librarian, and the playlist editor will be installed in C:\Program Files\Roland\SonicCellEditor.
- The plug-in version of the editor (subsequently referred to as "the plug-in") will be copied to C:\Program Files\Roland.

Registering the plug-in in SONAR 6.2

For details about registering a plug-in in SONAR 6.2, refer to the SONAR 6.2 owner's manual.

1. **Start up SONAR 6.2.**
2. **From the menu, choose "Tools" - "Cakewalk Plug-in Manager" to open the "Cakewalk Plug-in Manager" dialog box.**
3. **In the "VST Configuration" group box, click [Options] to open the "Cakewalk VST Scan Paths" dialog box.**
4. **Click [Add], and add "(the folder to which you copied the plug-in)\Roland."**
   Normally, this will be C:\Program Files\Roland.
5. **Click [OK] to close the [Cakewalk VST Scan Paths] dialog box.**
6. **In the "VST Settings" group box, click [Scan VST Plug-ins] to register the plug-in version of SonicCell Editor. Then click [Close].**

Connections and settings

1. **Use a USB cable to connect the SonicCell to your computer.**
2. **If necessary, use a MIDI cable to connect your MIDI keyboard to the SonicCell.**
3. **Turn on the power of the SonicCell.**
   If the SonicCell is not connected correctly, SonicCell Editor may not operate correctly.
   Make sure that you switch on the SonicCell's power before you start up SONAR 6.2.

* Don't disconnect the USB cable connected to the SonicCell while SONAR 6.2 is running.

Settings for the SonicCell

If you've connected a MIDI keyboard or other MIDI device to the SonicCell's MIDI IN, set the USB-MIDI Thru (p. 177) setting on the SonicCell module to ON.
If this is ON, MIDI messages arriving at MIDI IN will be sent without change to your computer via USB MIDI.

Settings for SONAR 6.2

Here we will use the SonicCell as a USB-MIDI interface for SONAR 6.2. Turn on the MIDI Thru setting.
If this is on, the MIDI messages received by SONAR 6.2 will be sent back to the SonicCell's sound generator.

1. **Start up SONAR 6.2.**
2. **Specify the SonicCell as the USB-MIDI interface for SONAR 6.2.**
   For details on how to make this setting, refer to the SONAR 6.2 owner's manual.
3. **From the menu, choose "Options" - "Global" to open the "Global Options" dialog box.**
4. **Select the "General" tab.**
5. **Select the "Always Echo Current MIDI Track" check box, and click [OK].**

Starting up SonicCell Editor

1. **Start up SONAR 6.2.**
2. **From the menu, choose "File" - "New" to open the "New Project File" dialog box.**
3. **Choose "Blank (no tracks or buses)" as the template, assign a name, and click [OK].**
4. **From the menu, choose "Insert" - "Audio Track" to add an audio track.**
5. **Right-click the FX field located at the right of the Track Pane of the audio track.**
6. **From the menu that appears, choose "Soft Synths" - "roland" - "SonicCell Editor VST."**
7. **If a message indicates "MIDI devices aren't set up correctly.," click [OK].**
8. **In SonicCell Editor, select the menu button "Setup" - "Set Up MIDI Devices" to open the "Set Up MIDI Devices" dialog box.**
9. **In SonicCell Input/Output, choose "Roland SonicCell" and click [OK].**
10. **In SonicCell Editor, click [READ].**
    This will load the settings from the SonicCell into the editor.

NOTE

Steps 7–10 are needed only when starting the editor for the first time. The second and subsequent times, the SonicCell settings will be loaded into the editor from the port you specified.

Adding a MIDI track

1. **From the menu, choose "Insert" - "MIDI Track" to add a MIDI track.**

2. **Specify the channel of the MIDI track.**

   If using Performance mode:

   As the MIDI track's input, choose "Roland SonicCell" - "MIDI Ch. n (the number of the part you will record)."
   As the MIDI track's output, choose "Roland SonicCell."

   If using Patch mode:

   As the MIDI track's input, you will normally choose "Roland SonicCell" - "MIDI Ch.1."
   As the MIDI track's output, choose "Roland SonicCell."

3. **Click the record-enable button in the track view.**

Selecting a patch

If using Performance mode:

1. **In the upper part of SonicCell Editor's main window, click "PART" [n (number of the part to record)].**

2. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**

3. **Choose the desired patch from the menu that appears.**

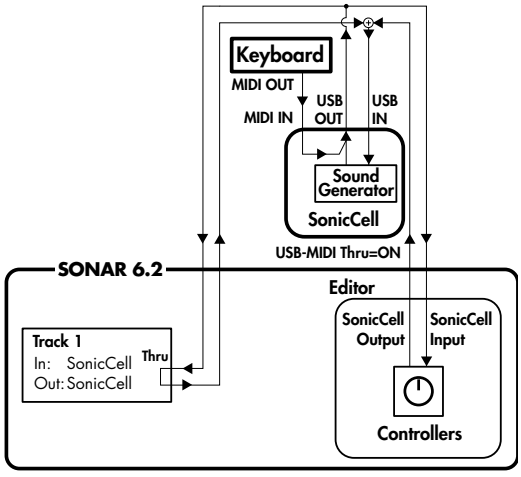
If using Patch mode:

1. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**

2. **Choose the desired patch from the menu that appears.**

Editing patch parameters

You can edit the patch parameters as desired.
The following illustration shows the relationship between the SonicCell module, your MIDI keyboard, SonicCell Editor, and SONAR 6.2.



You can edit the values by clicking (and dragging) the buttons, sliders, and knobs.
For details on editing the parameters, refer to "SonicCell Editor Manual."
Select the menu button "Help" - "SonicCell Editor Manual"
"Track 2" (the MIDI track you added) in SONAR 6.2 corresponds to "Track 1" in the illustration.

MEMO
If playing the keyboard does not produce sound, make sure that you've selected the MIDI track you added. MIDI Thru is enabled for the selected MIDI track.

Recording MIDI data

Here's how to record your playing. If you connect a MIDI keyboard to the SonicCell, you'll be able to record musical data from the keyboard.

If using Performance mode:

Set the MIDI channel of your MIDI keyboard to match the number of the part you want to record.

If using Patch mode:

Set the MIDI channel of your MIDI keyboard to 1.

1. **Click the record button in the Transport Toolbar, and play your MIDI keyboard.**

2. **Click the stop button in the Transport Toolbar to stop recording.**

Saving the project file

The SONAR 6.2 project file also includes SonicCell Editor's performance data and patch data.
This means that if you save your project file, you normally won't need to save data in SonicCell Editor.

From the menu, choose "File" - "Save."

Opening a project file

SONAR 6.2 project files include SonicCell Editor's performance data and patch data.
This means that when you open a project file, you normally won't need to open data in SonicCell Editor.

If using Performance mode:

1. **Close SONAR 6.2.**
2. **On the SonicCell module, select a different performance than the one you're currently using.**
   This is so you can verify that the performance data is reproduced when you open a project.
3. **Double-click the project file you saved earlier; SONAR 6.2 will start up.**
   SonicCell Editor will open together with the project. The performance data saved in the project file will be reproduced on the SonicCell module.

If using Patch mode:

1. **Close SONAR 6.2.**
2. **On the SonicCell module, select a different patch than the one you're currently using.**
   This is so you can verify that the patch data is reproduced when you open a project.
3. **Double-click the project file you saved earlier; SONAR 6.2 will start up.**
   SonicCell Editor will open together with the project. The patch data saved in the project file will be reproduced on the SonicCell module.

NOTE

If you're using Windows Vista and you double-click a project file to start up SONAR 6.2, the following error message will appear.
"Windows cannot find '(project file path)'. Make sure you typed the name correctly, and then try again."
Simply close the error message that was displayed, and continue using SONAR 6.2.

Recording multiple parts

If you're using Performance mode, you can edit and save the parameters for multiple SonicCell parts.

1. **Repeat the following steps for the desired number of parts.**
   "Adding a MIDI track" (p. 158)
   "Selecting a patch" (p. 158)
   "Editing patch parameters" (p. 158)
   "Recording MIDI data" (p. 158)
2. **Finally, execute "Save the project file" to save the multiple SonicCell parts along with the musical data.**

Cubase 4

Installing the driver and SonicCell Editor

Before you continue, install the driver, SonicCell Editor, Librarian, and Playlist Editor as described on p. 33–p. 39.

Windows:

- The stand-alone version of the editor, the librarian, and the playlist editor will be installed in C:\Program Files\Roland\SonicCellEditor.
- The plug-in version of the editor (subsequently referred to as "the plug-in") will be copied to C:\Program Files\Roland.

Mac:

- The stand-alone version of the editor, the librarian, and the playlist editor will be installed in \Applications\Roland\SonicCell Editor.
- The VSTi version of the plug-in module will be copied to \Library\Audio\Plug-Ins\VST\Roland.

Registering the plug-in in Cubase 4

For details about registering a plug-in in Cubase 4, refer to the owner's manual of Cubase 4.

Windows:

1. **Start up Cubase 4.**
2. **From the menu, choose "Devices" - "Plug-in Information" to open the "Plug-in Information" window.**
3. **Select the "VST PlugIns" tab.**
4. **Click "VST 2.x Plug-in Paths" to open the [VST 2.x Plug-in Paths] dialog box.**
5. **Click [Add], add "(folder to which you copied the plug-in)\Roland"), and click [OK].**
   Normally, this will be C:\Program Files\Roland.
6. **Click [Update].**
   If SonicCell Editor VST does not appear in the list, try restarting Cubase 4.

Mac:

Normally, the plug-in will be registered automatically when you start up Cubase 4.

Connections and settings

1. **Use a USB cable to connect the SonicCell to your computer.**
2. **If necessary, use a MIDI cable to connect your MIDI keyboard to the SonicCell.**
3. **Turn on the power of the SonicCell.**
   If the SonicCell is not connected correctly, SonicCell Editor may not operate correctly.
   Make sure that you switch on the SonicCell's power before you start up Cubase 4.

* Don't disconnect the USB cable connected to the SonicCell while Cubase 4 is running.

Settings for the SonicCell

If you've connected a MIDI keyboard or other MIDI device to the SonicCell's MIDI IN, set the USB-MIDI Thru (p. 177) setting on the SonicCell module to ON.
If this is ON, MIDI messages arriving at MIDI IN will be sent without change to your computer via USB MIDI.

Settings for Cubase 4

Here we will use the SonicCell as a USB-MIDI interface for Cubase 4. Turn on the MIDI Thru setting.
If this is on, the MIDI messages received by Cubase 4 will be sent back to the SonicCell's sound generator.

1. **Start up Cubase 4.**
2. **Specify the SonicCell as the USB-MIDI interface for Cubase 4.**
   For details on how to make this setting, refer to the Cubase 4 owner's manual.
3. **Open the "Preferences" dialog box.**

   Windows:
   From the menu, choose "File" - "Preferences."

   Mac:
   From the menu, choose "Cubase" - "Preferences."
4. **In the list at left, choose "MIDI" to see the MIDI preferences.**
5. **Select the "MIDI Thru Active" check box, and click [OK].**

Starting up SonicCell Editor

1. **Start up Cubase 4.**
2. **From the menu, choose "File" - "New Project" to open the "New Project" dialog box.**
3. **Select "Empty" as the template, and click [OK].**
   The "Set Project Folder" dialog box will open.
4. **Specify the desired project folder and click [OK].**
5. **From the menu, choose "Devices" - "VST Instruments" to open the "VST Instruments" window.**
6. **Click the first slot and select "SonicCell Editor VST."**
7. **If a message indicates "MIDI devices aren't set up correctly.," click [OK].**
8. **If a message asks "Do you want to create a MIDI track assigned to plugin "SonicCell Editor VST"?", click [Cancel].**
9. **In SonicCell Editor, select the menu button "Setup" - "Set Up MIDI Devices" to open the "Set Up MIDI Devices" dialog box.**
10. **In SonicCell Input/Output, choose "Roland SonicCell" and click [OK].**
11. **In SonicCell Editor, click [READ].**
    This will load the settings from the SonicCell into the editor.

* Steps 7 and 9–11 are needed only when starting the editor for the first time. The second and subsequent times, the SonicCell settings will be loaded into the editor from the port you specified.

Adding a MIDI track

1. **From the menu, choose "Project" - "Add Track" - "MIDI" to add a MIDI track.**
2. **Select "Roland SonicCell" as the input/output of the MIDI track.**
3. **Specify the channel of the MIDI track.**

   If using Performance mode:

   As the channel of the MIDI track, specify the number of the part you want to record.

   If using Patch mode:

   Specify channel 1 for the MIDI track.

Selecting a patch

If using Performance mode:

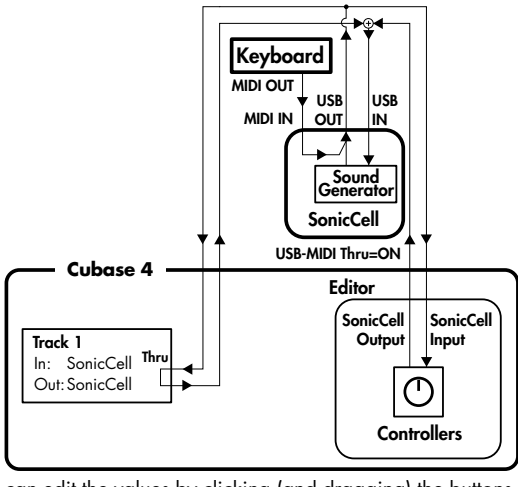
1. **In the upper part of SonicCell Editor's main window, click "PART" [n (number of the part to record)].**
2. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**
3. **Choose the desired patch from the menu that appears.**

If using Patch mode:

1. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**
2. **Choose the desired patch from the menu that appears.**

Editing patch parameters

You can edit the patch parameters as desired.
The following illustration shows the relationship between the SonicCell module, your MIDI keyboard, SonicCell Editor, and Cubase 4.



You can edit the values by clicking (and dragging) the buttons, sliders, and knobs.
For details on editing the parameters, refer to "SonicCell Editor Manual."
Select the menu button "Help" - "SonicCell Editor Manual."

MEMO
If playing the keyboard does not produce sound, make sure that you've selected the MIDI track you added. MIDI Thru is enabled for the selected MIDI track.

Recording MIDI data

Here's how to record your playing. If you connect a MIDI keyboard to the SonicCell, you'll be able to record musical data from the keyboard.

If using Performance mode:

Set the MIDI channel of your MIDI keyboard to match the number of the part you want to record.

If using Patch mode:

Set the MIDI channel of your MIDI keyboard to 1.

1. **Click the record button in the Transport Panel, and play your MIDI keyboard.**
2. **Click the stop button in the Transport Panel to stop recording.**

Saving the project file

The Cubase 4 project file also includes SonicCell Editor's performance data and patch data.
This means that if you save your project file, you normally won't need to save data in SonicCell Editor.

1. **From the menu, choose "File" - "Save" to open the "Save As" dialog box.**
2. **Assign the desired name, and click [Save].**

Opening a project file

Cubase 4 project files include SonicCell Editor's performance data and patch data.
This means that when you open a project file, you normally won't need to open data in SonicCell Editor.

If using Performance mode:

1. **Close Cubase 4.**
2. **On the SonicCell module, select a different performance than the one you're currently using.**
   This is so you can verify that the performance data is reproduced when you open a project.
3. **Double-click the project file you saved earlier; Cubase 4 will start up.**
   SonicCell Editor will open together with the project. The patch data saved in the project file will be reproduced on the SonicCell module.

If using Patch mode:

1. **Close Cubase 4.**
2. **On the SonicCell module, select a different patch than the one you're currently using.**
   This is so you can verify that the patch data is reproduced when you open a project.
3. **Double-click the project file you saved earlier; Cubase 4 will start up.**
   SonicCell Editor will open together with the project. The performance data saved in the project file will be reproduced on the SonicCell module.

Recording multiple parts

If you're using Performance mode, you can edit and save the parameters for multiple SonicCell parts.

1. **Repeat the following steps for the desired number of parts.**
   "Adding a MIDI track" (p. 161)
   "Selecting a patch" (p. 161)
   "Editing patch parameters" (p. 161)
   "Recording MIDI data" (p. 162)
2. **Finally, execute "Save the project file" to save the multiple SonicCell parts along with the musical data.**

Logic Pro 7.2

Installing the driver and SonicCell Editor

Before you continue, install the driver, SonicCell Editor, Librarian, and Playlist Editor as described on p. 37–p. 39.

- The stand-alone version of the editor, the librarian, and the playlist editor will be installed in \Applications\Roland\SonicCell Editor.
- The AU version of the plug-in module will be copied to \Library\Audio\Plug-Ins\Components.

Registering the plug-in in Logic Pro 7.2

For details about registering a plug-in in Logic Pro 7.2, refer to the owner's manual of Logic Pro 7.2.
Normally, the plug-in will be registered automatically when you start up Logic Pro 7.2.

Connections and settings

1. **Use a USB cable to connect the SonicCell to your computer.**
2. **If necessary, use a MIDI cable to connect your MIDI keyboard to the SonicCell.**
3. **Turn on the power of the SonicCell.**
   If the SonicCell is not connected correctly, SonicCell Editor may not operate correctly.
   Make sure that you switch on the SonicCell's power before you start up Logic Pro 7.2.

* Don't disconnect the USB cable connected to the SonicCell while Logic Pro 7.2 is running.

Settings for the SonicCell

If you've connected a MIDI keyboard or other MIDI device to the SonicCell's MIDI IN, set the USB-MIDI Thru (p. 177) setting on the SonicCell module to ON.
If this is ON, MIDI messages arriving at MIDI IN will be sent without change to your computer via USB MIDI.

Settings for Logic Pro 7.2

Specify the SonicCell as the USB-MIDI interface for Logic Pro 7.2.
For details on making this setting, refer to the Logic Pro 7.2 owner's manual.

Starting up SonicCell Editor

1. **Start up Logic Pro 7.2.**
2. **From the menu, choose "File" - "Close" to close the song that was loaded at start-up.**
3. **From the menu, choose "File" - "New" to open the "New" dialog box, and turn the "Use song template" check box [ON].**
4. **As the template, choose "Power Book 15" - "Basic Production" and click [OK].**
5. **Click (select) track "Inst 1."**
   An "audio instrument" object is assigned to track "Inst 1."
6. **From the Arrange window's sub-menu, choose "Track" - "Delete Unused."**
   Only the track "Inst 1" will remain.
7. **In the channel strip at the lower left of the Arrange window, click the [I/O] button.**
8. **From the menu that appears, choose "Stereo" - "AU Instruments" - "Roland" - "SonicCell Editor AU."**
9. **If a message indicates "MIDI devices aren't set up correctly.," click [OK].**
10. **In SonicCell Editor, select the menu button "Setup" - "Set Up MIDI Devices" to open the "Set Up MIDI Devices" dialog box.**
11. **In SonicCell Input/Output, choose "SonicCell" and click [OK].**
12. **In SonicCell Editor, click [READ].**
    This will load the settings from the SonicCell into the editor.

NOTE

Steps 9–12 are needed only when starting the editor for the first time. The second and subsequent times, the SonicCell settings will be loaded into the editor from the port you specified.

Adding a MIDI track

1. **From the menu, choose "Windows" - "Environment" to open the Environment window.**

2. **In the layer list at the left of the Environment window, choose the "MIDI Instr." layer.**

3. **Choose the following menu item.**

   If using Performance mode:

   From the Environment window's sub-menu, choose "New" - "Multi Instrument."

   If using Patch mode:

   From the Environment window's sub-menu, choose "New" - "Instrument."

4. **Change the instrument name.**

   If using Performance mode:

   In the left side of the Environment window, click "(Multi instr.)" in "▼ (Multi instr.)," and rename it to "SonicCell."

   If using Patch mode:

   In the left side of the Environment window, click "(Instrument)" in "▼ (Instrument)," and rename it to "SonicCell."

5. **Close the Environment window.**

   If using Performance mode:

   In "SonicCell" at the right side of the Environment window, click [n (number of the part to record)] to close the Environment window.

   If using Patch mode:

   Close the Environment window.

6. **From the Arrange window's sub-menu, choose "Track" - "Create."**

   An identical track "Inst 1" will be added below the track "Inst 1."

7. **Click and hold near the added track "Inst 1" icon.**

8. **Specify the channel of the MIDI track.**

   If using Performance mode:

   From the menu that appears, choose "MIDI Instr." - "SonicCell" - "n (number of the part to record)."

   The track "SonicCell n (number of the part to record)" has a "MIDI instrument" object assigned to it.

   If using Patch mode:

   From the menu that appears, chose "MIDI Instr." - "SonicCell."

   The track "SonicCell" has a "MIDI instrument" object assigned to it.

9. **Select the port.**

   If using Performance mode:

   In the track "SonicCell n (number of the part to record)" at the left side of the Arrange window, set the "Port" parameter to SonicCell.

   If using Patch mode:

   In the track "SonicCell" at the left side of the Arrange window, set the "Port" parameter to SonicCell.

MEMO

If the parameter "port" is not shown, click the [▶] located at the left of the track "SonicCell n" (or "SonicCell") in the left side of the Arrange window.

Selecting a patch

If using Performance mode:

1. **In the upper part of SonicCell Editor's main window, click "PART" [n (number of the part to record)].**

2. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**

3. **Choose the desired patch from the menu that appears.**

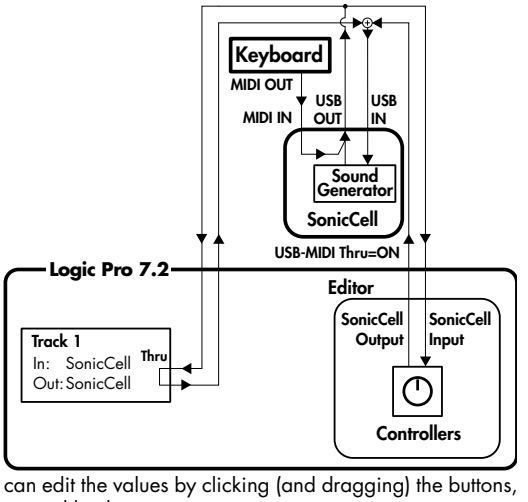
If using Patch mode:

1. **In the upper part of SonicCell Editor's main window, click "PATCH NAME" [▼].**

2. **Choose the desired patch from the menu that appears.**

Editing patch parameters

You can edit the patch parameters as desired.
The following illustration shows the relationship between the SonicCell module, your MIDI keyboard, SonicCell Editor, and Logic Pro 7.2.



You can edit the values by clicking (and dragging) the buttons, sliders, and knobs.

For details on editing the parameters, refer to online manual.
Select the menu button "Help" - "SonicCell Editor Manual."

NOTE

If using Performance mode:

- Logic Pro 7.2 track "SonicCell n (number of the part to record)" corresponds to "Track 1" of the illustration.
- The Physical Input setting in the "Click & Ports" layer of the Logic Pro 7.2 Environment window corresponds to "in: SonicCell" of the illustration. You may leave the Physical Input setting at the default setting of "SUM."
- "port: SonicCell" of the Logic Pro 7.2 track "SonicCell n (number of the part to record)" corresponds to "out: SonicCell" of the illustration.

If using Patch mode:

- Logic Pro 7.2 track "SonicCell" corresponds to "Track 1" of the illustration.
- The Physical Input setting in the "Click & Ports" layer of the Logic Pro 7.2 Environment window corresponds to "in: SonicCell" of the illustration. You may leave the Physical Input setting at the default setting of "SUM."
- "port: SonicCell" of the Logic Pro 7.2 track "SonicCell" corresponds to "out: SonicCell" of the illustration.

For details, refer to the Logic Pro 7.2 owner's manual.

MEMO

If you don't hear sound when you play the keyboard, make sure that the [R] button is on for the track "SonicCell."

Recording MIDI data

Here's how to record your playing.
If you connect a MIDI keyboard to the SonicCell, you'll be able to record musical data from the keyboard.

If using Performance mode:

Set the MIDI channel of your MIDI keyboard to match the number of the part you want to record.

If using Patch mode:

Set the MIDI channel of your MIDI keyboard to 1.

1. **Click the record button in the Transport window, and play your MIDI keyboard.**

2. **Click the stop button in the Transport window to stop recording.**

Saving the song file

The Logic Pro 7.2 song file also includes SonicCell Editor's performance data and patch data.
This means that if you save your song file, you normally won't need to save data in SonicCell Editor.

From the menu, choose "File" - "Save."

Opening a song file

Logic Pro 7.2 song files include SonicCell Editor's performance data and patch data.
This means that when you open a song file, you normally won't need to open data in SonicCell Editor.

If using Performance mode:

1. **Close Logic Pro 7.2.**

2. **On the SonicCell module, select a different performance than the one you're currently using.**
   This is so you can verify that the performance data is reproduced when you open a song.

3. **Double-click the song file you saved earlier; Logic Pro 7.2 will start up.**
   SonicCell Editor will open together with the song.
   The patch data saved in the song file will be reproduced on the SonicCell module.

If using Patch mode:

1. **Close Logic Pro 7.2.**

2. **On the SonicCell module, select a different patch than the one you're currently using.**
   This is so you can verify that the patch data is reproduced when you open a song.

3. **Double-click the song file you saved earlier; Logic Pro 7.2 will start up.**
   SonicCell Editor will open together with the song.
   The performance data saved in the song file will be reproduced on the SonicCell module.

Recording multiple parts

If you're using Performance mode, you can edit and save the parameters for multiple SonicCell parts.

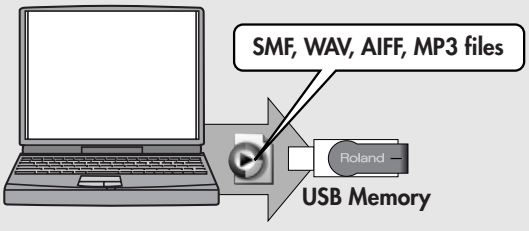
1. **Repeat the following steps for the desired number of parts.**
   "Adding a MIDI track" (p. 164)
   "Selecting a patch" (p. 164)
   "Editing patch parameters" (p. 164)
   "Recording MIDI data" (p. 165)

2. **Finally, execute "Save the song file" to save the multiple SonicCell parts along with the musical data.**

SMF/Audio File Player

SonicCell also has "SMF/Audio File Player" functionality.
"Songs" (SMF or audio files) and "playlists" that specify the playback order can be transferred from your computer via USB memory and used by SonicCell.
You can play back songs in the order specified by a "playlist," or you can select and play back an individual song from a playlist.

1 **Copy your data to USB Memory**



2 **Connect your USB Memory to the SonicCell**

MEMO

Use only USB memory sold by Roland. Operation cannot be guaranteed when products other than there is used. Proper operation cannot be guaranteed if other USB memory products is used.

NOTE

- Connect the USB memory after the SonicCell's power is turned on.
- If, after a USB memory device has been removed, you decide that you want to connect it again, you'll need to switch the SonicCell's power off, then switch it back on again.

Creating a playlist

Start up SonicCell Playlist Editor and create a playlist.

* For details on creating a playlist, refer to "SonicCellPlaylistEditorManualE.pdf," which is installed together with "SonicCell Playlist Editor."

NOTE

- Use the included "Sonic Playlist Editor" to create playlists. You cannot create playlists on SonicCell itself.
- You can play back individual songs even without creating a playlist. To do this, place the SMF or audio files in the root directory of your USB memory.
- Only audio files that have the same sampling rate as the SonicCell's own setting can be played.
  When you add audio files to a playlist, we recommend that you keep the sampling rate the same for all files.

Playing back songs

SMF/audio files that can be played

SMF		
	Format	0 or 1 * With format 1 SMFs, there are limitations on the tracks that will be played.
	File Size	240 KB maximum (Note that this will vary slightly based on the SMF content.)
	System Exclusive	Packet sizes of 512 bytes or less
Audio File		
WAV/AIFF	**Sampling Rate**	44.1/48/96kHz
	Bit depth	8/16/24 bits
MP3	**Format**	MPEG-1 audio layer 3
	Sampling Rate	44.1/48kHz
	Bit Rates	32/40/48/56/64/80/96/112/128/160/192/224/256/320kbps, VBR (Variable Bit Rate)

Song playback

NOTE

- You can't use the SMF/Audio File Player to play songs while also using USB audio/MIDI message input/output (p. 140).
- If you play back a demo song or SMF while editing a performance or patch, the contents of the temporary area will be rewritten, causing your edits to be lost. If you want to keep your edited data, you must write it before you play back a demo song or SMF data.
- Use the SonicCell in Performance mode when you're playing back SMF data.
- You can't execute the Write operation or use Utility functions (p. 182) while a song is playing back.
- The SonicCell can handle up to a maximum of 99 songs and playlists. (99 items in the root directory, and 99 items inside the SonicCell folder. The Playlist Editor can also handle up to 99 playlists.)

1. Connect the USB memory containing play lists and songs to SonicCell.

2. Press [SMF/AUDIO PLAYER].
The button's indicator will light, and the Playlist Select screen will appear.

NOTE

Playlists that show a 🔒 at the left of the name don't allow you to edit the playlist settings or the settings of the songs in the playlist.

3. Move the cursor to the playlist that you want to play.

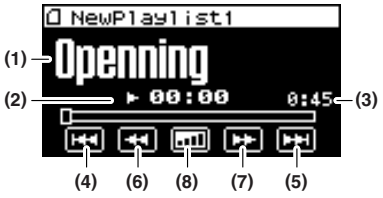
* If you want to select and play a song from within the selected playlist, proceed to "Selecting and playing a song from within a playlist" (p. 171).

4. Press [►/❚❚].
The player screen will appear, and the song will begin playing.

* If the song is an audio file, it will play only if its sampling rate matches the setting of the SonicCell.

* If the sampling rate of the first song (audio file) in the playlist does not match the SonicCell's sampling rate, none of the songs in that playlist will play.

5. If you want to stop song playback, press [►/❚❚].
The next time you press [►/❚❚], playback will start from the point at which you stopped.



Indication	Content	
(1)	Name of the currently playing song	
(2)	SMF: Currently-playing measure, Audio file: Playback time	* This is displayed correctly only if you created the playlist using Playlist Editor.
(3)	Length of the currently-playing song	
(4)	Move the cursor here and press [CURSOR/VALUE] to move to the beginning of the current song.	
(5)	Move the cursor here and press [CURSOR/VALUE] to move to the next song.	
(6)	Move the cursor here and press [CURSOR/VALUE] to rewind the song.	
(7)	Move the cursor here and press [CURSOR/VALUE] to fast-forward the song.	
(8)	Move the cursor here and press [CURSOR/VALUE] to view the current playback volume. Turn [CURSOR/VALUE] to adjust the volume. Range: 0–127 MEMO The parameter whose volume you're adjusting will depend on the type of file. If an SMF is selected: System setting "Master Level" (p. 176) If an audio file is selected: USB Audio "Audio Level" (p. 140)	

■ Menu screen

If you press [MENU] while the Playlist Select screen is displayed, the Playlist Menu screen will appear. The Playlist Menu is structured as shown in the illustration at right. You can switch between screens by turning [CURSOR/VALUE] to the right or left. Press [MENU] once again to return to the Playlist Select screen.

Parameter	Explanation
Show Info (Playlist Information)	Shows the contents of the selected playlist. Press [CURSOR/VALUE] to access the Playlist Information screen (p. 170).
Write (Playlist Write)	Saves the current playlist settings. (p. 173) * This will not appear if you've selected Demo Songs/USB Memory/Playlist Library.
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

■ Playlist Information screen .....

Indication	Content
Name	The name of the playlist.
Playback Mode	Specifies how the song will play. **Chain Play** If you move the cursor to this item and press [CURSOR/VALUE] to add a check mark (✔), Chain Play will be turned on. If this is on, the songs in the playlist will play consecutively. Playback will stop when the last song has ended. **Repeat All** If you move the cursor to this item and press [CURSOR/VALUE] to add a check mark (✔), Repeat All will be turned on. If this is on, the songs in the playlist will play consecutively, and when the last song has ended, the unit returns to the first song and enters pause mode. If Chain Play is on, consecutive playback will continue repeating. * This item will not appear for a playlist that has the indication at the left of the name. **NOTE** If you want to save the modified setting, execute Playlist Write.
Total Time	Total time (minutes: seconds) of the songs in the playlist * This item will not appear for a playlist that has the indication at the left of the name.
Total Meas (Measure)	The total number of measures in the playlist. * This item will not appear for a playlist that has the indication at the left of the name.
Memo	A comment, etc.

MEMO

If you press [MENU] when the Playlist Information screen is shown, the screen shown at the right will appear.

If you want to execute Playlist Write, select "OK" and press [CURSOR/VALUE].

If you decide to cancel, select "CANCEL" and press [CURSOR/VALUE].

Selecting and playing a song from within a playlist

4. Press [CURSOR/VALUE].
The songs in the selected playlist will be listed.

NOTE

A "?" mark is shown if the song's sampling rate differs from the setting of the SonicCell module, or if the song is not in a file type that the SonicCell can play. This song cannot be played.

5. Move the cursor to the song that you want to play, and press [CURSOR/VALUE].
The player screen will appear.

6. Press [▶/❚❚].
The song will begin playing.

■ Menu screen

When the song list screen or the player screen is shown, you can press [MENU] to access the Song Menu screen.

You can switch between screens by turning [CURSOR/VALUE] to the right or left.

Press [MENU] once again to return to the song list screen or the player screen.

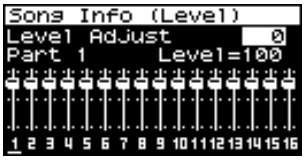
Parameter	Explanation
Song Info (Song Information)	Shows information about the selected song. Press [CURSOR/VALUE] to access the Song Information screen (p. 172).
Playlist (Playlist Information)	Shows the contents of the selected playlist. Press [CURSOR/VALUE] to access the Playlist Information screen (p. 170).
Change (Change Order)	Lets you change the order of songs in the playlist. Press [CURSOR/VALUE] to access the Change Order screen (p. 173). * This will not appear if you've selected Demo Songs/USB Memory/Playlist Library.
Delete (Song Delete)	Deletes the currently selected song from the playlist (p. 173). * This will not appear if you've selected Demo Songs/USB Memory/Playlist Library.
Write (Playlist Write)	Saves the current playlist settings. (p. 173) * This will not appear if you've selected Demo Songs/USB Memory/Playlist Library.
System	Press [CURSOR/VALUE] to access the System screen (p. 176).
Utility	Press [CURSOR/VALUE] to access the Utility screen (p. 182).
Demo Play	When you press [CURSOR/VALUE], the demo song list will appear. * For details on how to play the demo songs, refer to p. 15 and p. 168.
SRX Info (SRX Information)	Press [CURSOR/VALUE] to access the System SRX Info screen (p. 180).
Version (Version Information)	Press [CURSOR/VALUE] to access the System Version Info screen (p. 180).

■ Song Information screen .....

Indication	Content
Title	Name of the song.
Artist	Name of the artist.
Level Edit	Lets you adjust the volume of the song. Press [CURSOR/VALUE] to access the Song Info (Level) screen. * This item is not shown for songs in the USB Memory or Demo Songs playlist.
Meas (Measure)/Time	Number of measures in the song (for SMF)/Song length (for an audio file) * This item is not shown for songs in the USB Memory or Demo Songs playlist.
File Name	File name * This item is not shown for songs in the Demo Songs playlist.
File Type	The type of file (SMF/WAV/AIFF/MP3) * This item is not shown for songs in the Demo Songs playlist.
Sampling Rate	Sampling rate * This item is not shown for WAV/AIFF/MP3 file types.
File Size	Size of the file * This item is not shown for songs in the Demo Songs playlist.
Memo	A comment, etc. * This item is not shown for songs in the USB Memory playlist.

Song Info (Level) screen

For an SMF song



For an audio file song

MEMO

This adjusts the volume of each song.

NOTE

If you want to keep the adjusted volume setting, you must write it (Playlist Write). If you select a different playlist without writing your settings, the settings will revert to their original state.

Parameter	Value	Explanation
Level Adjust	-12–0–+12	Assuming that the original volume (the volume of the song in USB memory) is 0, you can adjust the volume within this range: -12–0–+12.
Part 1–16 Level	0–127	If the song's file type is SMF, you can adjust the volume individually for parts 1–16. Move the cursor to the part number shown at the bottom of the screen and press [CURSOR/VALUE], and you'll be able to adjust the volume of that part.

MEMO

If you press [MENU] when the Song Information/Song Info (Level) screen is shown, the screen shown at the right will appear.

If you want to execute Playlist Write, select "OK" and press [CURSOR/VALUE].

If you decide to cancel, select "CANCEL" and press [CURSOR/VALUE].

Playlist Write

Here's how to write the current playlist settings.

From the Song Menu screen (p. 171), choose "Write" to access the following screen.

1. **To write the data, choose "OK" and press [CURSOR/VALUE].**
   If you decide to cancel, choose "CANCEL" and press [CURSOR/VALUE].
   You will return to the previous screen.

Changing the song order

Here's how to change the order of the currently selected song.
From the Song Menu screen (p. 171), choose "Change" to access the Change Order screen.

1. **Turn [CURSOR/VALUE] to specify the desired position of the currently selected song.**

2. **When you've specified the desired position, press [CURSOR/VALUE].**
   The song order will be changed.

* If you move to a different screen without pressing [CURSOR/VALUE], the song order won't be changed.

NOTE

If you want to keep the settings you changed, execute the Write operation (Playlist Write).
If you select a different playlist without writing your settings, they will revert to their original state.

Deleting a song from the playlist

Here's how to delete the currently selected song from the playlist.

From the Song Menu screen (p. 171), choose "Delete" to access the following screen.

1. **To delete the song, choose "OK" and press [CURSOR/VALUE].**
   If you decide not to delete, choose "CANCEL" and press [CURSOR/VALUE].
   When the deletion is completed, you're returned to the Play List screen.

NOTE

If you want to keep the settings you changed, execute the Write operation (Playlist Write).
If you select a different playlist without writing your settings, they will revert to their original state.

Other Settings

System Settings

In the menu screen, choose "SYSTEM" to access the System screen.

Here you can make settings for the "system functions," which affect the operation of the entire SonicCell, such as the tuning, and how MIDI messages are received.

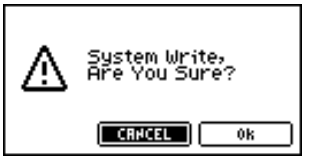
1. **In the Menu screen, move the cursor to "SYSTEM" and press [CURSOR/VALUE].**
   The System screen will appear.

2. **Turn [CURSOR/VALUE] to select the parameter you want to edit, then press [CURSOR/VALUE].**
   The value of the selected parameter will be highlighted.

   If the value field shows the "SELECT" indication, you can press [CURSOR/VALUE] to move to the setting screen for that parameter.

3. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**

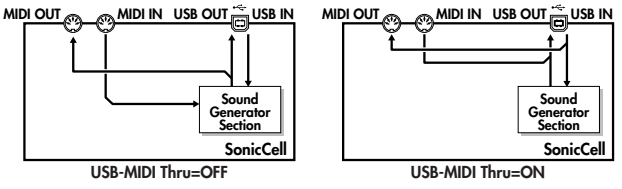
4. **When you've finished editing, press [MENU] to write the system settings.**
   The following message will appear.



5. **If you want to write the settings, select "OK" and press [CURSOR/VALUE].**
   If you decide not to write the settings, select "CANCEL" and press [CURSOR/VALUE].
   Once the settings have been written, you'll be returned to the System screen.

General settings (System screen)

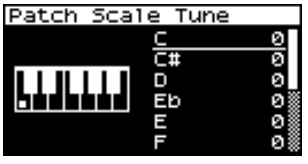
Parameter	Value	Explanation
Disp (Display) Brigtness	1–10	This adjusts the contrast/brightness of the display. Higher values will make the characters darker.
Master Level	0–127	Adjusts the volume of the entire SonicCell.
Master Tun (Tune)	415.3–466.2 Hz	Adjusts the overall tuning of the SonicCell. The display shows the frequency of the A4 note (center A).
Output Gain	-12–+12 dB	This adjusts the output gain from the SonicCell's Analog Out and Digital Out. When, for example, there are relatively few voices being sounded, boosting the output gain can let you attain the most suitable output level for recording and other purposes.
Master Key Shift	-24–+24	Shifts the overall pitch of the SonicCell in semitone steps.
Patch Remain (Patch Remain Switch)	OFF, ON	Specifies whether currently sounding notes will continue sounding when another patch or rhythm set is selected (ON), or not (OFF). Also, when this is "ON," changes produced by incoming MIDI messages such as Volume or Pan (CC 5, 7, 10, 65, 68, 71–74, RPN 0, 1, 2, MONO ON, POLY ON), as well as tonal quality and volume changes produced by the various controllers will be inherited. **NOTE** Effects settings change as soon as you switch to a new patch or rhythm set, without being influenced by the Patch Remain setting. Because of this, certain effects settings can cause notes that were until then sounding to no longer be heard, even though Patch Remain has been set to on.
Sync Mode	MASTER, SLAVE	Specifies the synchronization message that the SonicCell will use for operation. **MASTER:** The SonicCell will be the master. Choose this setting when using the SonicCell by itself without synchronizing to another device. **SLAVE:** The SonicCell will be the slave. Choose this setting when you want the SonicCell to synchronize to MIDI Clock messages received from another MIDI device.

Parameter	Value	Explanation
System Tempo	5–300	Sets the system tempo. * When Sync Mode is set to "SLAVE," the tempo will synchronize to the clock messages received from an external MIDI device, so the tempo value will be ignored. * The tempo value is not saved even if you save the System settings.
Tempo Override	OFF, ON	Specify whether the system tempo will change (ON), or will not change (OFF) when you switch performance.
Device ID (Device ID Number)	17–32	When you want to transmit or receive System Exclusive messages, set this parameter to match the Device ID number of the other MIDI device.
Perform Ctrl Ch (Performance Control Channel)	1–16, OFF	Performance Ctrl Ch selects the MIDI receive channel used during switching of performances when MIDI messages (Program Change/Bank Select) are sent from an external MIDI device. Set this to "OFF" if performances are not to be switched from an external MIDI device. **NOTE** If only a program change is received, and if the Perform Ctrl Ch setting coincides with the MIDI receive channel of a part, priority will be given to switching the performance.
Patch Rx Ch (Patch Mode Receive Channel)	1–16	Specifies the channel used to receive MIDI messages in Patch mode.
USB-MIDI Thru (USB-MIDI Thru Switch)	OFF, ON	Determines the MIDI signal flow from the MIDI IN connector to the SonicCell's sound generator. **OFF:** Directly transmits the MIDI signals arriving at the MIDI IN connector to the sound generator, and plays the SonicCell's sound. **ON:** Transmits the MIDI signals arriving at the MIDI IN connector to the computer via the USB connector. Via its USB connector, the SonicCell receives the signals that have been THRU'ed by the computer's sequencer software, and uses them to produce sound with its sound generator. 
Powerup Mode	PATCH, PERFORM	This setting allows you to choose the mode that you want the SonicCell to be in when it is powered up. **PATCH:** The SonicCell will be in Patch mode when you turn on the power. **PERFORM:** The SonicCell will be in Performance mode when you turn on the power.
Screen Saver	OFF, 5, 10–60 (min)	Set the time (minutes) until the screen saver begins working. If this is "OFF," the screen saver will not appear.
Screen Saver Type	1–6	Select the type of screen saver.
Scale Tune Sw (Switch)	OFF, ON	Turn this on when you wish to use a tuning scale other than equal temperament. One set of Scale Tune settings can be created in Patch mode. In Performance mode, this can be set for each part of the performance (p. 72). The SonicCell allows you to play the keyboard using temperaments other than equal temperament. The pitch is specified in one-cent units relative to the equal tempered pitch. * One-cent is 1/100th of a semitone.
Scale Tune	[SELECT]	Specifies the scale tuning of the patch. Press [CURSOR/VALUE] to access the Patch Scale Tune screen (p. 178).
Preview	[SELECT]	Makes settings for the Preview function. Press [CURSOR/VALUE] to access the Preview screen (p. 179).
System Control	[SELECT]	Makes settings for the Control function. Press [CURSOR/VALUE] to access the System Control screen (p. 179).
System MIDI	[SELECT]	Makes MIDI-related settings. Press [CURSOR/VALUE] to access the System MIDI screen (p. 180).

Patch Scale Tune settings

Here's how to make scale tune settings for Patch mode. These settings are shared by all patches.

MEMO
For details on scale tune settings for Performance mode, refer to p. 72.



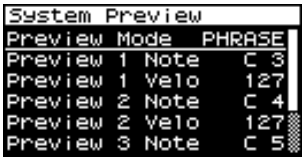
Parameter	Value	Explanation
C, C#, D, Eb, E, F, F#, G, G#, A, Bb, B	-64–+63	Adjusts the pitch of each note in one-cent steps (1/100th of a semitone) relative to its equal-tempered pitch.

- **Equal Temperament**
  This tuning divides the octave into 12 equal parts, and is the most widely used method of temperament used in Western music.
- **Just Temperament (Tonic of C)**
  Compared with equal temperament, the principle triads sound pure in this tuning. However, this effect is achieved only in one key, and the triads will become ambiguous if you transpose.
- **Arabian Scale**
  In this scale, E and B are a quarter note lower and C#, F# and G# are a quarter-note higher compared to equal temperament. The intervals between G and B, C and E, F and G#, Bb and C#, and Eb and F# have a natural third-the interval between a major third and a minor third. On the SonicCell, you can use Arabian temperament in the three keys of G, C and F.

<Example>

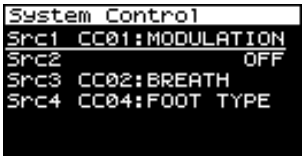
Note name	Equal Temperament	Just Temperament (tonic C)	Arabian Scale
C	0	0	-6
C#	0	-8	+45
D	0	+4	-2
Eb	0	+16	-12
E	0	-14	-51
F	0	-2	-8
F#	0	-10	+43
G	0	+2	-4
G#	0	+14	+47
A	0	-16	0
Bb	0	+14	-10
B	0	-12	-49

Settings for the Preview function (System Preview screen)



Parameter	Value	Explanation
Preview Mode	SINGLE, CHORD, PHRASE	**SINGLE:** The notes specified by Note Number 1–4 parameter will sound successively one by one. **CHORD:** The notes specified by Note Number 1–4 parameter will sound simultaneously. **PHRASE:** The Phrase associated with the patch's type/category is played.
Preview 1–4 Note **(Preview 1–4 Note Number)**	C-1–G9	Specify the pitch of the four notes that will sound when the Preview Mode parameter is set to "SINGLE" or "CHORD." **NOTE** If "PHRASE" is selected for the Preview Mode, these settings will have no effect.
Preview 1–4 Velo **(Preview 1–4 Note Velocity)**	OFF, 0–127	Specify the velocity of the four notes that will sound when the Preview Mode parameter is set to "SINGLE" or "CHORD." **NOTE** If "PHRASE" is selected for the Preview Mode, these settings will have no effect.

Settings for Control-related functions (System Control screen)



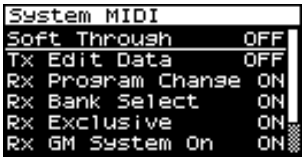
Parameter	Value	Explanation
Src 1–4 **(System Control 1–4 Source)**	OFF, CC01–31, 33–95, PITCH BEND AFTERTOUCH	System Control Assign selects the MIDI message used as the System Control. **OFF:** The system control knob will not be used. **CC01–31, 33–95:** Controller numbers 1–31, 33–95 **PITCH BEND:** Pitch Bend **AFTERTOUCH:** Aftertouch cf. For details on control change messages, refer to "MIDI Implementation" (p. 246).

System Control

System Control settings apply to the entire SonicCell, and specify how MIDI messages will control the volume and sounds. You can specify up to four MIDI messages for control purposes.

If you want to make individual settings for each performance, patch, or rhythm set to specify how sounds and effects will be controlled in real time, use "Matrix Control" (p. 95) or "Multi-effects Control" (p. 81, p. 137).

MIDI-related settings (System MIDI screen)



Parameter	Value	Explanation
Soft Through (Soft Through Switch)	OFF, ON	Specifies whether MIDI messages received at MIDI IN will be re-transmitted without change from MIDI OUT (the ON setting), or will not be re-transmitted (the OFF setting).
Tx Edit Data (Transmit Edit Data Switch)	OFF, ON	Specify whether changes you make in the settings of a patch, performance will be transmitted as system exclusive messages (ON), or will not be transmitted (OFF).
Rx Program Change (Receive Program Change Switch)	OFF, ON	Specifies whether Program Change messages will be received (ON) or not (OFF).
Rx Bank Select (Receive Bank Select Switch)	OFF, ON	Specifies whether Bank Select messages will be received (ON) or not (OFF).
Rx Exclusive (Receive System Exclusive Switch)	OFF, ON	Specifies whether System Exclusive messages will be received (ON) or not (OFF).
Rx GM System On (Receive GM System On Switch)	OFF, ON	Specifies whether General MIDI System On messages will be received (ON) or not (OFF).
Rx GM2 System On (Receive GM2 System On Switch)	OFF, ON	Specifies whether General MIDI 2 System On messages will be received (ON) or not (OFF).
Rx GS Reset (Receive GS Reset Switch)	OFF, ON	Specifies whether GS Reset messages will be received (ON) or not (OFF).

Viewing information about SonicCell (System SRX Info/System Version Info screens)

From the Menu screen, selecting "SRX Info" will access the System SRX Info screen, where you can view information about the expansion boards connected to the SonicCell.

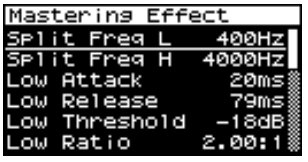
From the MENU screen, selecting "Version" will access the System Version Info screen, where you can view the version of the SonicCell system software.

* You can turn [CURSOR/VALUE] to move between these two screens.

Press [EXIT] to return to the previous screen.

Editing the mastering effect (Mastering Effect screen)

In Performance mode or Patch mode, select "M" in the Effect Routing screen to access the Mastering Effect screen.



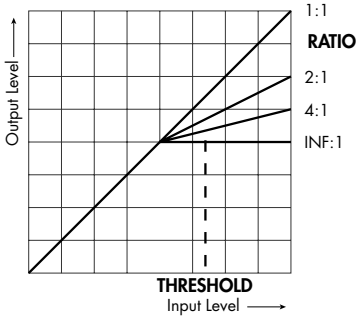
It has independent high, mid, and low ranges. Independently for the high-frequency, mid-frequency, and low-frequency regions, this compresses any sounds that exceed the specified level, making the volume more consistent.
When you procedure your own original audio CD, this lets you master at an optimized level.

NOTE
Mastering effect settings apply to the entire SonicCell. These settings are not for individual patches or performances.

Parameter	Value	Explanation
Split Freq L (Split Frequency Low)	200–800 Hz	Frequency at which the low-frequency (Low) and mid-frequency (Mid) bands are split.
Split Freq H (Split Frequency High)	2000–8000 Hz	Frequency at which the high-frequency (High) and mid-frequency (Mid) bands are split.
Low/Mid/High Attack	0–100 ms	Time from when the volume goes up the threshold level until the compressor effect applies.
Low/Mid/High Release	50–5000 ms	Time from when the volume falls below the threshold level until the compressor effect no longer applies.
Low/Mid/High Threshold	-36–0 dB	Specifies the volume levels at which compression will begin for the low-frequency (Low), mid-frequency (Mid), and high-frequency (High) ranges.
Low/Mid/High Ratio	1.00:1–INF:1 (INF: infinity)	Specifies the compression ratios for the low-frequency (Low), mid-frequency (Mid), and high-frequency (High) ranges.
Low/Mid/High Level	0–24 dB	Specifies the output volume for the low-frequency (Low), mid-frequency (Mid), and high-frequency (High) ranges.

About THRESHOLD and RATIO

As shown in the diagram below, these parameters determine how the volume is to be compressed.



■ Menu screen.....

From the Mastering Effect screen, you can press [MENU] to access the Mastering Type screen.

Press [MENU] once again to return to the Mastering Effect screen.

Parameter	Explanation
Write (System Write)	Saves the current settings as user settings. (p. 150).
Hard Comp, Soft Comp, Lo Boost, Mid Boost, Hi Boost	Recalls preset settings of the type you select.
User	Recalls user settings you've saved.

Utility functions

In the menu screen, choose “Utility” to access the Utility Menu screen.
Here you can save user data to USB memory, or restore (reload) data from USB memory into SonicCell.

MEMO
Use only USB memory sold by Roland. Operation cannot be guaranteed when products other than there is used.
Proper operation cannot be guaranteed if other USB memory products is used.

Backing up user data (User Backup)

You can save the user data to USB memory. This operation is called “User Backup.”

From the Utility screen, choose “User Backup” to access the following screen.

1. **To carry out the backup, choose “OK” and press [CURSOR/VALUE].**
   If you decide not to perform the backup, choose “CANCEL” and press [CURSOR/VALUE].
   When the backup is completed, you’re returned to the Utility screen.

Restoring backed-up data into the SonicCell (User Restore)

You can return the user data previously backed up to USB memory into the SonicCell. This operation is called “User Restore.”

From the Utility screen, choose “User Restore” to access the following screen.

1. **To carry out the restoration, choose “OK” and press [CURSOR/VALUE].**
   If you decide that you don’t want to carry out the restoration, choose “CANCEL” and press [CURSOR/VALUE].
   Once the restoration has been completed, the following screen will appear.

2. **Switch off the SonicCell’s power, then switch it on again.**

Returning to the factory settings (Factory Reset)

You can return all of SonicCell's settings to the factory-set state. This is called "Factory Reset."

NOTE

If SonicCell's internal memory already contains important data that you've created, all of this data will be lost when you execute a factory reset.
If you want to keep your data, you must save it to USB memory.

In the Utility screen, choose "Factory Reset" to access the following screen.

1. **To execute the factory reset, choose "OK" and press [CURSOR/VALUE].**
   If you decide not to execute, choose "CANCEL" and press [CURSOR/VALUE].
   Once the factory reset is completed, the following screen will appear.

2. **Switch off the SonicCell's power, then switch it on again.**

Initializing USB memory (USB Memory Format)

Here's how to initialize the USB memory. This operation is called "USB Memory Format."

NOTE

This operation will erase all data on your USB memory. Use this operation with caution.

In the Utility screen, choose "USB Memory Format" to access the Utility screen.

1. **To execute the USB memory format, choose "OK" and press [CURSOR/VALUE].**
   If you decide not to execute, choose "CANCEL" and press [CURSOR/VALUE].
   Once the USB memory format is completed, you'll be returned to the Utility screen.

Adjusting the overall tone of the audio output (Master Equalizer)

Here's how to make final adjustments to the overall tone of SonicCell's audio output (OUTPUT jacks and PHONS jack).

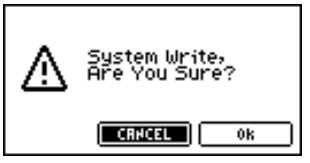
1. **Get the indicators for [MIDI INST], [USB AUDIO], and [INPUT] to all go out.**
   The Master EQ screen will appear.

2. **Turn [CURSOR/VALUE] to select the parameter that you want to edit, then press [CURSOR/VALUE].**
   The value of the selected parameter will be highlighted.

3. **Turn [CURSOR/VALUE] to edit the value, then press [CURSOR/VALUE].**
   * If the output volume is excessive, the "CLIP" indication will appear in the upper right of the screen. Adjust the volume so that distortion does not occur.

4. **When you've finished editing, press [MENU] to write the settings.**

5. **Choose "Write," and press [CURSOR/VALUE].**
   The following message will appear.



6. **To write the edited settings, choose "OK" and press [CURSOR/VALUE].**
   If you decide not to keep the changes you made, select "CANCEL" and press [CURSOR/VALUE].
   Once the settings have been written, you'll be returned to the Master EQ screen.

Parameter		Value	Explanation
LOW	Frequency	200 Hz, 400 Hz	Specifies the center frequency of the low-frequency range.
	Gain	-15 dB–+15 dB	Adjusts the volume of the low-frequency range.
MID	Frequency	200–8000 Hz	Specifies the center frequency of the mid-frequency range.
	Gain	-15 dB–+15 dB	Adjusts the volume of the mid-frequency range.
HIGH	Frequency	2000 Hz, 4000 Hz, 8000 Hz	Specifies the center frequency of the high-frequency range.
	Gain	-15 dB–+15 dB	Adjusts the volume of the high-frequency range.
Q		0.5–8.0	Specifies the width of the mid-frequency range.
Total Gain		-15 dB–+15 dB	Adjusts the overall volume of all frequency bands (low, mid, and high).

Appendices

Troubleshooting

If the SonicCell does not function in the way you expect, first check the following points. If this does not resolve the problem, consult your dealer or a nearby Roland Service Station.

* If any sort of message is being displayed on the screen during an operation, refer to Error Messages (p. 191).

Problems Concerning the Entire SonicCell

Q The power does not turn on.

A Make sure that the SonicCell's AC adaptor is correctly connected to the AC outlet and to the SonicCell itself. (p. 18)

Q Moving the SAMPLING RATE switch does not change the sampling rate

A he sampling rate will not change if you simply move the SAMPLING RATE switch while the power is on. You must turn the power off, then on again.
Then use the INPUT screen or USB Audio screen to verify that the sampling rate has changed. (p. 140, p. 142)

Issues Related to Sound

Q There is no sound.

A Check the following points.

- Is the power for connected amps and speakers turned on? Is the volume turned all the way down?
- Is the INPUT LEVEL knob turned all the way down?
- Have connections been made correctly?
- Can you hear sound through headphones?
  If there is sound in the headphones, it is possible that the connection cables are broken, or that your amp/mixer has malfunctioned. Check your cables and amp/mixer system once again.
- Is the MIDI receive channel correct?
  Make sure that the MIDI transmit channel of the connected device matches the receive channel of the SonicCell (p. 177).
- Have all tones in the patch been turned off?
  Turn on "Tone Switch." (p. 88)
- The Part level settings may be too low.
  Access the Level parameter, and check the level of each part (p. 69).
- Are the Effect settings correct?
  Check the Effect settings ON or OFF, the Effect Balance or Level. (p. 75, p. 132)
- Is the Wave Expansion Board properly installed?
  When selecting the settings that stipulate the use of EXP-A, B waves, Patches, or Rhythm Sets, check that the specified Wave Expansion Board is installed properly in the specified slot (p. 48, p. 51).
- Has the volume been lowered by MIDI messages (volume messages or expression messages) received from an external MIDI device?
- Is USB MIDI THRU set to ON?
  When USB MIDI THRU is ON, there will be sound if the sequencer software on the computer that is connected by a USB cable is set to THRU (p. 177).

Q A specific Part does not sound

A Check the following points.

- Has the volume level of the part been lowered?
  Adjust the Level to raise the volume of the part that is not heard (p. 69).
- Could the part be set to "M" (mute)?
  Set this to "-". (p. 58)

Q Specific pitch ranges do not sound

A Has a restricted range of notes been set?
If a specific range of notes does not sound, check the Key Range settings for the Patch Tone and the Performance Part.

- Part Key Range
  Key Range Lower/Upper (p. 71)
- Tone Key Range
  Key Range Lower/Upper (p. 112, p. 113)

Q Audio signals from the computer are not heard

A Could the audio signal from the computer have a different sampling rate than the SonicCell itself?
Change the SAMPLING RATE switch of the SonicCell to match the sampling rate of the audio signal.

* If you change the setting of the SAMPLING RATE switch while the power is on, you'll need to turn the power off, then on again.

Q The sound is distorted.

A Check the following points.

- Is an effect which distorts the sound being applied?
  If the sound for a specific patch or part is distorted, lower the volume level on that part.
  If the overall sound is distorted, adjust Master Level and Master EQ to lower the volume.
- Use the Sound Parameter in the System to lower the Output Gain (p. 176).

Q Pitch is incorrect.

A Check the following points.

- Is the tuning of the SonicCell incorrect?
  Check the Master Tune setting (p. 176).
- Has the pitch been changed by Pitch Bend messages received from an external MIDI device?

- Have the Coarse Tune or Fine Tune been set for specific Parts?
  Check the Coarse Tune and Fine Tune settings (p. 69).

Q **The sound is interrupted.**

A Sounds will be interrupted if more than 128 voices are used simultaneously.

- Reduce the number of Tones that you are using.
- Increase the Voice Reserve setting for parts that must not drop out. (p. 71)

Q **The sound cuts off when I switch Patches in Patch mode.**

A Although you can apply a wide variety of multi-effects with the SonicCell's multi-effects, switching the Patch also switches the type of multi-effects used.
In such instances, discrepancies between the sound being produced and the multi-effects type can arise, which may result in sounds being different than intended, so sounds produced when Patches are switched may be muted when factory settings are in effect. In certain situations, such as when not using multi-effects that have a great influence on the sound, remembering to set Patch Remain (p. 176) to "ON" allows you to switch Patches without sounds being muted.

Q **When switching Patches in Patch mode, the volume and other parameters set with Control Changes end up being reset.**

A Set Patch Remain (p. 176) to "ON."
Even once they have switched Patches, Control Change messages that have been received are carried forward, so even when switching a Patch whose level is turned all the way down by a Control Change volume message, the level remains unchanged.

Q **If the Tone Delay time value is set to the note, then does the delay time not change beyond a fixed length when the tempo is slowed down?**

A There is a maximum permissible value for the Tone Delay Time (p. 100). So, if the time setting is specified in terms of a note value, and the tempo is slowed down, this maximum permissible value will be reached, and it cannot be increased further. The upper time limit for each is the maximum value that can be set other than the numerical value for the beat.

Q **Even when I set the Pan for a Patch completely to one side, sound still comes from the other channel.**

A The SonicCell's internal effects are in stereo, so if you have effects applied to a Patch, even if the Pan is set all the way to one side, you will still be able to hear sounds of the effect component from the other channel.

Q **Sometimes, when playing legato, the pitch won't rise. Why is this?**

A When the Legato Switch (p. 91) is "ON," and the Legato Retriger (p. 91) is "OFF," and you hold down keys in the high register to play legato, the upper pitch limit of the wave may be exceeded, so that the pitch does not rise as far as you expect, but will stop rising at a certain point. Additionally, if differing upper pitch limits are used for the waves of a Patch that uses multiple tones, it may stop being heard in MONO. When making large pitch changes, set the Legato Retrigger to "ON."

Q **The notes sound strange in the upper registers of the keyboard.**

A Sometimes when playing the keys in the upper part of the SonicCell's keyboard, the sound may stop, or the pitch may stop rising; or with certain keys, there may be intermittent noise. This occurs mainly when the SonicCell's upper pitch limit is exceeded, so this issue doesn't arise in the ranges normally used. But, in any case, it does not indicate a malfunction.

Q **Although the same Patch is selected, it sounds different when I listen to it in the Performance.**

A In Performance mode, the parameters of each part of the performance can apply further modification to parameters such as pan, octave, and filter, relative to the settings specified by the patch. Thus, Patches in a Performance may sound different than they do when heard in Patch mode. To return these settings to their initial conditions, select the Patch after execute Factory Reset Temporary for the Performance. (p. 183)
Additionally, although a Patch may comprise tones created with the use of the multi-effects, the multi-effects used in the Performance may differ from the multi-effects selected by the Patch. Check the multi-effect settings of the performance. Also do the same for the Chorus and Reverb settings.

Q **The volume level of the instrument connected to SonicCell's INPUT is too low.**

A Could you be using a connection cable that contains a resistor?
Use a connection cable that does not contain a resistor.

Issues Related to Effects

Q Effects not applied.

A Check the following points.

- The "MFX," "Chorus," "Reverb" or "Mastering" effect switches may have been turned off.
  Turn the Effect Switch ON. (p. 76, p. 133)
- Are the various effect settings correct? (p. 75, p. 132, p. 144)
- If the send level of each effect is set to 0, the effect will not be applied. Check the settings.
- Even with send levels to each effect set at 0, effects are not applied if the Multi-effects Output Level, the Chorus Level, or the Reverb Level is set to 0. Check each setting.
- If Output Assign is set to other than "MFX," the Multi-effects sound will not be output.
- If Output Assign is set to "PATCH" for each Part of the Performance, the sound will be output according to the Output Assign settings of the Patch (for each Tone) which is assigned to those Parts. This means that if Output Assign for the Patch (each Tone) is set to other than "MFX," the Multi-effects sound will not be output.

Q The Modulation or other controller is always on.

A Check the Matrix Controller settings. (p. 95)
The SonicCell allows you to use the Matrix Control to control Patches in real time. The Matrix Control functions as the control source for the Control Change and other MIDI messages received by the SonicCell, and makes changes to the various Patch parameters based on these messages.
Depending on these settings, the SonicCell may be responding to MIDI messages sent from external MIDI devices, and may result the Patches sounding different than intended.

Q Raising the chorus or reverb send level for each part of a performance still does not cause the effect to be applied sufficiently.

A Although you can make Send level settings to the Chorus and Reverb for each individual Part in a Performance, these values only set the upper limit of the Chorus and Reverb Send levels for the Patch used. Accordingly, even when the value is set to the maximum of 127, if the Send level is lowered in the Patch being used, there will be no effect. In addition, different Patch Chorus and Reverb Send level settings can be used according to whether or not the multi-effects are used.

Q Using the Matrix Control or other such means to control the LFO results in noise when the Pan is changed suddenly.

A Lower the change in speed (LFO Rate).
Due to the specialized processing used for the Pan, which alters the volume level in each of the left and right sides, sudden Pan movements causing rapid changes in these levels creates large changes in volume, and noise from this may be audible as a result.

Q Multi-effect 43: TAP DELAY or other delay time value is set to the note, and then the tempo is slowed down, does the delay time not change beyond a fixed length?

A Such Delay time settings have an upper limit, so if the upper limit of a value set to the note is exceeded when the tempo is retarded, that upper value cannot rise any further. The upper time limit for each is the maximum value that can be set other than the numerical value for the beat.

Q I've saved (written) the effect settings of a performance, but they don't seem to be applied.

A Could you be using the effect settings of the patch?
If the MFX 1–3 Source, Chorus Source, or Reverb Source setting is set to "P1–P16," the performance's effect settings will not be used; the effect settings of the patch/rhythm set assigned to the specified part will be used instead.
If you want to use the performance's effect settings, set this to "PFM" (p. 80).

Issues Related to Saving Data

Q The Performance sounds different than when it was written.

A Check the following points.

- If you have modified the settings of a patch used by a performance, or if the temporary patch of the performance has been modified by an external MIDI device, these patches must also be saved.
  If patches used by a performance have been edited when you write that performance, the SonicCell will display a message asking whether you want to discard these patches. In such cases, first save the patch (p. 116) or rhythm set (p. 131), and then save the performance (p. 73) again.
- The Mastering Effect settings may have changed. (These settings are not stored as part of a performance.)

Q Patches sound different than when written.

A Check the following points.

- The write operation cannot be used to save Patches as changed in Patch mode using Control Change messages from an external MIDI device.

  cf. Refer to "MIDI Implementation" (p. 246) for more on the Control Change messages that are received.

- The Mastering Effect settings may have changed. (These settings are not stored as part of a patch.)

Q Data backed up to USB memory cannot be restored to the SonicCell.

- It is possible that the USB memory was not formatted correctly. The SonicCell can use USB memory that has been formatted as FAT. If your USB memory was formatted using any other method, please re-format it using FAT.

Issues Related to MIDI and External Devices

Q Performances of the external sequencer are sluggish, or have interruptions.

A Problems of sluggish and interrupted performances can crop up very easily when the sequencer or sound generator used for the performance has to handle heavy data loads.
Main causes and possible corrective measures are considered below.

- Are more than 128 voices playing simultaneously?
  Reduce the number of voices. The composition of SonicCell Patches is such that up to eight Waves may be used for one Patch. When using such Patches, even though only one sound may be heard, it is actually eight sounds that are being played simultaneously. In addition, with certain sounds like continuous sounds with long releases, even though the actual sound may not be audible to you, processing for playing the sound is still underway, so in these cases as well, the performance data can differ from the actual number of voices being played.
- Are you using a Patch that uses a lot of LFO?
  Try changing to a different Patch. LFO processing invariably places a big load on the machine, so heavy use of the LFO slows down processing for the SonicCell overall, which can end up having affecting the expression of sounds themselves.
- Is the data concentrated at the beginning of the beats in the sequence data?
  Avoid overlapping data with the same timing by setting an offset of 1-2 clocks instead. Data may easily become concentrated at the beginning of the beats in the song data when, for example, the song data is input using Step Recording, or if the data is quantized after being input with a keyboard in real time. Because of this, large amounts of data are sent to the SonicCell, and the processing for expressing sounds becomes bogged down.
- Is there a Program Change at the point where the song performance is sluggish?
  Change the position of the Program Change. When Program Changes are inserted in songs, processing time for switching patches increases, which may then cause the performance to become sluggish.
- Is there a System Exclusive message at the point where the song performance is sluggish?
  Move the location of the data. System Exclusive messages contain large amounts of data, thus placing a heavy burden on sequencers and sound modules. Try repositioning data and changing System Exclusive messages to Control Changes for any data for which Control Changes can be substituted.
- Is there an Aftertouch or other such large Control Change at the point where the song performance is sluggish?
  Move the location of the data. If the data is no longer needed, delete the data. In some cases, when using a keyboard that features aftertouch to input data, you may end up inputting huge amounts of data before realizing this is happening. Such large amounts of data can place an excessive load on your sequencer and sound module.

Q Can't receive MIDI messages correctly.

A Check the following points.
Is the SonicCell set to receive MIDI messages?

- Performance mode
  The performance part's Receive Channel (p. 71)
  The performance part's Receive Switch (p. 72)
- Patch mode
  Patch Rx Ch (p. 177)

Q Exclusive messages are not received.

A Check the following points.

- Is the instrument set to receive Exclusive messages?
  Set the Rx Exclusive to "ON" (p. 180).
- Does the Device ID number of the transmitting device match the Device ID number of the SonicCell?
  Check the Device ID (p. 177).

Q I connected an external sequencer or MIDI keyboard to the MIDI IN connector, and attempted to play a SonicCell rhythm set, but there was no sound. Why?

A Check to make sure that the MIDI Transmit channel of the external MIDI device and the SonicCell's MIDI Receive channel are matched. The MIDI Receive channel used by the SonicCell in Patch mode is set with the Patch Rx Ch (p. 177). Rhythm Set performance data is generally received on MIDI Channel 10.

Q When the Bend Range for a Patch is increased (48), the pitch does not rise sufficiently, even when a MIDI Pitch Bend message is received.

A While Patch Bend Ranges can be set anywhere between 0 and 48, when certain Waves in which the pitch is raised (in the + direction) are used, the pitch may stop rising at a fixed point, rather than continuing to go up. Although a value of 12 is ensured for the upper limit of raised pitches, use caution when setting the Bend Range above this figure.

Issues related to external input

Q The device connected to INPUT is inaudible or is not loud enough

A Check the following points.

- Are the audio cables connected correctly?
  Check the connections.
- Could an audio cable be broken?
  Could you be using a connection cable that contains a resistor? Use a connection cable that does not contain a resistor
- Could the INPUT LEVEL knob be set to "MIN"?
  Adjust the knob to an appropriate level.
- Is the INPUT gain select switch in the appropriate position?
  Set the INPUT gain select switch as appropriate for the equipment that is connected.

Q No sound from the mic

A Could you have connected a condenser mic?
If you're using a condenser mic, you'll need to provide phantom power.
Turn Phantom Power "ON." (p. 142)

- Could the mic cable be broken?
- Could the INPUT gain select switch be in a position other than "MIC"?
  Set the INPUT gain select switch to "MIC."

Issues related to USB memory

Q USB memory is not detected.
The files are not shown.

A Check the format of your USB memory.
The SonicCell can use USB memory that has been formatted as FAT. If your USB memory was formatted using any other method, please re-format it using FAT.

Q Can't back up to USB memory

A Check the following points.

- Could the USB memory be write protected?
- Is there sufficient free space on the USB memory?

Issues related to songs

Q Playlists are not shown

A This may be due to the following reasons.

- Playlists may not be shown if you directly add/delete/modify the song data in the SonicCell folder without using Playlist Editor.
- For some reason the USB memory is not recognized.
- It is possible that the USB memory was not formatted correctly. The SonicCell can use USB memory that has been formatted as FAT. If your USB memory was formatted using any other method, please re-format it using FAT.

Q Songs are not shown

A This may be due to the following reasons.

- Are the songs placed in the root directory?
  Songs may not be shown if you directly add/delete/modify the song data in the SonicCell folder without using Playlist Editor.
- It is possible that the USB memory was not formatted correctly. The SonicCell can use USB memory that has been formatted as FAT. If your USB memory was formatted using any other method, please re-format it using FAT.

Q Songs won't play

A This may be due to the following reasons.

- Could a "?" symbol be shown in the song list of the playlist?
  The sampling rate of the song (audio file) differs from the sampling rate of the SonicCell itself.
  Change the SAMPLING RATE switch of the SonicCell to match the sampling rate of the song.

* If you move the SAMPLING RATE switch while the power is on, you'll need to turn the power off and on again.

- The file type of the song is not one of the file types that the SonicCell can play.
- It may be that the song data is damaged.
- Songs cannot be played if you directly add/delete/modify the song data in the SonicCell folder without using Playlist Editor.

Q Can't hear the playback sound

A Is the playback volume set correctly?
Adjust the playback volume in the player screen. (p. 169)

Issues related to USB connection

Q The SonicCell is not recognized by my computer

A You must connect the SonicCell to a computer whose USB port supports USB 2.0 Hi-Speed connections.

Error Messages

If an incorrect operation is performed, or if processing could not be performed as you specified, an error message will appear. Refer to the explanation for the error message that appears, and take the appropriate action.

Message	Meaning	Action
USB Memory Not Ready!	USB memory is not connected.	Connect USB memory.
Read Error!	Failed to load data from USB memory.	Make sure that USB memory is correctly connected.
	It may be that the file is damaged.	Do not use this file.
	This file cannot be loaded since its format is incorrect.	Do not use this file.
Write Error!	Failed to write data to USB memory.	Make sure that USB memory is correctly connected.
	Data cannot be written because the USB memory has no more free space.	Delete unneeded files from the USB memory. Alternatively, use a different USB memory device, one that has more free space available.
	The file or the USB memory itself is write protected.	Make sure that the file or the USB memory is not write protected.
Incorrect File/ Sampling Rate.	This is a file that the SonicCell is unable to play.	Do not use this file.
	This song has not been transferred from Playlist Editor to USB memory.	Select the song for transfer from Playlist Editor, and transfer the data once again to USB memory.
	The sampling rate of the song does not match the setting of the SonicCell.	Set the sampling rate of the SonicCell to match the sampling rate of the song, and then restart it.
System Memory Damaged!	It is possible that the contents of system memory have been damaged.	Please execute a Factory Reset. If this does not resolve the problem, contact your dealer or a nearby Roland service center.
File Not Found!	The file was not found in USB memory.	Save the file once again in USB memory.
Checksum Error!	The checksum value of the received system exclusive message was incorrect.	Please correct the checksum value.
MIDI Buffer Full!	An unusually large amount of MIDI data was received, and could not be processed.	Reduce the amount of MIDI messages that are being transmitted.
MIDI Offline!	The MIDI IN connection was broken.	Check that there is no problem with the MIDI cable connected to the SonicCell's MIDI IN, and that the MIDI cable was not disconnected.
USB Offline!	The USB cable is not connected.	Check that there is no problem with the USB cable connected to the SonicCell, and that the USB cable was not disconnected.
Now Playing!	The SMF/Audio File Player is currently playing.	Either stop playback, or wait until playback has ended.

Effects List

Multi-Effects Parameter (MFX1–3, MFX)

The multi-effects feature 78 different kinds of effects. Some of the effects consist of two or more different effects connected in series. Parameters marked with a sharp "#" can be controlled using a Multi-Effecs Control (p. 81, p. 137) or Matrix Control (p. 95). (Two setting items will change simultaneously for "#1" and "#2").

FILTER (10 types)		
01	EQUALIZER	P.194
02	SPECTRUM	P.194
03	ISOLATOR	P.194
04	LOW BOOST	P.194
05	SUPER FILTER	P.195
06	STEP FILTER	P.195
07	ENHANCER	P.195
08	AUTO WAH	P.196
09	HUMANIZER	P.196
10	SPEAKER SIMULATOR	P.196
MODULATION (12 types)		
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35	OVERDRIVE	P.205
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39	GUITAR AMP SIMULATOR	P.205
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48	4TAP PAN DELAY	P.209
49	MULTI TAP DELAY	P.209
50	REVERSE DELAY	P.210
51	SHUFFLE DELAY	P.210
52	3D DELAY	P.211
53	TIME CTRL DELAY	P.211
54	LONG T CTL DELAY	P.211
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58	LOFI RADIO	P.213
59	TELEPHONE	P.213
60	PHONOGRAPH	P.213
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61	PITCH SHIFTER	P.214
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64	REVERB	P.215
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66	OD → CHORUS	P.215
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68	OD → DELAY	P.216
69	DST → CHORUS	P.216
70	DST → FLANGER	P.216
71	DST → DELAY	P.216
72	ENH → CHORUS	P.216
73	ENH → FLANGER	P.217
74	ENH → DELAY	P.217
75	CHORUS → DELAY	P.217
76	FLANGER → DELAY	P.217
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PIANO (1 type)		
78	SYMPATHETIC RESO	P.218

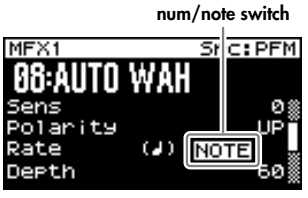
About Note

Some effect parameters (such as Rate or Delay Time) can be set in terms of a note value.

Such parameters have a num/note switch that lets you specify whether you will set the value as a note value or as a numerical value.

If you want to set Rate (Delay Time) as a numerical value, set the num/note switch to "Hz" ("msec"). If you want to set it as a note value, set the num/note switch to "NOTE."

num/note switch



* If the Rate is specified as a note value, the modulation will be synchronized with the tempo when you play back SMF song data.

note:

𝅘𝅥𝅯₃	Sixty-fourth-note triplet	𝅘𝅥𝅯	Sixty-fourth note	𝅘𝅥𝅰₃	Thirty-second-note triplet
𝅘𝅥𝅰	Thirty-second note	𝅘𝅥𝅰₃	Sixteenth-note triplet	𝅘𝅥𝅰.	Dotted thirty-second note
𝅘𝅥𝅯	Sixteenth note	𝅘𝅥𝅯₃	Eighth-note triplet	𝅘𝅥𝅯.	Dotted sixteenth note
𝅘𝅥𝅮	Eighth note	𝅘𝅥₃	Quarter-note triplet	𝅘𝅥𝅮.	Dotted eighth note
𝅘𝅥	Quarter note	𝅗𝅥₃	Half-note triplet	𝅘𝅥.	Dotted quarter note
𝅗𝅥	Half note	𝅝₃	Whole-note triplet	𝅗𝅥.	Dotted half note
𝅝	Whole note	𝅜₃	Double-note triplet	𝅝.	Dotted whole note
𝅜	Double note				

NOTE

If a parameter whose num/note switch is set to "NOTE" is specified as a destination for multi-effect control, you will not be able to use multi-effect control to control that parameter.

NOTE

If you specify the delay time as a note value, slowing down the tempo will not change the delay time beyond a certain length. This is because there is an upper limit for the delay time; if the delay time is specified as a note value and you slow down the tempo until this upper limit is reached, the delay time cannot change any further. This upper limit is the maximum value that can be specified when setting the delay time as a numerical value.

When Using 3D Effects

The following 3D effects utilize RSS (Roland Sound Space) technology to create a spaciousness that cannot be produced by delay, reverb, chorus, etc.

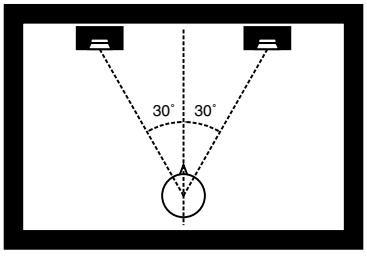
52: 3D DELAY

29: 3D CHORUS

30: 3D FLANGER

31: 3D STEP FLANGER

When using these effects, we recommend that you place your speakers as follows. Also, make sure that the speakers are at a sufficient distance from the walls on either side.



If the left and right speakers are too far apart, or if there is too much reverberation, the full 3D effect may not appear.

Each of these effects has an "Output Mode" parameter. If the sound from the OUTPUT jacks is to be heard through speakers, set this parameter to "SPEAKER." If the sound is to be heard through headphones, set it to "PHONES." This will ensure that the optimal 3D effect will be heard. If this parameter is not set correctly, the full 3D effect may not appear.

About the STEP RESET function

06: STEP FILTER

16: STEP RING MOD

19: STEP PAN

20: SLICER

63: STEP PCH SHIFTER

The above five types contain a sixteen-step sequencer.

For these types, you can use a multi-effect control (p. 81, p. 137) to reset the sequence to play from the first step.

To do this, set the multi-effect control Destination to "Step Reset."

For example if you are using the modulation lever to control the effect, you would make the following settings.

Source: CC01: MODULATION

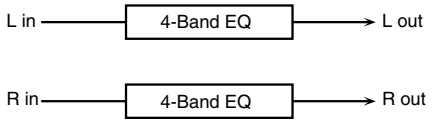
Destination: Step Reset

Sens: +63

With these settings, the sequence will play back from the first step whenever you operate the modulation lever.

01: EQUALIZER

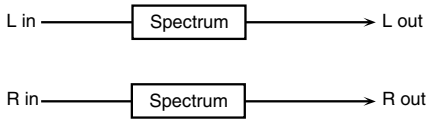
This is a four-band stereo equalizer (low, mid x 2, high).



Parameter	Value	Description
Low Freq	200, 400 Hz	Frequency of the low range
Low Gain #	-15– +15 dB	Gain of the low range
Mid1 Freq	200–8000 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 for Q to narrow the range to be affected.
Mid2 Freq	200–8000 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 for Q to narrow the range to be affected.
High Freq	2000, 4000, 8000 Hz	Frequency of the high range
High Gain #	-15– +15 dB	Gain of the high range
Level #	0–127	Output Level

02: SPECTRUM

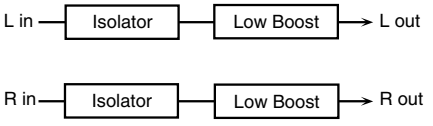
This is a stereo spectrum. Spectrum is a type of filter which modifies the timbre by boosting or cutting the level at specific frequencies.



Parameter	Value	Description
Band1 (250Hz)	-15– +15 dB	Gain of each frequency band
Band2 (500Hz)		
Band3 (1000Hz)		
Band4 (1250Hz)		
Band5 (2000Hz)		
Band6 (3150Hz)		
Band7 (4000Hz)		
Band8 (8000Hz)		
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

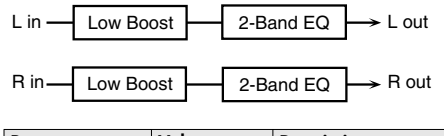
This is an equalizer which cuts the volume greatly, allowing you to add a special effect to the sound by cutting the volume in varying ranges.



Parameter	Value	Description
Boost/ Cut Low #	-60– +4 dB	These boost and cut each of the High, Middle, and Low frequency ranges. At -60 dB, the sound becomes inaudible. 0 dB is equivalent to the input level of the sound.
Boost/ Cut Mid #		
Boost/ Cut High #		
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	Adjusts the level settings 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

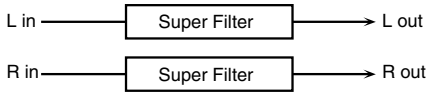
Boosts the volume of the lower range, creating powerful lows.



Parameter	Value	Description
Boost Frequency #	50–125 Hz	Center frequency at which the lower range will be boosted
Boost Gain #	0– +12 dB	Amount by 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 frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Level	0–127	Output level

05: SUPER FILTER

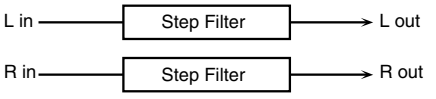
This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically.



Parameter	Value	Description
Filter Type	LPF, BPF, HPF, NOTCH	Filter type 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 **-36 dB:** extremely steep **-24 dB:** steep **-12 dB:** gentle
Filter Cutoff #	0–127	Cutoff frequency of the filter Increasing this value will raise the cutoff frequency.
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
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)
		
Rate #	0.05–10.00 Hz, note	Rate of modulation
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.



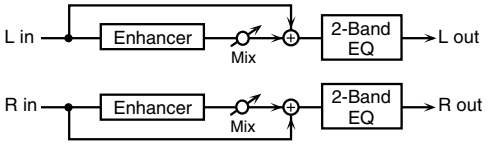
Parameter	Value	Description
Step 01–16	0–127	Cutoff frequency at each step
Rate #	0.05–10.00 Hz, note	Rate of modulation
Attack #	0–127	Speed at which the cutoff frequency changes between steps
Filter Type	LPF, BPF, HPF, NOTCH	Filter type Frequency range that will pass through each filter **LPF:** frequencies 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

MEMO

You can use multi-effect control to make the step sequence play again from the beginning (p. 193).

07: ENHANCER

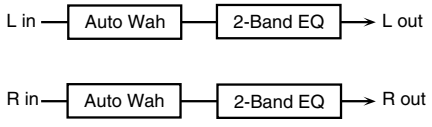
Controls the overtone structure of the high frequencies, adding sparkle and tightness to the sound.



Parameter	Value	Description
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

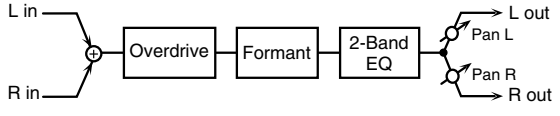
Cyclically controls a filter to create cyclic change in timbre.



Parameter	Value	Description
Filter Type	LPF, BPF	Type of filter **LPF:** The wah effect will be applied over a wide frequency range. **BPF:** The wah effect will be applied over a narrow frequency range.
Manual #	0–127	Adjusts the center frequency at which the effect is applied.
Peak	0–127	Adjusts the amount of the wah effect that will occur in the range of the center frequency. Set a higher value for Q to narrow the range to be affected.
Sens #	0–127	Adjusts the sensitivity with which the filter is controlled.
Polarity	UP, DOWN	Sets the direction in which the frequency will change when the auto-wah filter is modulated. **UP:** The filter will change toward a higher frequency. **DOWN:** The filter will change toward a lower frequency.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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

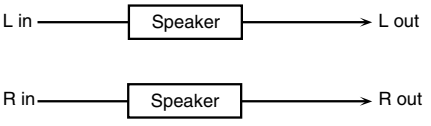
Adds a vowel character to the sound, making it similar to a human voice.



Parameter	Value	Description
Drive Sw	OFF, ON	Turns Drive 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	
Rate #	0.05–10.00 Hz, note	Frequency at which the two vowels switch
Depth #	0–127	Effect depth
Input Sync Sw	OFF, ON	Determines whether the LFO for switching the vowels is reset by the input signal (ON) or not (OFF).
Input Sync Threshold	0–127	Volume level at which reset is applied
Manual #	0–100	Point at which Vowel 1/2 switch **49 or less:** Vowel 1 will have a longer duration. **50:** Vowel 1 and 2 will be of equal duration. **51 or more:** Vowel 2 will have a longer duration.
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Pan #	L64–63R	Stereo location of the output
Level	0–127	Output level

10: SPEAKER SIMULATOR

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



Parameter	Value	Description
Speaker Type	(See the table right.)	Type of speaker
Mic Setting	1, 2, 3	Adjusts the location of the mic that is recording the sound of the speaker. This can be adjusted in three steps, with the mic 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

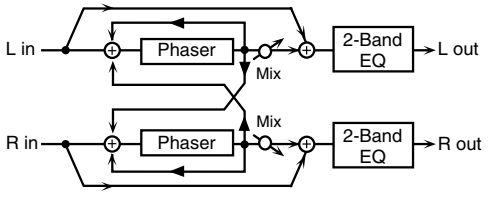
Specifications of each Speaker Type

The speaker column indicates the diameter of each speaker unit (in inches) and the number of units.

Type	Cabinet	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 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

11: PHASER

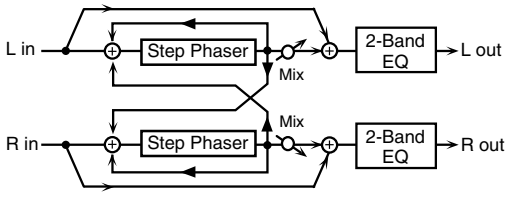
A phase-shifted sound is added to the original sound and modulated.



Parameter	Value	Description
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual #	0–127	Adjusts the basic frequency from which the sound will be modulated.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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: STEP PHASER

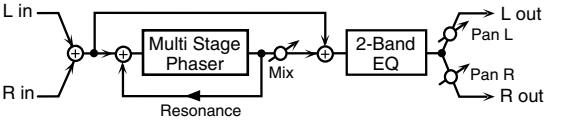
The phaser effect will be varied gradually.



Parameter	Value	Description
Mode	4-STAGE, 8-STAGE, 12-STAGE	Number of stages in the phaser
Manual #	0–127	Adjusts the basic frequency from which the sound will be modulated.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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 #	0.10–20.00 Hz, note	Rate of the step-wise change in the phaser effect
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

13: MLT STAGE PHASER (MULTI STAGE PHASER)

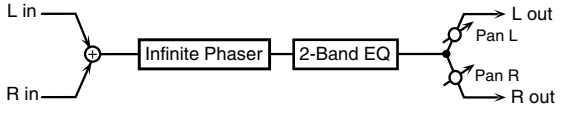
Extremely high settings of the phase difference produce a deep phaser effect.



Parameter	Value	Description
Mode	4-STAGE, 8-STAGE, 12-STAGE, 16-STAGE, 20-STAGE, 24-STAGE	Number of phaser stages
Manual #	0–127	Adjusts the basic frequency from which the sound will be modulated.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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

14: INFINITE PHASER

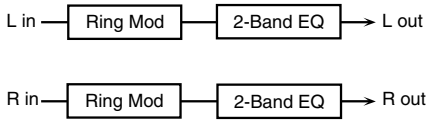
A phaser that continues raising/lowering the frequency at which the sound is modulated.



Parameter	Range	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	Volume of the phase-shifted sound
Pan #	L64–63R	Panning of the output sound
Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range
High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
Level	0–127	Output volume

15: RING MODULATOR

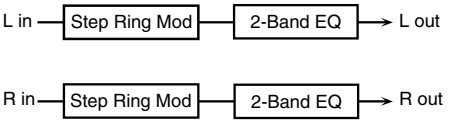
This is an effect that applies amplitude modulation (AM) to the input signal, producing bell-like sounds. You can also change the modulation frequency in response to changes in the volume of the sound sent into the effect.



Parameter	Value	Description
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 (**UP**) or lower frequencies (**DOWN**).
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output level

16: STEP RING MOD (STEP RING MODULATOR)

This is a ring modulator that uses a 16-step sequence to vary the frequency at which modulation is applied.



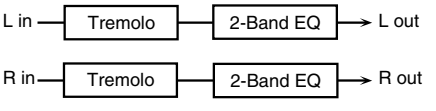
Parameter	Range	Explanation
Step 01–16	0–127	Frequency of ring modulation at each step
Rate #	0.05–10.00 Hz, note	Rate at which the 16-step sequence will cycle
Attack #	0–127	Speed at which the modulation frequency changes between steps
Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range
High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and effect sound (W)
Level	0–127	Output volume

MEMO

You can use multi-effect control to make the step sequence play again from the beginning (p. 193).

17: TREMOLO

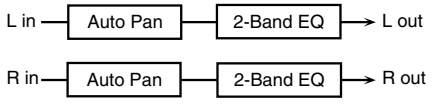
Cyclically modulates the volume to add tremolo effect to the sound.

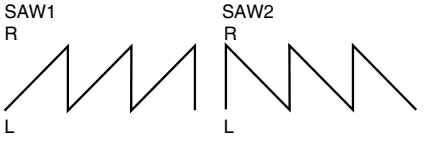


Parameter	Value	Description
Mod Wave	TRI, SQR, SIN, SAW1, SAW2	Modulation Wave **TRI:** triangle wave **SQR:** square wave **SIN:** sine wave **SAW1/2:** sawtooth wave
		
Rate #	0.05–10.00 Hz, note	Frequency of the change
Depth #	0–127	Depth to which the effect is applied
Low Gain	-15– +15 dB	Gain of the low range
High Gain	-15– +15 dB	Gain of the high range
Level	0–127	Output Level

18: AUTO PAN

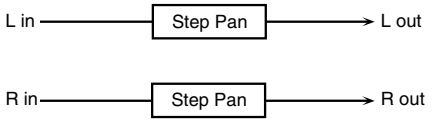
Cyclically modulates the stereo location of the sound.



Parameter	Value	Description
Mod Wave	TRI, SQR, SIN, SAW1, SAW2	Modulation Wave **TRI:** triangle wave **SQR:** square wave **SIN:** sine wave **SAW1/2:** sawtooth wave
		
Rate #	0.05–10.00 Hz, note	Frequency of the change
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: STEP PAN

This uses a 16-step sequence to vary the panning of the sound.



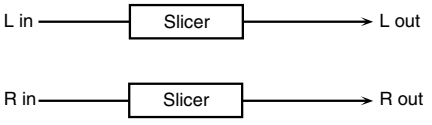
Parameter	Range	Explanation
Step 01–16	L64–63R	Pan at each step
Rate #	0.05–10.00 Hz, note	Rate at which the 16-step sequence will cycle
Attack #	0–127	Speed at which the pan changes between steps
Input Sync Sw	OFF, ON	Specifies whether an input note will cause the sequence to resume from the first step of the sequence (ON) or not (OFF)
Input Sync Threshold	0–127	Volume at which an input note will be detected
Level	0–127	Output volume

MEMO

You can use multi-effect control to make the step sequence play again from the beginning (p. 193).

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.



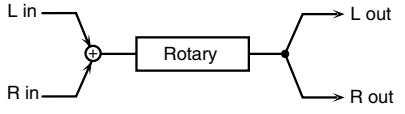
Parameter	Value	Description
Step 01–16	L64–63R	Level at each step
Rate #	0.05–10.00 Hz, note	Rate at which the 16-step sequence will cycle
Attack #	0–127	Speed at which the level changes between steps
Input Sync Sw	OFF, ON	Specifies whether an input note will cause the sequence to resume from the first 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

MEMO

You can use multi-effect control to make the step sequence play again from the beginning (p. 193).

21: ROTARY

The Rotary effect simulates the sound of the rotary speakers often used with the electric organs of the past. Since the movement of the high range and low range rotors can be set independently, the unique type of modulation characteristic of these speakers can be simulated quite closely. This effect is most suitable for electric organ Patches.

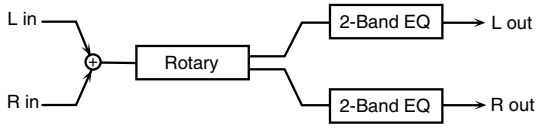


Parameter	Value	Description
Speed #	SLOW, FAST	Simultaneously switch the rotational speed of the low frequency rotor and high frequency rotor. **SLOW:** Slows down the rotation to the Slow Rate. **FAST:** Speeds up the rotation to the Fast Rate.
Wf Slow Speed	0.05–10.00 Hz	Slow speed (SLOW) of the low frequency rotor
Wf Fast Speed	0.05–10.00 Hz	Fast speed (FAST) of the low frequency rotor
Wf 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. Lower values will require longer times.
Wf Level	0–127	Volume of the low frequency rotor
Tw Slow Speed	0.05–10.00 Hz	Settings of the high frequency rotor The parameters are the same as for the low frequency rotor
Tw Fast Speed	0.05–10.00 Hz	
Tw Acceleration	0–15	
Tw 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.

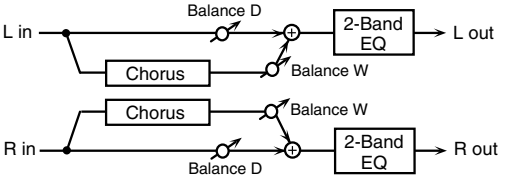
This effect features the same specifications as the VK-7's built-in rotary speaker.



Parameter	Value	Description
Speed #	SLOW, FAST	Rotational speed of the rotating speaker
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.
Wf Slow Speed	0.05–10.00 Hz	Low-speed rotation speed of the woofer
Wf Fast Speed	0.05–10.00 Hz	High-speed rotation speed of the woofer
Wf Trans Up	0–127	Adjusts the rate at which the woofer rotation speeds up when the rotation is switched from Slow to Fast.
Wf Trans Down	0–127	Adjusts the rate at which the woofer rotation speeds up when the rotation is switched from Fast to Slow.
Wf Level	0–127	Volume of the woofer
Tw Slow Speed	0.05–10.00 Hz	Settings of the tweeter The parameters are the same as for the woofer.
Tw Fast Speed	0.05–10.00 Hz	
Tw Trans Up	0–127	
Tw Trans Down	0–127	
Tw Level	0–127	
Spread	0–10	Sets the rotary speaker stereo image. The higher the value set, the wider the sound is spread out.
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

23: CHORUS

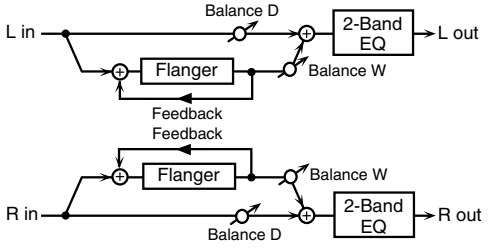
This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorus sound.



Parameter	Value	Description
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	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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

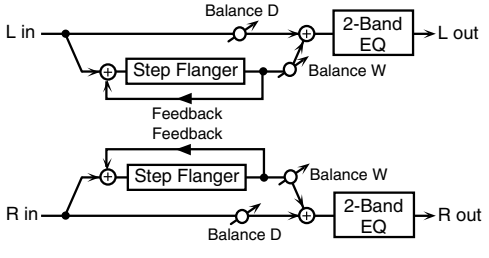
This is a stereo flanger. (The LFO has the same phase for left and right.) It produces a metallic resonance that rises and falls like a jet airplane taking off or landing. A filter is provided so that you can adjust the timbre of the flanged sound.



Parameter	Value	Description
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	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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

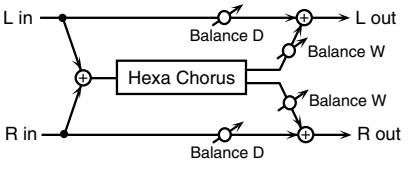
This is a flanger in which the flanger pitch changes in steps. The speed at which the pitch changes can also be specified in terms of a note-value of a specified tempo.



Parameter	Value	Description
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	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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 #	0.10–20.00 Hz, note	Rate (period) of pitch change
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

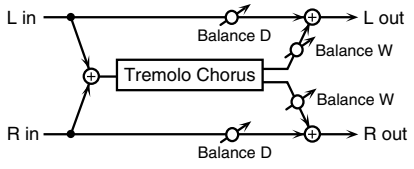
Uses a six-phase chorus (six layers of chorused sound) to give richness and spatial spread to the sound.



Parameter	Value	Description
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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

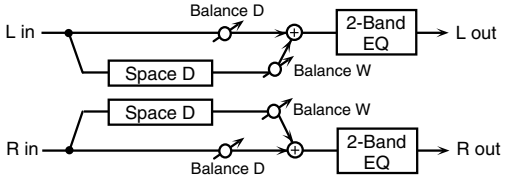
This is a chorus effect with added Tremolo (cyclic modulation of volume).



Parameter	Value	Description
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Chorus Rate #	0.05–10.00 Hz, note	Modulation frequency of the chorus effect
Chorus Depth	0–127	Modulation depth of the chorus effect
Tremolo Rate #	0.05–10.00 Hz, note	Modulation frequency of the tremolo effect
Tremolo Separation	0–127	Spread 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

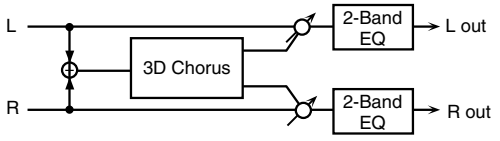
This is a multiple chorus that applies two-phase modulation in stereo. It gives no impression of modulation, but produces a transparent chorus effect.



Parameter	Value	Description
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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: 3D CHORUS

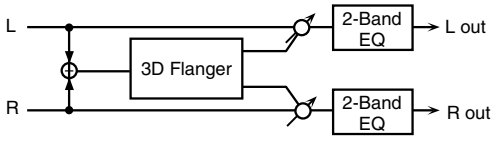
This applies a 3D effect to the chorus sound. The chorus sound will be positioned 90 degrees left and 90 degrees right.



Parameter	Value	Description
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	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Modulation depth of the chorus effect
Phase	0–180 deg	Spatial spread of the sound
Output Mode	SPEAKER, PHONES	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select **SPEAKER** when using speakers, or **PHONES** when using headphones.
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

30: 3D FLANGER

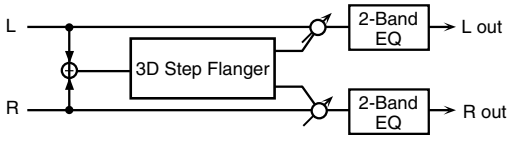
This applies a 3D effect to the flanger sound. The flanger sound will be positioned 90 degrees left and 90 degrees right.



Parameter	Value	Description
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	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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.
Output Mode	SPEAKER, PHONES	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select **SPEAKER** when using speakers, or **PHONES** when using headphones.
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

31: 3D STEP FLANGER

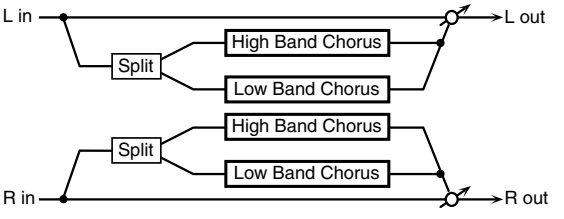
This applies a 3D effect to the step flanger sound. The flanger sound will be positioned 90 degrees left and 90 degrees right.



Parameter	Value	Description
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	200–8000 Hz	Basic frequency of the filter
Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
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 #	0.10–20.00 Hz, note	Rate (period) of pitch change
Output Mode	SPEAKER, PHONES	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select **SPEAKER** when using speakers, or **PHONES** when using headphones.
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

32: 2BAND CHORUS

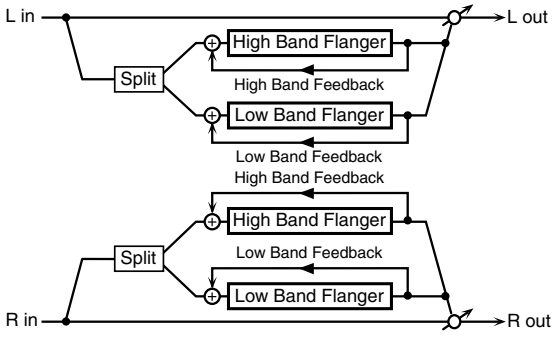
A chorus effect that lets you apply an effect independently to the low-frequency and high-frequency ranges.



Parameter	Range	Explanation
Split Freq	200–8000 Hz	Frequency at which the low and high ranges will be divided
Low Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the low-range chorus sound is heard
Low Rate #	0.05–10.00 Hz, note	Rate at which the low-range chorus sound is modulated
Low Depth	0–127	Modulation depth for the low-range chorus sound
Low Phase	0–180 deg	Spaciousness of the low-range chorus sound
High Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the high-range chorus sound is heard
High Rate #	0.05–10.00 Hz, note	Rate at which the low-range chorus sound is modulated
High Depth	0–127	Modulation depth for the high-range chorus sound
High Phase	0–180 deg	Spaciousness of the high-range chorus sound
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and chorus sound (W)
Level	0–127	Output volume

33: 2BAND FLANGER

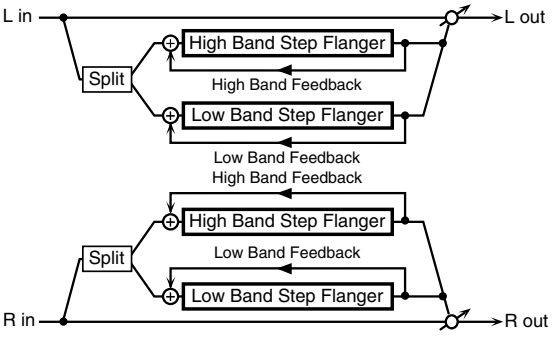
A flanger that lets you apply an effect independently to the low-frequency and high-frequency ranges.



Parameter	Range	Explanation
Split Freq	200–8000 Hz	Frequency at which the low and high ranges will be divided
Low Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the low-range flanger sound is heard
Low Rate #	0.05–10.00 Hz, note	Rate at which the low-range flanger sound is modulated
Low Depth	0–127	Modulation depth for the low-range flanger sound
Low Phase	0–180 deg	Spaciousness of the low-range flanger sound
Low Feedback #	-98– +98%	Proportion of the low-range flanger sound that is to be returned to the input (negative values invert the phase)
High Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the high-range flanger sound is heard
High Rate #	0.05–10.00 Hz, note	Rate at which the high-range flanger sound is modulated
High Depth	0–127	Modulation depth for the high-range flanger sound
High Phase	0–180 deg	Spaciousness of the high-range flanger sound
High Feedback #	-98– +98%	Proportion of the high-range flanger sound that is to be returned to the input (negative values invert the phase)
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and flanger sound (W)
Level	0–127	Output volume

34: 2BAND STEP FLNGR (2BAND STEP FLANGER)

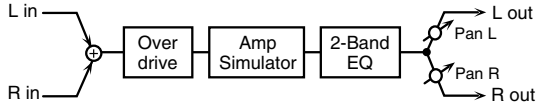
A step flanger that lets you apply an effect independently to the low-frequency and high-frequency ranges.



Parameter	Range	Explanation
Split Freq	200–8000 Hz	Frequency at which the low and high ranges will be divided
Low Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the low-range flanger sound is heard
Low Rate #	0.05–10.00 Hz, note	Rate at which the low-range flanger sound is modulated
Low Depth	0–127	Modulation depth for the low-range flanger sound
Low Phase	0–180 deg	Spaciousness of the low-range flanger sound
Low Feedback #	-98– +98%	Proportion of the low-range flanger sound that is to be returned to the input (negative values invert the phase)
Low Step Rate #	0.10–20.00 Hz, note	Rate at which the steps will cycle for the low-range flanger sound
High Pre Delay	0.0–100.0 ms	Delay time from when the original sound is heard to when the high-range flanger sound is heard
High Rate #	0.05–10.00 Hz, note	Rate at which the high-range flanger sound is modulated
High Depth	0–127	Modulation depth for the high-range flanger sound
High Phase	0–180 deg	Spaciousness of the high-range flanger sound
High Feedback #	-98– +98%	Proportion of the high-range flanger sound that is to be returned to the input (negative values invert the phase)
High Step Rate #	0.10–20.00 Hz, note	Rate at which the steps will cycle for the high-range flanger sound
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and flanger sound (W)
Level	0–127	Output volume

35: OVERDRIVE

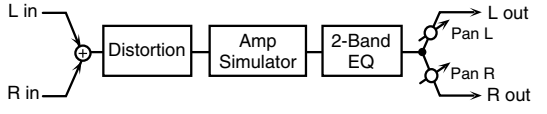
Creates a soft distortion similar to that produced by vacuum tube amplifiers.



Parameter	Value	Description
Drive #	0–127	Degree of distortion Also changes the volume.
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

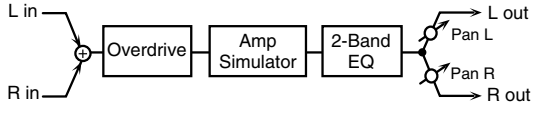
36: DISTORTION

Produces a more intense distortion than Overdrive. The parameters are the same as for "35: OVERDRIVE."



37: VS OVERDRIVE

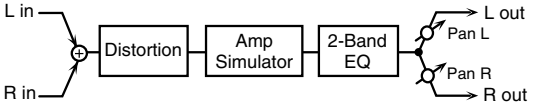
This is an overdrive that provides heavy distortion.



Parameter	Value	Description
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

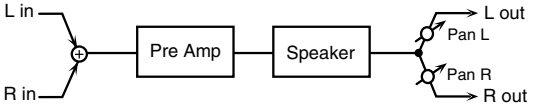
38: VS DISTORTION

This is a distortion effect that provides heavy distortion. The parameters are the same as for "37: VS OVERDRIVE."



39: GUITAR AMP SIMULATOR

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



Parameter	Value	Description
Pre Amp Sw	OFF, ON	Turns the amp switch on/off.
Pre Amp Type	JC-120, CLEAN TWIN, MATCH DRIVE, BG LEAD, MS1959I, MS1959II, MS1959I+II, SLDN LEAD, METAL5150, METAL LEAD, OD-1, OD-2 TURBO, DISTORTION, FUZZ	Type of guitar amp
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 **Pre Amp Middle** **Pre Amp Treble**	0–127	Tone of the bass/mid/treble frequency range * Middle cannot be set if "Match Drive" is selected as the Pre Amp Type.
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," and "BG Lead" Pre Amp Types.
Speaker Sw	OFF, ON	Determines whether the signal passes through the speaker (ON), or not (OFF).
Speaker Type	(See the table below.)	Type of speaker
Mic Setting	1, 2, 3	Adjusts the location of the mic that's capturing the sound of the speaker. This can be adjusted in three steps, from 1 to 3, with the mic becoming more distant as the value increases.
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
Level #	0–127	Output level

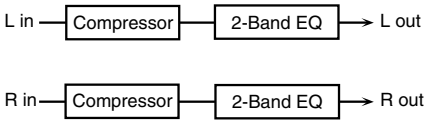
Specifications for each Speaker Type

The speaker column indicates the diameter of each speaker unit (in inches) and the number of units.

Type	Cabinet	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 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

40: COMPRESSOR

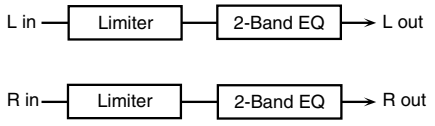
Flattens out high levels and boosts low levels, smoothing out fluctuations in volume.



Parameter	Value	Description
Attack #	0–127	Sets the speed at which compression starts
Threshold #	0–127	Adjusts the volume at which compression begins
Post Gain	0– +18 dB	Adjusts the output gain.
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Level #	0–127	Output level

41: LIMITER

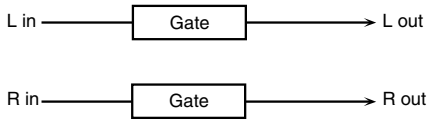
Compresses signals that exceed a specified volume level, preventing distortion from occurring.



Parameter	Value	Description
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 frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Level #	0–127	Output level

42: 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.

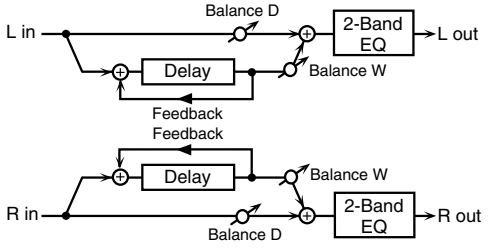


Parameter	Value	Description
Threshold #	0–127	Volume level at which the gate begins to close
Mode	GATE, DUCK	Type of gate **GATE:** The gate will close when the volume of the original sound decreases, cutting the original sound. **DUCK (Ducking):** The gate will close when the volume of the original 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

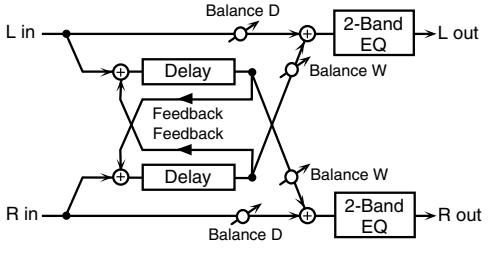
43: DELAY

This is a stereo delay.

When Feedback Mode is NORMAL:



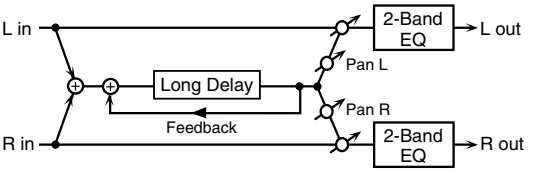
When Feedback Mode is CROSS:



Parameter	Value	Description
Delay Left	0–1300 ms, note	Adjusts the time until the delay sound is heard.
Delay Right		
Phase Left	NORMAL, INVERSE	Phase of the delay sound
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 amount of the delay sound that's fed back into the effect. Negative (-) settings 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.
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output level

44: LONG DELAY

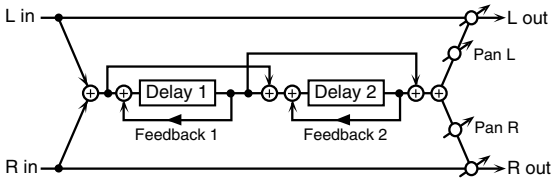
A delay that provides a long delay time.



Parameter	Range	Explanation
Delay Time	0–2600 ms, note	Delay time from when the original sound is heard to when the delay sound is heard
Phase	NORMAL, INVERSE	Phase of the delay (NORMAL: non-inverted, INVERT: inverted)
Feedback #	-98– +98%	Proportion of the delay sound that is to be returned to the input (negative values invert the phase)
HF Damp	200–8000 Hz, BYPASS	Frequency at which the high-frequency content of the delayed sound will be cut (BYPASS: no cut)
Pan #	L64–63R	Panning of the delay sound
Low Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and delay sound (W)
Level	0–127	Output volume

45: SERIAL DELAY

This delay connects two delay units in series. Feedback can be applied independently to each delay unit, allowing you to produce complex delay sounds.

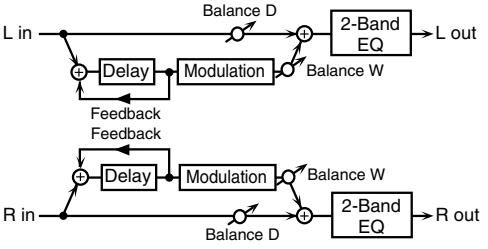


Parameter	Range	Explanation
Delay1 Time	0–1300 ms, note	Delay time from when sound is input to delay 1 until the delay sound is heard
Delay1 Feedback #	-98– +98%	Proportion of the delay sound that is to be returned to the input of delay 1 (negative values invert the phase)
Delay1 HF Damp	200–8000 Hz, BYPASS	Frequency at which the high-frequency content of the delayed sound of delay 1 will be cut (BYPASS: no cut)
Delay2 Time	0–1300 ms, note	Delay time from when sound is input to delay 2 until the delay sound is heard
Delay2 Feedback #	-98– +98%	Proportion of the delay sound that is to be returned to the input of delay 2 (negative values invert the phase)
Delay2 HF Damp	200–8000 Hz, BYPASS	Frequency at which the high-frequency content of the delayed sound of delay 2 will be cut (BYPASS: no cut)
Pan #	L64–63R	Panning of the delay sound
Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range
High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and delay sound (W)
Level	0–127	Output volume

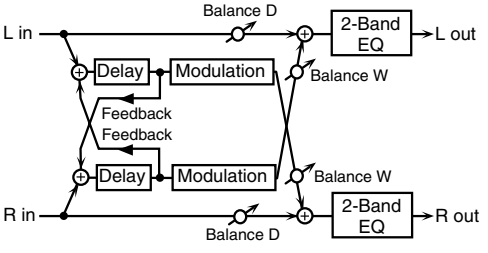
46: MODULATION DELAY

Adds modulation to the delayed sound.

When Feedback Mode is NORMAL:



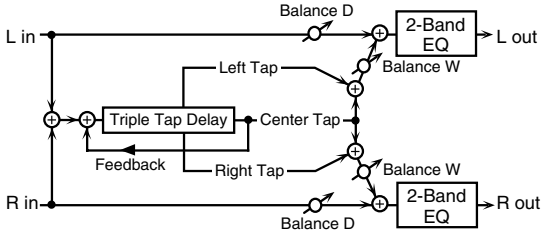
When Feedback Mode is CROSS:



Parameter	Value	Description
Delay Left	0–1300 ms, note	Adjusts the time until the delay sound is heard.
Delay 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 amount of the delay sound that's fed back into the effect. Negative (-) settings 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.
Rate #	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Phase	0-180 deg	Spatial spread of the sound
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output level

47: 3TAP PAN DELAY

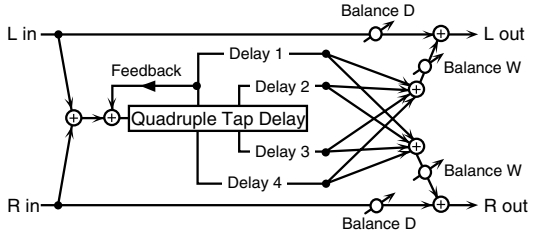
Produces three delay sounds; center, left and right.

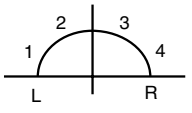


Parameter	Value	Description
Delay Left/ Right/Center	0–2600 ms, note	Adjusts the time until the delay sound is heard.
Center Feedback #	-98– +98%	Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings invert the phase.
HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect is filtered out. If you do not want to filter out any high frequencies, set this parameter to BYPASS.
Left/Right/ Center Level	0–127	Volume of each delay
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W– D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output level

48: 4TAP PAN DELAY

This effect has four delays.



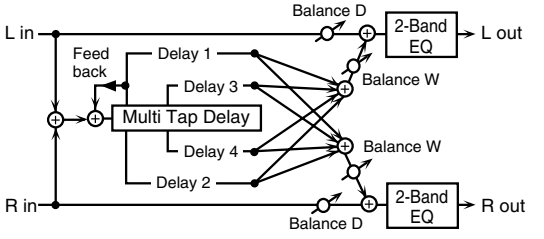


Stereo location of each delay

Parameter	Value	Description
Delay 1–4 Time	0–2600 ms, note	Adjusts the time until the delay sound is heard.
Delay 1 Feedback #	-98– +98%	Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings 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 do not want to filter out any high frequencies, set this parameter to BYPASS.
Delay 1–4 Level	0–127	Volume of each delay
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W– D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output level

49: MULTI TAP DELAY

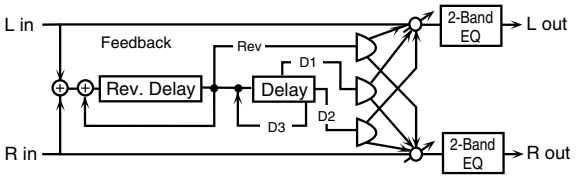
This effect provides four delays. Each of the Delay Time parameters can be set to a note length based on the selected tempo. You can also set the panning and level of each delay sound.



Parameter	Value	Description
Delay 1–4 Time	0–2600 ms, note	Adjusts the time until Delays 1–4 are heard.
Delay 1 Feedback #	-98– +98%	Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings 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 the high frequencies, set this parameter to BYPASS.
Delay 1–4 Pan	L64–63R	Stereo location of Delays 1–4
Delay 1–4 Level	0–127	Output level of Delays 1–4
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W– D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output level

50: REVERSE DELAY

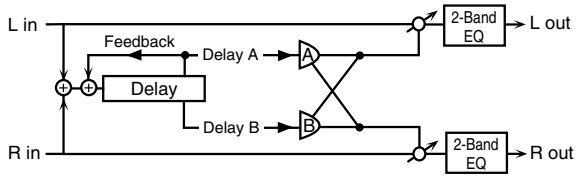
This is a reverse delay that adds a reversed and delayed sound to the input sound. A tap delay is connected immediately after the reverse delay.



Parameter	Range	Explanation
Threshold	0–127	Volume at which the reverse delay will begin to be applied
Rev Dly Time	0–1300 ms, note	Delay time from when sound is input into the reverse delay until the delay sound is heard
Rev Dly 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 Dly HF Damp	200–8000 Hz, BYPASS	Frequency at which the high-frequency content of the reverse-delayed sound will be cut (BYPASS: no cut)
Rev Dly Pan	L64–63R	Panning of the reverse delay sound
Rev Dly Level	0–127	Volume of the reverse delay sound
Delay 1 – 3 Time	0–1300 ms, note	Delay time from when sound is input into the tap delay until the delay sound is heard
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	200–8000 Hz, BYPASS	Frequency at which the low-frequency content of the tap delay sound will be cut (BYPASS: no cut)
Delay 1 Pan', 'Delay 2 Pan	L64–63R	Panning of the tap delay sounds
Delay 1 Level', 'Delay 2 Level	0–127	Volume of the tap delay sounds
Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range
High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and delay sound (W)
Level	0–127	Output volume

51: SHUFFLE DELAY

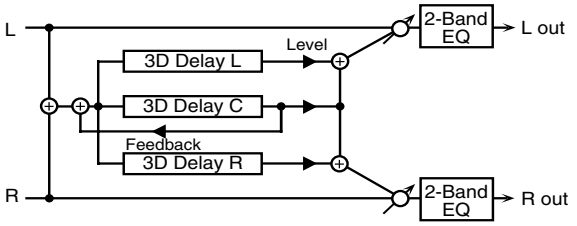
Adds a shuffle to the delay sound, giving the sound a bouncy delay effect with a swing feel.



Parameter	Value	Description
Delay Time #	0–2600 ms, note	Adjusts the time until the delay sound is heard.
Shuffle Rate #	0–100%	Adjusts the ratio (as a percentage) of the time that elapses before Delay B sounds relative to the time that elapses before the Delay A sounds. When set to 100%, the delay times are the same.
Acceleration	0–15	Adjusts the speed which the Delay Time changes from the current setting to its specified new setting.
Feedback #	-98– +98%	Adjusts the amount of the delay that's fed back into the effect. Negative (-) settings 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.
Pan A/B	0–127	Stereo location of Delay A/B
Level A/B	0–127	Volume of delay A/B
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output level

52: 3D DELAY

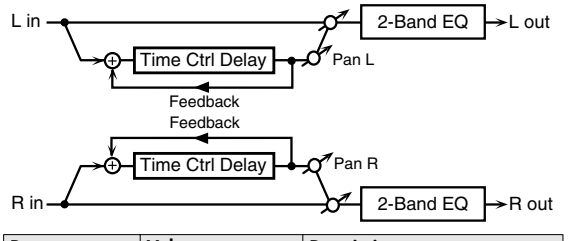
This applies a 3D effect to the delay sound. The delay sound will be positioned 90 degrees left and 90 degrees right.



Parameter	Value	Description
Delay Left	0–2600 ms, note	Adjusts the delay time from the direct sound until the delay sound is heard.
Delay Right		
Delay Center		
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	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
Left Level	0–127	Output level of the delay sound
Right Level		
Center Level		
Output Mode	SPEAKER, PHONES	Adjusts the method that will be used to hear the sound that is output to the OUTPUT jacks. The optimal 3D effect will be achieved if you select **SPEAKER** when using speakers, or **PHONES** when using headphones.
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

53: TIME CTRL DELAY

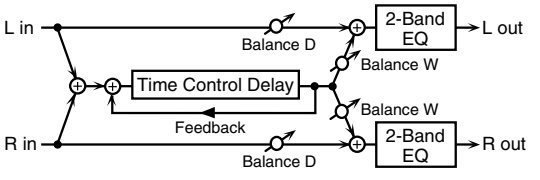
A stereo delay in which the delay time can be varied smoothly.



Parameter	Value	Description
Delay Time #	0–1300 ms, note	Adjusts the time until the delay is heard.
Acceleration	0–15	Adjusts the speed which the Delay Time changes from the current setting to a specified new setting. The rate of change for the Delay Time directly affects the rate of pitch change.
Feedback #	-98– +98%	Adjusts the amount of the delay that's fed back into the effect. Negative (-) settings 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 do not want to filter out any high frequencies, set this parameter to BYPASS.
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output level

54: LONG T CTL DELAY (LONG TIME CONTROL DELAY)

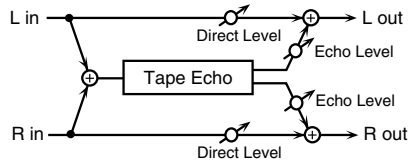
A delay in which the delay time can be varied smoothly, and allowing an extended delay to be produced.



Parameter	Value	Description
Delay Time #	0–2600 ms, note	Adjusts the time until the delay is heard.
Acceleration	0–15	Adjusts the speed which the Delay Time changes from the current setting to a specified new setting. The rate of change for the Delay Time directly affects the rate of pitch change.
Feedback #	-98– +98%	Adjusts the amount of the delay that's fed back into the effect. Negative (-) settings 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 do not want to filter out any high frequencies, set this parameter to BYPASS.
Pan #	L64–63R	Stereo location of the delay
Low Gain	-15– +15 dB	Gain of the low frequency range
High Gain	-15– +15 dB	Gain of the high frequency range
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the delay sound (W)
Level	0–127	Output level

55: TAPE ECHO

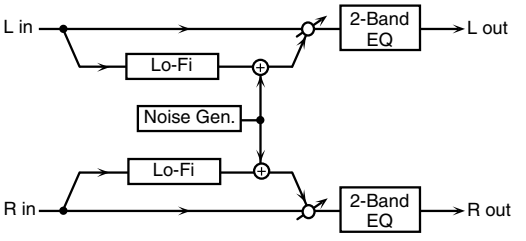
A virtual tape echo that produces a realistic tape delay sound. This simulates the tape echo section of a Roland RE-201 Space Echo.



Parameter	Value	Description
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		
Head L Pan		
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.
Wow/Flutter Rate	0–127	Speed of wow/flutter (complex variation in pitch caused by tape wear and rotational irregularity)
Wow/Flutter 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

56: LOFI NOISE

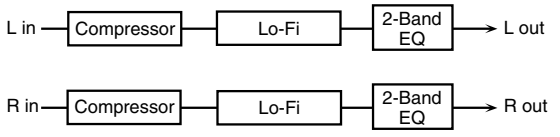
In addition to a lo-fi effect, this adds various types of noise such as white noise and disc noise.



Parameter	Value	Description
LoFi Type	1–9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Filter Type	OFF, LPF, HPF	Type of filter **OFF:** no filter is used **LPF:** cuts the frequency range above the Cutoff **HPF:** cuts the frequency range below the Cutoff
Filter Cutoff	200–8000 Hz	Center frequency of the filter
W/P Noise Type	WHITE, PINK	Switch between white noise and pink noise.
W/P Noise LPF	200–8000 Hz, BYPASS	Center frequency of the low pass filter applied to the white/pink noise (BYPASS: no cut)
W/P Noise Level #	0–127	Volume of the white/pink noise
Disc Noise Type	LP, EP, SP, RND	Type of record noise The frequency at which the noise is heard depends on the selected type.
Disc Noise LPF	200–8000 Hz, BYPASS	Adjusts the cutoff frequency of the low pass filter applied to the record noise. If you don't want to filter out any high frequencies, set this parameter to BYPASS.
Disc Noise Level #	0–127	Volume of the record noise
Hum Noise Type	50 Hz, 60 Hz	Frequency of the hum noise
Hum Noise LPF	200–8000 Hz, BYPASS	Center frequency of the low pass filter applied to the hum noise (BYPASS: no cut)
Hum Noise Level #	0–127	Volume of the hum noise
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

57: LOFI COMPRESS

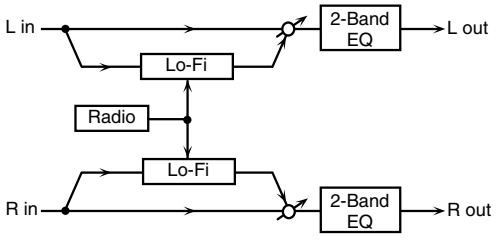
This is an effect that intentionally degrades the sound quality for creative purposes.



Parameter	Value	Description
Pre Fil Type	1–6	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	1–9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Post Fil Type	OFF, LPF, HPF	Type of filter **OFF:** no filter is used **LPF:** cuts the frequency range above the Cutoff **HPF:** cuts the frequency range below the Cutoff
Post Fil Cutoff	200–8000 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

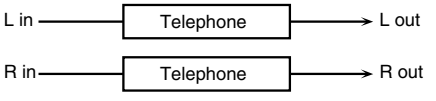
58: LOFI RADIO

In addition to a Lo-Fi effect, this effect also generates radio noise.



Parameter	Value	Description
LoFi Type	1–9	Degrades the sound quality. The sound quality grows poorer as this value is increased.
Filter Type	OFF, LPF, HPF	Type of filter **OFF:** no filter is used **LPF:** cuts the frequency range above the Cutoff **HPF:** cuts the frequency range below the Cutoff
Filter Cutoff	200–8000 Hz	Basic frequency of the Post Filter
Radio Detune #	0–127	Simulates the tuning noise of a radio. As this value is raised, the tuning drifts further.
Radio Noise Level #	0–127	Volume of the radio noise
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output level

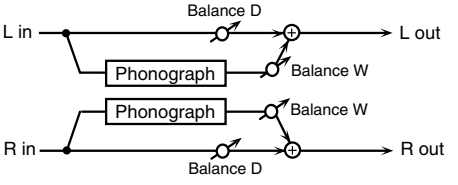
59: TELEPHONE



Parameter	Value	Description
Voice Quality #	0–15	Audio quality of the telephone voice
Treble	-15– +15 dB	Bandwidth of the telephone voice
Balance #	D100:0–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output level

60: PHONOGRAPH

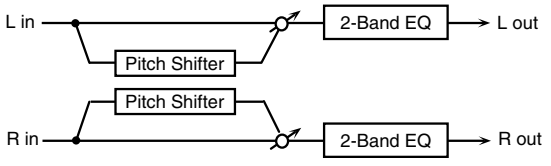
Simulates a sound recorded on an analog record and played back on a record player. This effect also simulates the various types of noise that are typical of a record, and even the rotational irregularities of an old turntable.



Parameter	Value	Description
Signal Distortion	0–127	Depth of distortion
Frequency Range	0–127	Frequency response of the playback system Decreasing this value will produce the impression of an old system with a poor frequency response.
Disc Type	LP, EP, SP	Rotational speed of the turntable This will affect the frequency of the scratch noise.
Scratch Noise Level	0–127	Amount of noise due to scratches on the record
Dust Noise Level	0–127	Volume of noise due to dust on the record
Hiss Noise Level	0–127	Volume of continuous "hiss"
Total Noise Level #	0–127	Volume of overall noise
Wow	0–127	Depth of long-cycle rotational irregularity
Flutter	0–127	Depth of short-cycle rotational irregularity
Random	0–127	Depth of indefinite-cycle rotational irregularity
Total Wow/Flutter #	0–127	Depth of overall rotational irregularity
Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the effect sound (W)
Level	0–127	Output level

61: PITCH SHIFTER (Feedback Pitch Shifter)

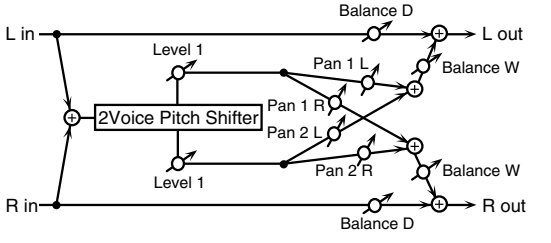
A stereo pitch shifter.



Parameter	Value	Description
Coarse #1	-24– +12 semi	Adjusts the pitch of the pitch shifted sound in semitone steps.
Fine #1	-100– +100 cent	Adjusts the pitch of the pitch shifted sound in 2-cent steps.
Delay Time	0–1300 ms, note	Adjusts the delay time from the direct sound until the pitch shifted sound is heard.
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

62: 2VOI PCH SHIFTER (2VOICE PITCH SHIFTER)

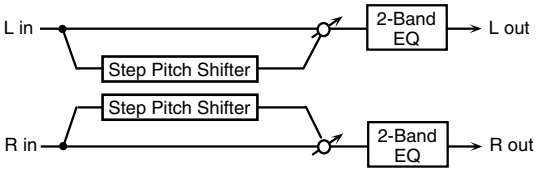
Shifts the pitch of the original sound. This 2-voice pitch shifter has two pitch shifters, and can add two pitch shifted sounds to the original sound.



Parameter	Value	Description
Pitch 1: Coarse #1	-24-+12 semi	Adjusts the pitch of Pitch Shift 1 in semitone steps.
Pitch 1:Fine #1	-100-+100 cent	Adjusts the pitch of Pitch Shift Pitch 1 in 2-cent steps.
Pitch 1:Delay	0–1300 ms, note	Adjusts the delay time from the direct sound until the Pitch Shift 1 sound is heard.
Pitch 1:Feedback #	-98– +98%	Adjusts the proportion of the pitch shifted sound that is fed back into the effect. Negative (-) settings will invert the phase.
Pitch 1:Pan #	L64-63R	Stereo location of the Pitch Shift 1 sound
Pitch 1:Level	0–127	Volume of the Pitch Shift1 sound
Pitch 2: Coarse #2	-24-+12 semi	Settings of the Pitch Shift 2 sound. The parameters are the same as for the Pitch Shift 1 sound.
Pitch 2:Fine #2	-100-+100 cent	
Pitch 2:Delay	0–1300 ms, note	
Pitch 2:Feedback #	-98– +98%	
Pitch 2:Pan #	L64-63R	
Pitch 2:Level	0–127	
Low Gain	-15– +15 dB	Gain of the low range
High Gain	-15– +15 dB	Gain of the high range
Level Balance	A100:0B-A0:100B	Volume balance between the Pitch Shift 1 and Pitch Shift 2 sounds
Balance	D100:0W-D0:100W	Volume balance between the direct sound (D) and the pitch shifted sound (W)
Level	0-127	Output Level

63: STEP PCH SHIFTER (STEP PITCH SHIFTER)

A pitch shifter in which the amount of pitch shift is varied by a 16-step sequence.



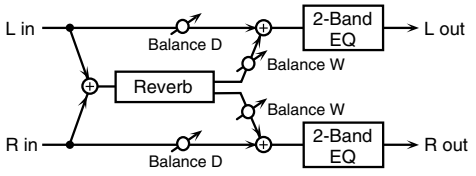
Parameter	Range	Explanation
Step 01–16	-24–+12 semi	Amount of pitch shift at each step (semitone units)
Rate #	0.05–10.00 Hz, note	Rate at which the 16-step sequence will cycle
Attack #	0–127	Speed at which the amount of pitch shift changes between steps
Gate Time #	0–127	Duration of the pitch shifted sound at each step
Fine	-100– +100 cent	Pitch shift adjustment for all steps (2-cent units)
Delay Time	0–1300 ms, note	Delay time from the original sound until the pitch-shifted sound is heard
Feedback #	-98– +98%	Proportion of the pitch-shifted sound that is to be returned to the input (negative values invert the phase)
Low Gain	-15– +15 dB	Amount of boost/cut for the low-frequency range
High Gain	-15– +15 dB	Amount of boost/cut for the high-frequency range
Balance #	D100:0W–D0:100W	Volume balance of the original sound (D) and pitch-shifted sound (W)
Level	0–127	Output volume

MEMO

You can use multi-effect control to make the step sequence play again from the beginning (p. 193).

64: REVERB

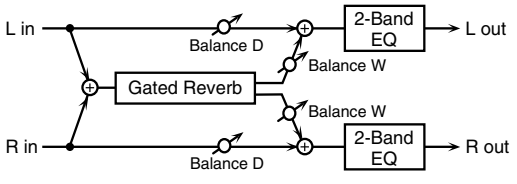
Adds reverberation to the sound, simulating an acoustic space.



Parameter	Value	Description
Type	ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2	Type of reverb **ROOM1:** dense reverb with short decay **ROOM2:** sparse reverb with short decay **STAGE1:** reverb with greater late reverberation **STAGE2:** reverb with strong early reflections **HALL1:** reverb with clear reverberance **HALL2:** reverb with rich reverberance
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time #	0–127	Time length of reverberation
HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which the reverberant sound will be cut. As the frequency is set lower, more of the high frequencies will be cut, resulting in a softer and more muted reverberance. If you do not want to cut the high frequencies, set this parameter to BYPASS.
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 reverb sound (W)
Level	0–127	Output Level

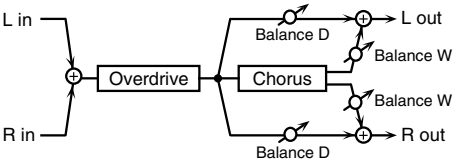
65: GATED REVERB

This is a special type of reverb in which the reverberant sound is cut off before its natural length.



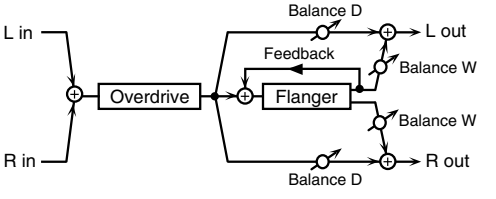
Parameter	Value	Description
Type	NORMAL, REVERSE, SWEEP1, SWEEP2	Type of reverb **NORMAL:** conventional gated reverb **REVERSE:** backwards reverb **SWEEP1:** the reverberant sound moves from right to left **SWEEP2:** the reverberant sound moves from left to right
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the reverb sound is heard.
Gate Time	5–500 ms	Adjusts the time from when the reverb is heard until it disappears.
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 reverb sound (W)
Level #	0–127	Output Level

66: OD → CHORUS (OVERDRIVE → CHORUS)



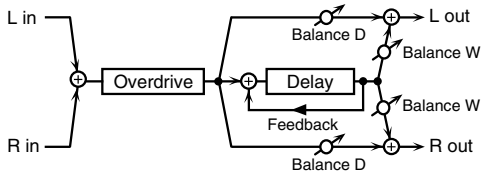
Parameter	Value	Description
Od Drive #	0–127	Degree of distortion Also changes the volume.
Od Pan #	L64–63R	Stereo location of the overdrive sound
Cho Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Cho Rate #	0.05–10.00 Hz, note	Frequency of modulation
Cho Depth	0–127	Depth of modulation
Cho 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: OD → FLANGER (OVERDRIVE → FLANGER)



Parameter	Value	Description
Od Drive #	0–127	Degree of distortion Also changes the volume.
Od Pan #	L64–63R	Stereo location of the overdrive sound
Fln Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Fln Rate #	0.05–10.00 Hz, note	Frequency of modulation
Fln Depth	0–127	Depth of modulation
Fln Feedback #	-98– +98%	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Fln 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

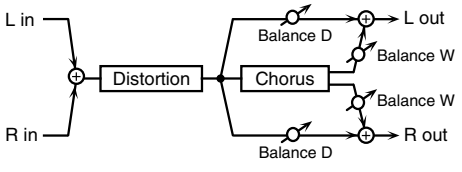
68: OD → DELAY (OVERDRIVE → DELAY)



Parameter	Value	Description
Od Drive #	0–127	Degree of distortion Also changes the volume.
Od Pan #	L64–63R	Stereo location of the overdrive sound
Delay Time	0–2600 ms, note	Adjusts the delay time from the direct sound until 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	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
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

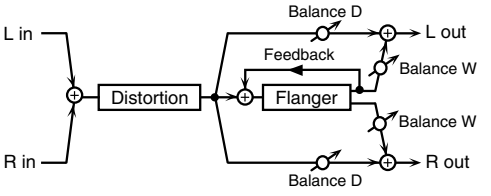
69: DST → CHORUS (DISTORTION → CHORUS)

The parameters are essentially the same as in "66: OD → CHORUS," with the exception of the following two.
OD Drive → Dst Drive, OD Pan → Dst Pan



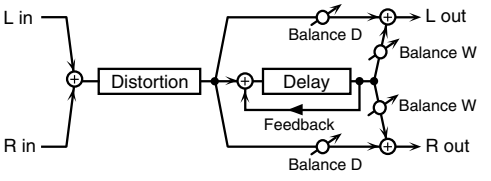
70: DST → FLANGER (DISTORTION → FLANGER)

The parameters are essentially the same as in "67: OD → FLANGER," with the exception of the following two.
OD Drive → Dst Drive, OD Pan → Dst Pan

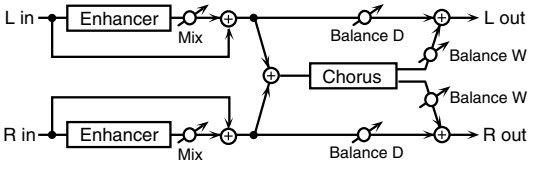


71: DST → DELAY (DISTORTION → DELAY)

The parameters are essentially the same as in "68: OD → DELAY," with the exception of the following two.
OD Drive → Dst Drive, OD Pan → Dst Pan

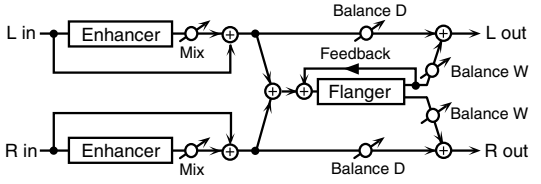


72: ENH → CHORUS (ENHANCER → CHORUS)



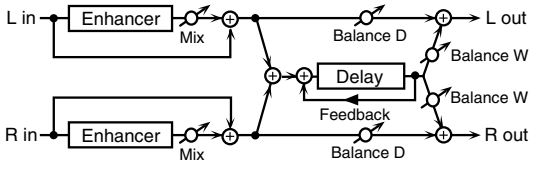
Parameter	Value	Description
Enh Sens #	0–127	Sensitivity of the enhancer
Enh Mix #	0–127	Level of the overtones generated by the enhancer
Cho Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Cho Rate #	0.05–10.00 Hz, note	Frequency of modulation
Cho Depth	0–127	Depth of modulation
Cho 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

73: ENHANCER → FLANGER (ENH → FLANGER)



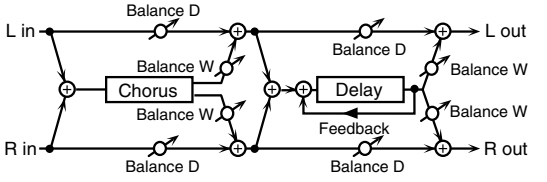
Parameter	Value	Description
Enh Sens #	0–127	Sensitivity of the enhancer
Enh Mix #	0–127	Level of the overtones generated by the enhancer
Fln Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Fln Rate #	0.05–10.00 Hz, note	Frequency of modulation
Fln Depth	0–127	Depth of modulation
Fln Feedback #	-98– +98%	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Fln 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

74: ENH → DELAY (ENHANCER → DELAY)



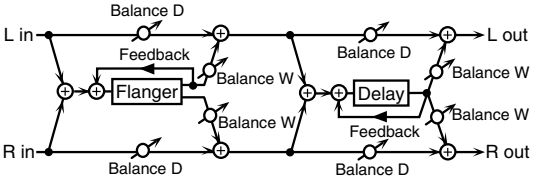
Parameter	Value	Description
Enh Sens #	0–127	Sensitivity of the enhancer
Enh Mix #	0–127	Level of the overtones generated by the enhancer
Delay Time	0–2600 ms, note	Adjusts the delay time from the direct sound until the delay sound is heard.
Delay Feedback #	-98– +98%	Adjusts the proportion of the delay sound that is fed back into the effect. Negative (-) settings will invert the phase.
Delay HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
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

75: CHORUS → DELAY



Parameter	Value	Description
Cho Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Cho Rate #	0.05–10.00 Hz, note	Frequency of modulation
Cho Depth	0–127	Depth of modulation
Cho Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Delay Time	0–2600 ms, note	Adjusts the delay time from the direct sound until 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	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
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

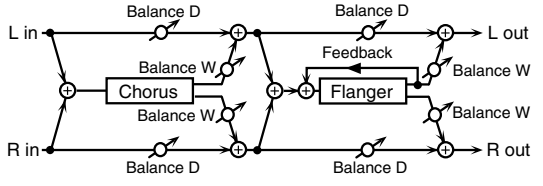
76: FLANGER → DELAY



Parameter	Value	Description
Fln Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Fln Rate #	0.05–10.00 Hz, note	Frequency of modulation
Fln Depth	0–127	Depth of modulation
Fln Feedback #	-98– +98%	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Fln Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the flanger sound (W)
Delay Time	0–2600 ms, note	Adjusts the delay time from the direct sound until the delay sound is heard.

Parameter	Value	Description
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	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
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

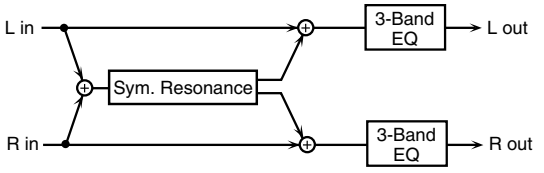
77: CHORUS → FLANGER



Parameter	Value	Description
Cho Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Cho Rate #	0.05–10.00 Hz, note	Modulation frequency of the chorus effect
Cho Depth	0–127	Modulation depth of the chorus effect
Cho Balance #	D100:0W–D0:100W	Volume balance between the direct sound (D) and the chorus sound (W)
Fln Pre Delay	0.0–100.0 ms	Adjusts the delay time from when the direct sound begins until the flanger sound is heard.
Fln Rate #	0.05–10.00 Hz, note	Modulation frequency of the flanger effect
Fln Depth	0–127	Modulation depth of the flanger effect
Fln Feedback #	-98– +98%	Adjusts the proportion of the flanger sound that is fed back into the effect. Negative (-) settings will invert the phase.
Fln 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

78: SYMPATHETIC RESO (SYMPATHETIC RESONANCE)

On an acoustic piano, holding down the damper pedal allows other strings to resonate in sympathy with the notes you play, creating rich and spacious resonances. This effect simulates these sympathetic resonances.



Parameter	Range	Explanation
Depth #	0–127	Depth of the effect
Damper #	0–127	Depth to which the damper pedal is pressed (controls the resonant sound)
Pre LPF	16–15000 Hz, BYPASS	Frequency of the filter that cuts the high-frequency content of the input sound (BYPASS: no cut)
Pre HPF	BYPASS, 16–15000 Hz	Frequency of the filter that cuts the low-frequency content of the input sound (BYPASS: no cut)
Peaking Freq	200–8000 Hz	Frequency of the filter that boosts/cuts a specific frequency region of the input sound
Peaking Gain	-15– +15 dB	Amount of boost/cut produced by the filter at the specified frequency region of the input sound
Peaking Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of the frequency region boosted/cut by the 'Peaking Gain' parameter (larger values make the region narrower)
HF Damp	16–15000 Hz, BYPASS	Frequency at which the high-frequency content of the resonant sound will be cut (BYPASS: no cut)
LF Damp	BYPASS, 16–15000 Hz	Frequency at which the low-frequency content of the resonant sound will be cut (BYPASS: no cut)
Lid	1–6	This simulates the actual changes in sound that occur when the lid of a grand piano is set at different heights.
EQ Low Freq	200, 400 Hz	Frequency of the low-range EQ
EQ Low Gain	-15– +15 dB	Amount of low-range boost/cut
EQ Mid Freq	200–8000 Hz	Frequency of the midrange EQ
EQ Mid Gain	-15– +15 dB	Amount of midrange boost/cut
EQ Mid Q	0.5, 1.0, 2.0, 4.0, 8.0	Width of midrange (larger values make the region narrower)
EQ High Freq	2000, 4000, 8000 Hz	Frequency of the high-range EQ
EQ High Gain	-15–+15 dB	Amount of high-range boost/cut
Level	0–127	Output Level

Chorus Parameters

The SonicCell's Chorus effect unit can also be used as a stereo delay unit.
These settings allow you to select chorus or delay, and the characteristics of the selected effect type.

Parameter	Value	Description
Chorus Type	0 (OFF), 1 (CHORUS), 2 (DELAY), 3 (GM2 CHORUS)	Selects either Chorus or Delay. 0 (OFF): Neither Chorus or Delay is used. 1 (CHORUS): Chorus is used. 2 (DELAY): Delay is used. 3 (GM2 CHORUS): GM2 Chorus is used.
01: CHORUS		
Rate	0.05–10.00 Hz, note	Frequency of modulation
Depth	0–127	Depth of modulation
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the chorus sound is heard.
Feedback	0–127	Adjusts the amount of the chorus sound that is fed back into the effect.
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	200–8000 Hz	Basic frequency of the filter
Phase	0–180°	Spatial spread of the sound
02: DELAY		
Delay Left **Delay Right** **Delay Center**	0–1000 ms, note	Adjusts the delay time from the direct sound until the delay sound is heard.
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	200–8000 Hz, BYPASS	Adjusts the frequency above which sound fed back to the effect will be cut. If you do not want to cut the high frequencies, set this parameter to BYPASS.
Left Level **Right Level** **Center Level**	0–127	Volume of each delay sound
03: GM2 CHORUS		
Pre-LPF	0–7	Cuts the high frequency range of the sound coming into the chorus. Higher values will cut more of the high frequencies.
Level	0–127	Volume of the chorus sound
Feedback	0–127	Adjusts the amount of the chorus sound that is fed back into the effect.
Delay	0–127	Adjusts the delay time from the direct sound until the chorus sound is heard.
Rate	0–127	Frequency of modulation
Depth	0–127	Depth of modulation
Send Level To Reverb	0–127	Adjusts the amount of chorus sound that will be sent to the reverb.

NOTE

If you specify the delay time as a note value, slowing down the tempo will not change the delay time beyond a certain length. This is because there is an upper limit for the delay time; if the delay time is specified as a note value and you slow down the tempo until this upper limit is reached, the delay time cannot change any further. This upper limit is the maximum value that can be specified when setting the delay time as a numerical value.

note:

𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯3	Sixty-fourth-note triplet	𝅘𝅥𝅯	Sixty-fourth note	𝅘𝅥𝅯𝅘𝅥𝅯𝅘𝅥𝅯3	Thirty-second-note triplet
𝅘𝅥𝅯𝅘𝅥𝅯	Thirty-second note	𝅘𝅥𝅯𝅘𝅥𝅯3	Sixteenth-note triplet	𝅘𝅥𝅯𝅘𝅥𝅯.	Dotted thirty-second note
𝅘𝅥𝅯	Sixteenth note	𝅘𝅥𝅯3	Eighth-note triplet	𝅘𝅥𝅯.	Dotted sixteenth note
𝅘𝅥𝅮	Eighth note	𝅘𝅥3	Quarter-note triplet	𝅘𝅥𝅮.	Dotted eighth note
𝅘𝅥	Quarter note	𝅗𝅥3	Half-note triplet	𝅘𝅥.	Dotted quarter note
𝅗𝅥	Half note	𝅝3	Whole-note triplet	𝅗𝅥.	Dotted half note
𝅝	Whole note	𝅜3	Double-note triplet	𝅝.	Dotted whole note
𝅜	Double note				

Reverb Parameters

These settings allow you to select the desired type of reverb, and its characteristics.

Parameter	Value	Description
Reverb Type	0 (OFF), 1 (REVERB), 2 (SRV ROOM), 3 (SRV HALL), 4 (SRV PLATE), 5 (GM2 REVERB)	Type of reverb 0 (OFF): Reverb is not used. 1 (REVERB): Normal reverb 2 (SRV ROOM): This simulates typical room acoustic reflections. 3 (SRV HALL): This simulates typical concert hall acoustic reflections. 4 (SRV PLATE): This simulates a reverb plate, a popular type of artificial reverb unit that derives its sound from the vibration of a metallic plate. 5 (GM2 REVERB): GM2 Reverb
01: REVERB		
Type	ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2, DELAY, PAN-DELAY	Type of reverb/delay ROOM1: short reverb with high density ROOM2: short reverb with low density STAGE1: reverb with greater late reverberation STAGE2: reverb with strong early reflections HALL1: very clear-sounding reverb HALL2: rich reverb DELAY: conventional delay effect PAN-DELAY: delay effect with echoes that pan left and right
Time	0–127	Time length of reverberation (Type: ROOM1–HALL2) Delay time (Type: DELAY, PAN-DELAY)
HF Damp	200–8000 Hz, BYPASS	Adjusts the frequency above which the high-frequency content of the reverb sound will be cut, or "damped." If you do not want to cut the high frequencies, set this parameter to BYPASS.
Delay Feedback	0–127	Adjusts the amount of delay feedback when the Type setting is DELAY or PAN-DELAY. Amount of delay sound returned to the input (this setting is valid only if Type is DELAY or PAN-DELAY)
02: SRV ROOM **03: SRV HALL** **04: SRV PLATE**		
Pre Delay	0.0–100.0 ms	Adjusts the delay time from the direct sound until the reverb sound is heard.
Time	0–127	Time length of reverberation
Size	1–8	Size of the simulated room or hall
High Cut	160 Hz–12.5 kHz, BYPASS	Adjusts the frequency above which the high-frequency content of the reverb will be reduced. If you do not want to reduce the high frequencies, set this parameter to BYPASS.
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 Freq	50–4000 Hz	Adjusts the frequency below which the low-frequency content of the reverb sound will be reduced, or "damped."
LF Damp Gain	-36–0 dB	Adjusts the amount of damping applied to the frequency range selected with LF Damp. With a setting of "0," there will be no reduction of the reverb's low-frequency content.
HF Damp Freq	4000 Hz–12.5 kHz	Adjusts the frequency above which the high-frequency content of the reverb sound will be reduced, or "damped."
HF Damp Gain	-36–0 dB	Adjusts the amount of damping applied to the frequency range selected with HF Damp. With a setting of "0," there will be no reduction of the reverb's high-frequency content.

Parameter	Value	Description
05: GM2 REVERB		
Character	0–7	Type of reverb 0–5: reverb 6, 7: delay
Pre-LPF	0–7	Cuts the high frequency range of the sound coming into the reverb. Higher values will cut more of the high frequencies.
Level	0–127	Output level of reverberation
Time	0–127	Time length of reverberation
Delay Feedback	0–127	Adjusts the amount of the delay sound that is fed back into the effect when the Reverb Character setting is 6 or 7.

Input Effect Parameters

Selects the type of effect that will be applied to the external input source.

01: EQUALIZER

Adjusts the tone of the low-frequency and high-frequency ranges.

Parameter	Range	Explanation
Low Freq	200, 400 Hz	Center frequency of the low-frequency range
Low Gain	-15–+15 dB	Amount of low-frequency boost/cut
High Freq	2000, 4000, 8000 Hz	Center frequency of the high-frequency range
High Gain	-15–+15 dB	Amount of high-frequency boost/cut

02: ENHANCER

Modifies the harmonic content of the high-frequency range to add sparkle to the sound.

Parameter	Range	Explanation
Sens	0–127	Depth of the enhancer effect
Mix	0–127	Volume of the harmonics that are generated

03: COMPRESSOR

Restrains high levels and boosts low levels to make the overall volume more consistent.

Parameter	Range	Explanation
Attack	0–127	Time from when the input exceeds the Threshold until the volume begins to be compressed
Threshold	0–127	Volume level at which compression will begin
Post Gain	0–+18 dB	Level of the output sound

04: LIMITER

Compresses the sound when it exceeds a specified volume, to keep distortion from occurring.

Parameter	Range	Explanation
Release	0–127	Time from when the input falls below the Threshold until compression ceases
Threshold	0–127	Volume level at which compression will begin
Post Gain	0–+18 dB	Level of the output sound

05: NOISE SUPPRESSOR

Suppresses noise during periods of silence.

Parameter	Range	Explanation
Threshold	0–127	Volume at which noise suppression will begin
Release	0–127	Time from when noise suppression begins until the volume reaches zero.

06: CENTER CANCELER

Removes the sounds that are localized at the center of the stereo input. This is a convenient way to eliminate a vocal.

Parameter	Range	Explanation
Ch Balance	-50– +50	Volume balance of the L (left) and R (right) channels for removing the sound
Range Low	16–15000 Hz	Lower frequency limit of the band to be removed
Range High	16–15000 Hz	Upper frequency limit of the band to be removed

Performance List

USER (USER GROUP)

No	Name	No	Name
1	Seq:Template	33	GM2 Template
2	Seq:Temp 2	34	SuperRichPNO
3	Seq:Temp 3	35	Bs/Piano
4	Seq:Temp 4	36	Brite Piano
5	Seq:Temp 5	37	CrystalGrand
6	Seq:Temp 6	38	SuperPhaseEP
7	Seq:Temp 7	39	D50 Memories
8	Seq:Temp 8	40	RockOrg
9	Seq:Temp 9	41	Delicate
10	Seq:Temp 10	42	SuperStrings
11	Seq:Temp 11	43	Braves
12	Seq:Temp 12	44	Orchestral
13	Seq:Temp 13	45	Sonic
14	Seq:Temp 14	46	Pole
15	Seq:Temp 15	47	Twilight
16	Seq:Temp 16	48	3AM
17	Seq:Temp 17	49	Ocean
18	Seq:Temp 18	50	Jupiters
19	Seq:Temp 19	51	Blizzard
20	Seq:Temp 20	52	Horizon
21	Seq:Temp 21	53	Buzz
22	Seq:Temp 22	54	80s
23	Seq:Temp 23	55	TripTo80s
24	Seq:Temp 24	56	80s Stack
25	Seq:Temp 25	57	AutoNoise
26	Seq:Temp 26	58	World Lead
27	Seq:Temp 27	59	XyloSawLead
28	Seq:Temp 28	60	WoodyFltLd
29	Seq:Temp 29	61	Saturn
30	Seq:Temp 30	62	Tale
31	Seq:Temp 31	63	Synchronize
32	Seq:Temp 32	64	Gramophone

PRST(PRESET GROUP)

No	Name	No	Name
1	Seq:Template	33	GM2 Template
2	Seq:Temp 2	34	SuperRichPNO
3	Seq:Temp 3	35	Bs/Piano
4	Seq:Temp 4	36	Brite Piano
5	Seq:Temp 5	37	CrystalGrand
6	Seq:Temp 6	38	SuperPhaseEP
7	Seq:Temp 7	39	D50 Memories
8	Seq:Temp 8	40	RockOrg
9	Seq:Temp 9	41	Delicate
10	Seq:Temp 10	42	SuperStrings
11	Seq:Temp 11	43	Braves
12	Seq:Temp 12	44	Orchestral
13	Seq:Temp 13	45	Sonic
14	Seq:Temp 14	46	Pole
15	Seq:Temp 15	47	Twilight
16	Seq:Temp 16	48	3AM
17	Seq:Temp 17	49	Ocean
18	Seq:Temp 18	50	Jupiters
19	Seq:Temp 19	51	Blizzard
20	Seq:Temp 20	52	Horizon
21	Seq:Temp 21	53	Buzz
22	Seq:Temp 22	54	80s
23	Seq:Temp 23	55	TripTo80s
24	Seq:Temp 24	56	80s Stack
25	Seq:Temp 25	57	AutoNoise
26	Seq:Temp 26	58	World Lead
27	Seq:Temp 27	59	XyloSawLead
28	Seq:Temp 28	60	WoodyFltLd
29	Seq:Temp 29	61	Saturn
30	Seq:Temp 30	62	Tale
31	Seq:Temp 31	63	Synchronize
32	Seq:Temp 32	64	Gramophone

Patch List

USER(User Group)

User 1-128 (CC#0 = 87, CC#32 = 0)
User129-256 (CC#0 = 87, CC#32 = 1)

No	Name	Category	Voice
1	Rich Grand	AC.PIANO	2
2	JD-800 Piano	AC.PIANO	1
3	Stage Phazer	EL.PIANO	2
4	Lounge Kit	COMBINATION	2
5	SC Trem Wuly	EL.PIANO	1
6	FM-777	EL.PIANO	5
7	SA EPiano	EL.PIANO	3
8	HardRockORG1	ORGAN	4
9	Rocky Organ	ORGAN	2
10	FullStop Org	ORGAN	3
11	R&B Organ 2	ORGAN	4
12	X Perc Organ	ORGAN	3
13	Smoky Organ	ORGAN	1
14	Crummy Organ	ORGAN	2
15	Chapel Organ	ORGAN	2
16	Mid Pipe Org	ORGAN	4
17	VntgClav	KEYBOARDS	3
18	Phase Clavi	KEYBOARDS	2
19	Funky Line	KEYBOARDS	2
20	Harpsy Clavi	KEYBOARDS	2
21	SonicStrings	STRINGS	8
22	String Ens	STRINGS	3
23	Wind & Str 1	ORCHESTRA	7
24	Soft Orch 2	ORCHESTRA	7
25	SC Hollow	SOFT PAD	4
26	Heaven Pad	SOFT PAD	3
27	Soft OB Pad	SOFT PAD	3
28	Reso Pad	SOFT PAD	3
29	Slow Saw Str	SOFT PAD	2
30	JP Strings 2	SOFT PAD	5
31	Cell Comb	BRIGHT PAD	3
32	Super SynStr	BRIGHT PAD	2
33	80s Str	BRIGHT PAD	8
34	Polar Night	BRIGHT PAD	4
35	Distant Sun	BRIGHT PAD	4
36	SC Brt Brass	AC.BRASS	4
37	Horny Sax	SAX	2
38	80s Brass 1	SYNTH BRASS	6
39	Juno-106 Brs	SYNTH BRASS	1
40	Poly Brass	SYNTH BRASS	2

No	Name	Category	Voice
41	JP8000 Brass	SYNTH BRASS	6
42	Sonic Brass	SYNTH BRASS	4
43	SuperSawSlow	OTHER SYNTH	2
44	Cell Trance	OTHER SYNTH	3
45	Trancy Synth	OTHER SYNTH	2
46	Stacc Heaven	OTHER SYNTH	4
47	Sugar Synth	OTHER SYNTH	5
48	Himalaya Ice	BELL	2
49	Wine Glass	BELL	4
50	Synergy MLT	MALLET	2
51	AirPluck	MALLET	4
52	SC Marimba	MALLET	1
53	Cmp'd Fng Bs	BASS	3
54	FingerMaster	BASS	2
55	Return2Base!	BASS	1
56	Chicken Bass	BASS	3
57	SC Fretnot 1	BASS	2
58	Got Pop?	BASS	1
59	Sonic Ac Bs	BASS	1
60	Low Bass	SYNTH BASS	3
61	Foundation	SYNTH BASS	2
62	SC Rubber Bs	SYNTH BASS	3
63	Punch MG 2	SYNTH BASS	2
64	SC GarageBs2	SYNTH BASS	2
65	SC AcidPunch	SYNTH BASS	2
66	Loco Voco	SYNTH BASS	2
67	VirtualHuman	PULSATING	4
68	Strobot	PULSATING	2
69	SC Strobe	PULSATING	4
70	HPF Slicer	PULSATING	3
71	Choir Aahs 1	VOX	4
72	Choir Aahs 2	VOX	4
73	Angels Choir	VOX	4
74	Syn Opera	VOX	4
75	Choir&Str	VOX	7
76	Terra Nostra	SOFT PAD	8
77	Aah Vox	VOX	2
78	Cell SquLead	SOFT LEAD	4
79	Howards Lead	SOFT LEAD	3
80	Windy Synth	SOFT LEAD	3

No	Name	Category	Voice
81	Sinetific	SOFT LEAD	2
82	SoloNzPeaker	SOFT LEAD	1
83	Juno SftLd	SOFT LEAD	1
84	R&B TriLead	SOFT LEAD	1
85	X-Pulse Lead	SOFT LEAD	2
86	Theramax	SOFT LEAD	1
87	GR Lead	SOFT LEAD	2
88	Chubby Lead	SOFT LEAD	2
89	Shaku Lead	SOFT LEAD	5
90	Porta SoloLd	HARD LEAD	2
91	Wind Syn Ld	HARD LEAD	2
92	Follow Me	HARD LEAD	2
93	SC Saw Ld 1	HARD LEAD	2
94	Sync Ld Mono	HARD LEAD	1
95	SC Brt Nylon	AC.GUITAR	1
96	So good !	AC.GUITAR	2
97	SC 12str Gtr	AC.GUITAR	3
98	Jazz Guitar	EL.GUITAR	1
99	Strat Gtr	EL.GUITAR	1
100	Trem-o-Vibe	DIST.GUITAR	2
101	Searing COSM	DIST.GUITAR	2
102	Larsen /Aft	DIST.GUITAR	2
103	SC Loud Gtr	DIST.GUITAR	3
104	Sitar on C	PLUCKED	6
105	Pat is away	PLUCKED	5
106	Bosporus	PLUCKED	3
107	Aerial Harp	PLUCKED	2
108	Nice Kalimba	PLUCKED	1
109	SC Flute	FLUTE	2
110	Andes Mood	FLUTE	1
111	LongDistance	ETHNIC	1
112	Ambi Shaku	ETHNIC	3
113	Soprano Sax	SAX	1
114	Solo AltoSax	SAX	1
115	XP TnrBrethy	SAX	1
116	Good Old Day	WIND	3
117	BluesHrp V/S	HARMONICA	1
118	Squeeze Me!	ACCRDION	4
119	Solo Tp	AC.BRASS	2
120	SC Violin	STRINGS	1

No	PatchName	PatchCategory	Voice
121	SC Cello	STRINGS	1
122	Juno-D Maj7	TECHNO SYNTH	4
123	Sweet House	TECHNO SYNTH	4
124	ElectroDisco	BEAT&GROOVE	5
125	Groove 007	BEAT&GROOVE	4
126	Autotrance	BEAT&GROOVE	4
127	Compusonic 2	BEAT&GROOVE	4
128	Passing by	SYNTH FX	4

User129–256: "INIT PATCH"

PR-A (Preset A Group)

(CC#0 = 87, CC#32 = 64)

No	Name	Category	Voice	(Preset#)
1	Rich Grand	AC.PIANO	2	PR-A001
2	88ConcertPno	AC.PIANO	2	PR-A002
3	UltimatGrand	AC.PIANO	2	PR-A003
4	X Pure Grand	AC.PIANO	2	PR-A004
5	So true...	AC.PIANO	2	PR-A005
6	ConcertPiano	AC.PIANO	3	PR-A006
7	Warm Piano	AC.PIANO	2	PR-A007
8	ConcertGrand	AC.PIANO	2	PR-A008
9	Hall Concert	AC.PIANO	2	PR-A009
10	Bright Tune	AC.PIANO	2	PR-A010
11	Mellow Tune	AC.PIANO	2	PR-A011
12	Studio Grand	AC.PIANO	2	PR-A012
13	DryStudio88	AC.PIANO	4	PR-A013
14	First Choice	AC.PIANO	2	PR-A014
15	Rokkin' pF	AC.PIANO	2	PR-A015
16	Dark Grand	AC.PIANO	4	PR-A016
17	SC Grand+Pad	AC.PIANO	4	PR-A017
18	Warm Pad Pno	AC.PIANO	4	PR-A018
19	SC Grand+Vox	AC.PIANO	4	PR-A019
20	Cicada Piano	AC.PIANO	4	PR-A020
21	X Piano +Str	AC.PIANO	4	PR-A021
22	Warm Str Pno	AC.PIANO	6	PR-A022
23	Grand Hall	AC.PIANO	5	PR-A023
24	Rapsody	AC.PIANO	7	PR-A024
25	JD-800 Piano	AC.PIANO	1	PR-A025
26	SA Dance Pno	AC.PIANO	2	PR-A026
27	SC E-Grand	AC.PIANO	4	PR-A027
28	Back E-Grand	AC.PIANO	2	PR-A028
29	SC Grand+FM	AC.PIANO	4	PR-A029
30	SC Blend Pno	AC.PIANO	5	PR-A030
31	Piano Oz	AC.PIANO	4	PR-A031
32	FX Piano	AC.PIANO	4	PR-A032
33	AmbientPiano	AC.PIANO	4	PR-A033
34	SC Pure EP	EL.PIANO	1	PR-A034
35	SC Trem EP	EL.PIANO	1	PR-A035
36	SC Phase EP	EL.PIANO	1	PR-A036
37	PhaseEPLayer	EL.PIANO	3	PR-A037
38	SC E.Piano	EL.PIANO	5	PR-A038
39	StageEP Trem	EL.PIANO	2	PR-A039
40	Back2the60s	EL.PIANO	2	PR-A040
41	Stage EP	EL.PIANO	4	PR-A041
42	Stage Phazer	EL.PIANO	2	PR-A042
43	StageCabinet	EL.PIANO	2	PR-A043
44	Tine EP	EL.PIANO	1	PR-A044
45	LEO EP	EL.PIANO	4	PR-A045
46	LonesomeRoad	EL.PIANO	2	PR-A046
47	Age'n'Tines	EL.PIANO	2	PR-A047
48	Brill TremEP	EL.PIANO	2	PR-A048
49	Crystal EP	EL.PIANO	2	PR-A049
50	Vintage Tine	EL.PIANO	1	PR-A050
51	Celestial EP	EL.PIANO	4	PR-A051
52	Psycho EP	EL.PIANO	4	PR-A052
53	Mk2 Stg phsr	EL.PIANO	3	PR-A053
54	Dreaming EP	EL.PIANO	4	PR-A054
55	Balladeer	EL.PIANO	3	PR-A055
56	Remember	EL.PIANO	2	PR-A056
57	Vibe EP	EL.PIANO	1	PR-A057
58	sin(EP)	EL.PIANO	2	PR-A058
59	SC Pure Wuly	EL.PIANO	1	PR-A059
60	SC Trem Wuly	EL.PIANO	1	PR-A060
61	Super Wurly	EL.PIANO	3	PR-A061
62	Wurly Trem	EL.PIANO	3	PR-A062
63	VelSpdWurly	EL.PIANO	2	PR-A063
64	Fonky Fonky	EL.PIANO	2	PR-A064
65	FM EP mix	EL.PIANO	6	PR-A065
66	FM-777	EL.PIANO	5	PR-A066
67	FM EPad	EL.PIANO	3	PR-A067
68	EP Stack	EL.PIANO	4	PR-A068
69	EP Belle	EL.PIANO	3	PR-A069
70	80s EP	EL.PIANO	4	PR-A070
71	SA EPiano	EL.PIANO	3	PR-A071
72	BrillClav DB	KEYBOARDS	2	PR-A072
73	Cell Clav	KEYBOARDS	1	PR-A073
74	VntgClav	KEYBOARDS	3	PR-A074
75	Cutter Clavi	KEYBOARDS	2	PR-A075
76	Funky D	KEYBOARDS	2	PR-A076
77	Phase Clavi	KEYBOARDS	2	PR-A077
78	BPF Clavi Ph	KEYBOARDS	2	PR-A078
79	Pulse Clavi	KEYBOARDS	2	PR-A079
80	PWM Clav	KEYBOARDS	1	PR-A080
81	Funky Line	KEYBOARDS	2	PR-A081
82	Biting Clav	KEYBOARDS	2	PR-A082
83	Analog Clavi	KEYBOARDS	1	PR-A083
84	Reso Clavi	KEYBOARDS	2	PR-A084
85	Snappy Clav	KEYBOARDS	2	PR-A085
86	Over-D6	KEYBOARDS	3	PR-A086
87	Harpsy Clavi	KEYBOARDS	2	PR-A087
88	SC Harpsi	KEYBOARDS	4	PR-A088
89	Amadeus	KEYBOARDS	8	PR-A089
90	SC Celesta	KEYBOARDS	1	PR-A090
91	Himalaya Ice	BELL	2	PR-A091
92	FM Syn Bell	BELL	4	PR-A092
93	D-50 Fantsia	BELL	3	PR-A093
94	Wine Glass	BELL	4	PR-A094
95	MuBox Pad	BELL	4	PR-A095
96	SC Bell 1	BELL	4	PR-A096
97	FM Heaven	BELL	4	PR-A097
98	SC Glocken	BELL	1	PR-A098
99	Music Bells	BELL	2	PR-A099
100	SC Musicbox	BELL	1	PR-A100
101	Music Box 2	BELL	2	PR-A101
102	Kalimbells	BELL	2	PR-A102
103	Step Ice	BELL	4	PR-A103
104	SC Bell 2	BELL	2	PR-A104
105	Candy Bell	BELL	2	PR-A105
106	SC Chime	BELL	1	PR-A106
107	Bell Ring	BELL	4	PR-A107
108	Tubular Bell	BELL	1	PR-A108
109	5th Key	BELL	2	PR-A109
110	Bell Monitor	BELL	2	PR-A110
111	TubyRuesday	BELL	2	PR-A111
112	Vibrations	MALLET	2	PR-A112
113	SC Vibe	MALLET	1	PR-A113
114	Ringy Vibes	MALLET	2	PR-A114
115	Airie Vibez	MALLET	4	PR-A115
116	SC Marimba	MALLET	1	PR-A116
117	FM Wood	MALLET	4	PR-A117
118	SC Xylo	MALLET	1	PR-A118
119	Ethno Keys	MALLET	2	PR-A119
120	Synergy MLT	MALLET	2	PR-A120
121	Icy Keys	MALLET	4	PR-A121
122	Steel Drums	MALLET	2	PR-A122
123	50`SteelDrms	MALLET	4	PR-A123
124	Xylosizer	MALLET	2	PR-A124
125	Toy Box	MALLET	3	PR-A125
126	AirPluck	MALLET	4	PR-A126
127	HardRockORG1	ORGAN	4	PR-A127
128	HardRockORG2	ORGAN	5	PR-A128

PR-B (Preset B Group)

(CC#0 = 87, CC#32 = 65)

No	Name	Category	Voice	(Preset#)
129	SuperDistORG	ORGAN	4	PR-B001
130	SuperDistLd2	ORGAN	4	PR-B002
131	FullDraw Org	ORGAN	3	PR-B003
132	StakDraw Org	ORGAN	4	PR-B004
133	FullStop Org	ORGAN	3	PR-B005
134	SC Perc Org	ORGAN	4	PR-B006
135	VKHold4Speed	ORGAN	4	PR-B007
136	X Perc Organ	ORGAN	3	PR-B008
137	Rocky Organ	ORGAN	2	PR-B009
138	Euro Organ	ORGAN	2	PR-B010
139	Rhythm'n'B	ORGAN	4	PR-B011
140	Phono Organ	ORGAN	2	PR-B012
141	LoFi PercOrg	ORGAN	1	PR-B013
142	Rochno Org	ORGAN	4	PR-B014
143	R&B Organ 1	ORGAN	2	PR-B015
144	R&B Organ 2	ORGAN	4	PR-B016
145	SC Dist Bee	ORGAN	1	PR-B017
146	60's Org 1	ORGAN	2	PR-B018
147	60's Org 2	ORGAN	2	PR-B019
148	Smoky Organ	ORGAN	1	PR-B020
149	SC SoapOpera	ORGAN	1	PR-B021
150	Crummy Organ	ORGAN	2	PR-B022
151	Chapel Organ	ORGAN	2	PR-B023
152	Grand Pipe	ORGAN	3	PR-B024
153	Pipe Org/Mod	ORGAN	6	PR-B025
154	Masked Opera	ORGAN	6	PR-B026
155	Mid Pipe Org	ORGAN	4	PR-B027
156	Vodkakordion	ACCRDION	3	PR-B028
157	Squeeze Me!	ACCRDION	4	PR-B029
158	Guinguette	ACCRDION	3	PR-B030
159	HarWonderca	HARMONICA	2	PR-B031
160	BluesHrp V/S	HARMONICA	1	PR-B032
161	Green Bullet	HARMONICA	2	PR-B033
162	SC Brt Nylon	AC.GUITAR	1	PR-B034
163	SoftNyln Gtr	AC.GUITAR	2	PR-B035
164	SC Nylon Gt	AC.GUITAR	2	PR-B036
165	Wet Nyln Gtr	AC.GUITAR	3	PR-B037
166	Pre Mass Hum	AC.GUITAR	4	PR-B038
167	Thick Steel	AC.GUITAR	2	PR-B039
168	Uncle Martin	AC.GUITAR	2	PR-B040
169	Wide Ac Gtr	AC.GUITAR	4	PR-B041
170	Comp Stl Gtr	AC.GUITAR	2	PR-B042
171	Stl Gtr Duo	AC.GUITAR	2	PR-B043
172	SC 12str Gtr	AC.GUITAR	3	PR-B044
173	So good !	AC.GUITAR	2	PR-B045
174	StratSeq'nce	EL.GUITAR	3	PR-B046
175	Jazz Guitar	EL.GUITAR	1	PR-B047
176	DynoJazz Gtr	EL.GUITAR	1	PR-B048
177	Clean Gtr	EL.GUITAR	1	PR-B049
178	Crimson Gtr	EL.GUITAR	2	PR-B050
179	Plug n' Gig	EL.GUITAR	1	PR-B051
180	Kinda Kurt	EL.GUITAR	2	PR-B052
181	Nice Oct Gtr	EL.GUITAR	2	PR-B053
182	Strat Gtr	EL.GUITAR	1	PR-B054
183	Touch Drive	DIST.GUITAR	1	PR-B055
184	SC Chunk	DIST.GUITAR	4	PR-B056
185	Trem-o-Vibe	DIST.GUITAR	2	PR-B057
186	LP Dist	DIST.GUITAR	2	PR-B058
187	Hurtling Gtr	DIST.GUITAR	3	PR-B059
188	Searing COSM	DIST.GUITAR	2	PR-B060
189	SC Loud Gtr	DIST.GUITAR	3	PR-B061
190	SC Plugged!!	DIST.GUITAR	1	PR-B062
191	Punker 1	DIST.GUITAR	2	PR-B063
192	SC PowerChd	DIST.GUITAR	2	PR-B064
193	Punker 2	DIST.GUITAR	2	PR-B065
194	Larsen /Aft	DIST.GUITAR	2	PR-B066
195	Rockin' Dly	DIST.GUITAR	3	PR-B067
196	Sonic Ac Bs	BASS	1	PR-B068
197	Ulti Ac Bass	BASS	2	PR-B069
198	Downright Bs	BASS	3	PR-B070
199	Cmp'd Fng Bs	BASS	3	PR-B071
200	Sonic Fng Bs	BASS	3	PR-B072
201	Ultimo Bass	BASS	2	PR-B073
202	Roomy Bass	BASS	2	PR-B074
203	FingerMaster	BASS	2	PR-B075
204	All Round Bs	BASS	2	PR-B076
205	R&B Bs/Slide	BASS	2	PR-B077
206	Sonic Pck Bs	BASS	3	PR-B078
207	Thumb Up!	BASS	1	PR-B079
208	Tubby Mute	BASS	2	PR-B080
209	Chicken Bass	BASS	3	PR-B081
210	Snug Bass	BASS	2	PR-B082
211	Return2Base!	BASS	1	PR-B083
212	Chorus Bass	BASS	2	PR-B084
213	A Big Pick	BASS	3	PR-B085
214	Basement	BASS	1	PR-B086
215	SC Fretnot 1	BASS	2	PR-B087
216	SC Fretnot 2	BASS	3	PR-B088
217	RichFretless	BASS	2	PR-B089
218	NewAge Frtls	BASS	3	PR-B090
219	SlapBass1	BASS	1	PR-B091
220	Slap2 w/Fx	BASS	1	PR-B092
221	Got Pop?	BASS	1	PR-B093
222	JBass v/Thmb	BASS	2	PR-B094
223	SC Slap Bass	BASS	2	PR-B095
224	X Slap Bass	BASS	3	PR-B096
225	Low Bass	SYNTH BASS	3	PR-B097
226	Mini Like!	SYNTH BASS	2	PR-B098
227	MC-404 Bass	SYNTH BASS	2	PR-B099
228	SC Rubber Bs	SYNTH BASS	3	PR-B100
229	SH-101 Bs 1	SYNTH BASS	2	PR-B101
230	SC Syn Bass1	SYNTH BASS	3	PR-B102
231	Juno-106 Bs	SYNTH BASS	2	PR-B103
232	Smooth Bass	SYNTH BASS	2	PR-B104
233	SC Flat Bs	SYNTH BASS	3	PR-B105
234	Foundation	SYNTH BASS	2	PR-B106
235	Punch MG 2	SYNTH BASS	2	PR-B107
236	Electro Rubb	SYNTH BASS	2	PR-B108
237	R&B Bass 1	SYNTH BASS	2	PR-B109
238	Enorjizor	SYNTH BASS	2	PR-B110
239	LowFat Bass	SYNTH BASS	3	PR-B111
240	Doze Bass	SYNTH BASS	1	PR-B112
241	DCO Bass	SYNTH BASS	4	PR-B113
242	Virtual RnBs	SYNTH BASS	2	PR-B114
243	Saw&MG Bass	SYNTH BASS	4	PR-B115
244	MG+SubOsc Bs	SYNTH BASS	2	PR-B116
245	R&B Bass 2	SYNTH BASS	1	PR-B117
246	R&B Bass 3	SYNTH BASS	2	PR-B118
247	Not a Bass	SYNTH BASS	2	PR-B119
248	ResoSyn Bs 1	SYNTH BASS	2	PR-B120
249	SH-1 Bass	SYNTH BASS	2	PR-B121
250	SH-101 Bs 2	SYNTH BASS	2	PR-B122
251	Punch MG 1	SYNTH BASS	2	PR-B123
252	MKS-50 SynBs	SYNTH BASS	1	PR-B124
253	Gashed Bass	SYNTH BASS	2	PR-B125
254	Q Bass	SYNTH BASS	3	PR-B126
255	Super-G DX	SYNTH BASS	3	PR-B127
256	Kickin' Bass	SYNTH BASS	2	PR-B128

PR-C (Preset C Group)

(CC#0 = 87, CC#32 = 66)

No	Name	Category	Voice	(Preset#)
257	OilDrum Bass	SYNTH BASS	3	PR-C001
258	Dust Bass	SYNTH BASS	4	PR-C002
259	Glide-iator	SYNTH BASS	2	PR-C003
260	SC AcidPunch	SYNTH BASS	2	PR-C004
261	TBasic	SYNTH BASS	1	PR-C005
262	SC Unison Bs	SYNTH BASS	2	PR-C006
263	Detune Bass	SYNTH BASS	2	PR-C007
264	Lo Bass	SYNTH BASS	3	PR-C008
265	SC GarageBs1	SYNTH BASS	3	PR-C009
266	SC GarageBs2	SYNTH BASS	2	PR-C010
267	Sub Sonic	SYNTH BASS	4	PR-C011
268	SC Jungle Bs	SYNTH BASS	2	PR-C012
269	R&B Bass 4	SYNTH BASS	1	PR-C013
270	Simply Basic	SYNTH BASS	2	PR-C014
271	Beepin Bass	SYNTH BASS	2	PR-C015
272	MC-TB Bass	SYNTH BASS	2	PR-C016
273	Acdg Bass	SYNTH BASS	2	PR-C017
274	Loco Voco	SYNTH BASS	2	PR-C018
275	Unplug it!	SYNTH BASS	1	PR-C019
276	S&H Bass	SYNTH BASS	2	PR-C020
277	Destroyed Bs	SYNTH BASS	2	PR-C021
278	SC Acid Bs	SYNTH BASS	2	PR-C022
279	Lo-Fi TB	SYNTH BASS	1	PR-C023
280	Drop Bass	SYNTH BASS	3	PR-C024
281	Big Mini	SYNTH BASS	3	PR-C025
282	Muffled MG	SYNTH BASS	2	PR-C026
283	Intrusive Bs	SYNTH BASS	2	PR-C027
284	Alpha SynBs	SYNTH BASS	2	PR-C028
285	TransistorBs	SYNTH BASS	3	PR-C029
286	Juno-60 Bass	SYNTH BASS	2	PR-C030
287	Storm Bass	SYNTH BASS	4	PR-C031
288	Alpha ResoBs	SYNTH BASS	2	PR-C032
289	SH-101 Vibe	SYNTH BASS	4	PR-C033
290	Fazee Bass	SYNTH BASS	4	PR-C034
291	Hi-Energy Bs	SYNTH BASS	2	PR-C035
292	SC Violin	STRINGS	1	PR-C036
293	Violin	STRINGS	1	PR-C037
294	Viola	STRINGS	3	PR-C038
295	SC Cello	STRINGS	1	PR-C039
296	Cello	STRINGS	1	PR-C040
297	Contrabass	STRINGS	4	PR-C041
298	Dolce Qrt	STRINGS	2	PR-C042
299	Chamber Str	STRINGS	3	PR-C043
300	Small Str	STRINGS	7	PR-C044
301	Marcato	STRINGS	2	PR-C045
302	Bright Str	STRINGS	2	PR-C046
303	String Ens	STRINGS	3	PR-C047
304	SonicStrings	STRINGS	8	PR-C048
305	Stringz 101	STRINGS	2	PR-C049
306	Crossed Bows	STRINGS	5	PR-C050
307	Warm Strings	STRINGS	5	PR-C051
308	Stacc mp Str	STRINGS	4	PR-C052
309	Movie Scene	STRINGS	4	PR-C053
310	Hybrid Str 1	STRINGS	6	PR-C054
311	Gang Strangs	STRINGS	6	PR-C055
312	Clustered!?!	STRINGS	8	PR-C056
313	Full Strings	STRINGS	4	PR-C057
314	X StrSection	STRINGS	4	PR-C058
315	Oct Strings	STRINGS	6	PR-C059
316	Sahara Str	STRINGS	4	PR-C060
317	Random Mood	STRINGS	6	PR-C061
318	X Hall Str	STRINGS	8	PR-C062
319	SC Slow Str	STRINGS	8	PR-C063
320	Hybrid Str 2	STRINGS	7	PR-C064
321	Biggie Bows	STRINGS	6	PR-C065
322	Staccato VS	STRINGS	4	PR-C066
323	So Staccato	STRINGS	4	PR-C067
324	DelicatePizz	STRINGS	4	PR-C068
325	Vls PizzHall	STRINGS	8	PR-C069
326	Orch Pizz	STRINGS	4	PR-C070
327	Pizz'Stac VS	STRINGS	6	PR-C071
328	Mellow Tron	STRINGS	3	PR-C072
329	Tronic Str	STRINGS	2	PR-C073
330	Tape Memory	STRINGS	2	PR-C074
331	Wind & Str 1	ORCHESTRA	7	PR-C075
332	Wind & Str 2	ORCHESTRA	5	PR-C076
333	Farewell	ORCHESTRA	6	PR-C077
334	Orch & Horns	ORCHESTRA	5	PR-C078
335	Soft Orch 1	ORCHESTRA	4	PR-C079
336	Soft Orch 2	ORCHESTRA	7	PR-C080
337	Henry IX	ORCHESTRA	4	PR-C081
338	Ending Scene	ORCHESTRA	4	PR-C082
339	Symphonika	ORCHESTRA	8	PR-C083
340	Mix Hit 2	HIT&STAB	4	PR-C084
341	Cheezy Movie	HIT&STAB	4	PR-C085
342	Philly Hit	HIT&STAB	1	PR-C086
343	Smear Hit 1	HIT&STAB	2	PR-C087
344	Smear Hit 2	HIT&STAB	2	PR-C088
345	Good Old Hit	HIT&STAB	4	PR-C089
346	Mix Hit 1	HIT&STAB	4	PR-C090
347	Lo-Fi Hit	HIT&STAB	4	PR-C091
348	2ble Action	HIT&STAB	2	PR-C092
349	In da Cave	HIT&STAB	2	PR-C093
350	Housechord	HIT&STAB	3	PR-C094
351	Mod Chord	HIT&STAB	2	PR-C095
352	Dance Steam	HIT&STAB	2	PR-C096
353	Good Old Day	WIND	3	PR-C097
354	SC WindWood	WIND	3	PR-C098
355	Clarence.net	WIND	2	PR-C099
356	SC Oboe	WIND	1	PR-C100
357	Hall Oboe	WIND	1	PR-C101
358	English Horn	WIND	1	PR-C102
359	Bassoon	WIND	1	PR-C103
360	SC Flute	FLUTE	2	PR-C104
361	Piccolo	FLUTE	2	PR-C105
362	Andes Mood	FLUTE	1	PR-C106
363	HimalayaPipe	FLUTE	4	PR-C107
364	Solo Tp	AC.BRASS	2	PR-C108
365	Horn Chops	AC.BRASS	2	PR-C109
366	Flugel Horn	AC.BRASS	1	PR-C110
367	Spit Flugel	AC.BRASS	3	PR-C111
368	Mute Tp /Mod	AC.BRASS	3	PR-C112
369	Harmon Mute	AC.BRASS	1	PR-C113
370	Soft Tb	AC.BRASS	2	PR-C114
371	Solo Tb	AC.BRASS	1	PR-C115
372	Solo Bone	AC.BRASS	2	PR-C116
373	XP Horn	AC.BRASS	1	PR-C117
374	Grande Tuba	AC.BRASS	2	PR-C118
375	SC Tuba	AC.BRASS	1	PR-C119
376	StackTp Sect	AC.BRASS	4	PR-C120
377	Tb Section	AC.BRASS	5	PR-C121
378	TpTb Sect.	AC.BRASS	2	PR-C122
379	SC Brt Brass	AC.BRASS	4	PR-C123
380	SC BrsSect 1	AC.BRASS	7	PR-C124
381	SC BrsSect 2	AC.BRASS	8	PR-C125
382	Tpts & Tmbs	AC.BRASS	2	PR-C126
383	Brass & Sax	AC.BRASS	5	PR-C127
384	BrassPartOut	AC.BRASS	6	PR-C128

PR-D (Preset D Group)

(CC#0 = 87, CC#32 = 67)

No	Name	Category	Voice	(Preset#)
385	Simple Tutti	AC.BRASS	2	PR-D001
386	F.Horns Sect	AC.BRASS	3	PR-D002
387	Full sForza	AC.BRASS	4	PR-D003
388	Stereo Brass	AC.BRASS	4	PR-D004
389	Wide SynBrss	SYNTH BRASS	2	PR-D005
390	DetuneSawBrs	SYNTH BRASS	2	PR-D006
391	J-Pop Brass	SYNTH BRASS	6	PR-D007
392	80s Brass 1	SYNTH BRASS	6	PR-D008
393	80s Brass 2	SYNTH BRASS	4	PR-D009
394	Ana Brass	SYNTH BRASS	5	PR-D010
395	Soft Brass	SYNTH BRASS	3	PR-D011
396	JP8000 Brass	SYNTH BRASS	6	PR-D012
397	Sonic Brass	SYNTH BRASS	4	PR-D013
398	Syn Brass	SYNTH BRASS	4	PR-D014
399	Syn Brass 2	SYNTH BRASS	4	PR-D015
400	Xpand Brass	SYNTH BRASS	2	PR-D016
401	Xpand Brass2	SYNTH BRASS	4	PR-D017
402	Super Saw	SYNTH BRASS	4	PR-D018
403	SoftSynBrass	SYNTH BRASS	2	PR-D019
404	Silky JP	SYNTH BRASS	2	PR-D020
405	Silk Brs Pad	SYNTH BRASS	1	PR-D021
406	80s Brass 3	SYNTH BRASS	8	PR-D022
407	X-Saw Brass1	SYNTH BRASS	2	PR-D023
408	Cheesy Brass	SYNTH BRASS	4	PR-D024
409	Dual Saw Brs	SYNTH BRASS	2	PR-D025
410	Juno-106 Brs	SYNTH BRASS	1	PR-D026
411	Poly Brass	SYNTH BRASS	2	PR-D027
412	Stacked Brs	SYNTH BRASS	4	PR-D028
413	Soprano Sax	SAX	1	PR-D029
414	Solo Sop Sax	SAX	1	PR-D030
415	Alto mp	SAX	1	PR-D031
416	Alto Sax	SAX	1	PR-D032
417	Solo AltoSax	SAX	1	PR-D033
418	AltoLead Sax	SAX	1	PR-D034
419	XP TnrBrethy	SAX	1	PR-D035
420	Tenor Sax	SAX	2	PR-D036
421	Fat TenorSax	SAX	3	PR-D037
422	Baritone Sax	SAX	1	PR-D038
423	Sax Sect. 1	SAX	3	PR-D039
424	Sax Sect. 2	SAX	4	PR-D040
425	Horny Sax	SAX	2	PR-D041
426	FXM Alto Sax	SAX	1	PR-D042
427	Porta SoloLd	HARD LEAD	2	PR-D043
428	Porta Lead	HARD LEAD	2	PR-D044
429	Wind Syn Ld	HARD LEAD	2	PR-D045
430	SC Saw Ld 1	HARD LEAD	2	PR-D046
431	SC Saw Ld 2	HARD LEAD	2	PR-D047
432	Juno Lead	HARD LEAD	2	PR-D048
433	Follow Me	HARD LEAD	2	PR-D049
434	DC Triangle	HARD LEAD	2	PR-D050
435	Sqr-Seqence	HARD LEAD	1	PR-D051
436	Pure Square	HARD LEAD	2	PR-D052
437	Griggley	HARD LEAD	2	PR-D053
438	SC LegatoSaw	HARD LEAD	2	PR-D054
439	Lone Prophat	HARD LEAD	1	PR-D055
440	Dual Profs	HARD LEAD	2	PR-D056
441	Gwyo Press	HARD LEAD	2	PR-D057
442	"Q" DualSaws	HARD LEAD	2	PR-D058
443	Mogulator Ld	HARD LEAD	2	PR-D059
444	DirtyVoltage	HARD LEAD	2	PR-D060
445	Clean?	HARD LEAD	2	PR-D061
446	Distortion	HARD LEAD	4	PR-D062
447	SC Syn Ld	HARD LEAD	2	PR-D063
448	SynLead 0322	HARD LEAD	2	PR-D064
449	X-Sink Delay	HARD LEAD	3	PR-D065
450	Destroyed Ld	HARD LEAD	2	PR-D066
451	Synchro Lead	HARD LEAD	2	PR-D067
452	Sync Ld Mono	HARD LEAD	1	PR-D068
453	SyncModulate	HARD LEAD	3	PR-D069
454	Distorted MG	HARD LEAD	1	PR-D070
455	SonicVampire	HARD LEAD	2	PR-D071
456	Blue Meanie	HARD LEAD	2	PR-D072
457	SC Dist Lead	HARD LEAD	2	PR-D073
458	Ringmod Lead	HARD LEAD	4	PR-D074
459	Stimulation	HARD LEAD	4	PR-D075
460	BodyElectric	HARD LEAD	3	PR-D076
461	Classic Lead	HARD LEAD	4	PR-D077
462	Feat Lead	HARD LEAD	2	PR-D078
463	Wire Sync	HARD LEAD	3	PR-D079
464	Epic Lead	HARD LEAD	2	PR-D080
465	Bag Lead	HARD LEAD	3	PR-D081
466	Wezcoast	HARD LEAD	2	PR-D082
467	HyperJupiter	HARD LEAD	3	PR-D083
468	Vintagolizer	HARD LEAD	4	PR-D084
469	C64 Lead	HARD LEAD	2	PR-D085
470	303 NRG	HARD LEAD	2	PR-D086
471	Cell SquLead	SOFT LEAD	4	PR-D087
472	SC Sqr Lead	SOFT LEAD	2	PR-D088
473	SH Sqr Lead	SOFT LEAD	2	PR-D089
474	Round SQR	SOFT LEAD	2	PR-D090
475	Windy Synth	SOFT LEAD	3	PR-D091
476	Sqr Diamond	SOFT LEAD	2	PR-D092
477	Sinetific	SOFT LEAD	2	PR-D093
478	PeakArpSine	SOFT LEAD	1	PR-D094
479	Howards Lead	SOFT LEAD	3	PR-D095
480	SoloNzPeaker	SOFT LEAD	1	PR-D096
481	Juno SftLd	SOFT LEAD	1	PR-D097
482	R&B TriLead	SOFT LEAD	1	PR-D098
483	R&B Tri Ld2	SOFT LEAD	1	PR-D099
484	Jupiter Lead	SOFT LEAD	1	PR-D100
485	Dig-n-Duke	SOFT LEAD	2	PR-D101
486	SC SoftLead	SOFT LEAD	2	PR-D102
487	Mid Saw Ld	SOFT LEAD	4	PR-D103
488	X-Pulse Lead	SOFT LEAD	2	PR-D104
489	Mild 2-SawLd	SOFT LEAD	2	PR-D105
490	Mew Lead	SOFT LEAD	1	PR-D106
491	Shy Soloist	SOFT LEAD	1	PR-D107
492	Theramax	SOFT LEAD	1	PR-D108
493	Therasqu	SOFT LEAD	1	PR-D109
494	GR Lead	SOFT LEAD	2	PR-D110
495	SH-2 Lead	SOFT LEAD	2	PR-D111
496	SC ResoLead	SOFT LEAD	3	PR-D112
497	Modulated Ld	SOFT LEAD	1	PR-D113
498	Synthi Fizz	SOFT LEAD	2	PR-D114
499	Waspy Lead	SOFT LEAD	1	PR-D115
500	Pulstar Ld	SOFT LEAD	1	PR-D116
501	Naked Lead	SOFT LEAD	1	PR-D117
502	Alpha Spit	SOFT LEAD	1	PR-D118
503	Vliolin Lead	SOFT LEAD	2	PR-D119
504	Mod Lead	SOFT LEAD	4	PR-D120
505	JP Saw Lead	SOFT LEAD	2	PR-D121
506	Tristar	SOFT LEAD	2	PR-D122
507	Chubby Lead	SOFT LEAD	2	PR-D123
508	Sneaky Leady	SOFT LEAD	2	PR-D124
509	Shaku Lead	SOFT LEAD	5	PR-D125
510	Legato Tkno	SOFT LEAD	1	PR-D126
511	SCResoSaw Ld	SOFT LEAD	2	PR-D127
512	SliCed Lead	SOFT LEAD	2	PR-D128

PR-E (Preset E Group)

(CC#0 = 87, CC#32 = 68)

No	Name	Category	Voice	(Preset#)
513	Mini Growl	SOFT LEAD	2	PR-E001
514	Evangelized	SOFT LEAD	2	PR-E002
515	Air Lead	SOFT LEAD	4	PR-E003
516	Juno-D Maj7	TECHNO SYNTH	4	PR-E004
517	Sweet House	TECHNO SYNTH	4	PR-E005
518	Periscope	TECHNO SYNTH	4	PR-E006
519	5th Voice	TECHNO SYNTH	6	PR-E007
520	HPF Sweep	TECHNO SYNTH	2	PR-E008
521	BPF Saw	TECHNO SYNTH	4	PR-E009
522	Moon Synth	TECHNO SYNTH	2	PR-E010
523	DelyResoSaws	TECHNO SYNTH	2	PR-E011
524	R-Trance	TECHNO SYNTH	7	PR-E012
525	Braatz...	TECHNO SYNTH	6	PR-E013
526	AllinOneRiff	TECHNO SYNTH	7	PR-E014
527	YZ Again	TECHNO SYNTH	7	PR-E015
528	Flazzy Lead	TECHNO SYNTH	8	PR-E016
529	Coffee Bee	TECHNO SYNTH	2	PR-E017
530	SC-303	TECHNO SYNTH	1	PR-E018
531	Dance Saws	TECHNO SYNTH	8	PR-E019
532	AluminmWires	TECHNO SYNTH	3	PR-E020
533	Fred&Barney	TECHNO SYNTH	6	PR-E021
534	Electrostars	TECHNO SYNTH	4	PR-E022
535	LoFiSequence	TECHNO SYNTH	2	PR-E023
536	MelodicDrums	TECHNO SYNTH	2	PR-E024
537	TB Wah	TECHNO SYNTH	1	PR-E025
538	Waving TB303	TECHNO SYNTH	3	PR-E026
539	Digi Seq	TECHNO SYNTH	3	PR-E027
540	Seq Saw	TECHNO SYNTH	1	PR-E028
541	Reso Seq Saw	TECHNO SYNTH	1	PR-E029
542	DetuneSeqSaw	TECHNO SYNTH	2	PR-E030
543	Technotribe	TECHNO SYNTH	2	PR-E031
544	Teethy Grit	TECHNO SYNTH	3	PR-E032
545	Repertition	TECHNO SYNTH	4	PR-E033
546	Killerbeez	TECHNO SYNTH	4	PR-E034
547	Acid Lead	TECHNO SYNTH	2	PR-E035
548	Tranceformer	TECHNO SYNTH	1	PR-E036
549	Anadroid	TECHNO SYNTH	1	PR-E037
550	Shroomy	TECHNO SYNTH	3	PR-E038
551	Noize R us	TECHNO SYNTH	2	PR-E039
552	Beep Melodie	TECHNO SYNTH	4	PR-E040
553	Morpher	TECHNO SYNTH	8	PR-E041
554	Uni-G	TECHNO SYNTH	2	PR-E042
555	Power Synth	TECHNO SYNTH	4	PR-E043
556	Hoover Again	TECHNO SYNTH	4	PR-E044
557	Alpha Said..	TECHNO SYNTH	2	PR-E045
558	Ravers Awake	TECHNO SYNTH	2	PR-E046
559	Tekno Gargle	TECHNO SYNTH	2	PR-E047
560	Tranceiver	TECHNO SYNTH	4	PR-E048
561	Techno Dream	TECHNO SYNTH	4	PR-E049
562	Techno Pizz	TECHNO SYNTH	4	PR-E050
563	VirtualHuman	PULSATING	4	PR-E051
564	Strobot	PULSATING	2	PR-E052
565	SC Strobe	PULSATING	4	PR-E053
566	Strobe X	PULSATING	5	PR-E054
567	Rhythmic 5th	PULSATING	4	PR-E055
568	Cell Pad	PULSATING	3	PR-E056
569	DarknessSide	PULSATING	6	PR-E057
570	Shape of X	PULSATING	5	PR-E058
571	Sonic Dance	PULSATING	5	PR-E059
572	ShapeURMusic	PULSATING	5	PR-E060
573	Synth Force	PULSATING	4	PR-E061
574	Trance Split	PULSATING	2	PR-E062
575	Step Trance	PULSATING	1	PR-E063
576	Chop Synth	PULSATING	2	PR-E064

No	Name	Category	Voice	(Preset#)
577	Euro Teuro	PULSATING	6	PR-E065
578	Auto Trance	PULSATING	2	PR-E066
579	Eureggae	PULSATING	2	PR-E067
580	Sorry4theDLY	PULSATING	2	PR-E068
581	Beat Pad	PULSATING	3	PR-E069
582	TMT Seq Pad	PULSATING	4	PR-E070
583	ForYourBreak	PULSATING	4	PR-E071
584	HPF Slicer	PULSATING	3	PR-E072
585	Sliced Choir	PULSATING	6	PR-E073
586	Digi-Doo	PULSATING	2	PR-E074
587	PanningFrmnt	PULSATING	2	PR-E075
588	Dirty Beat	PULSATING	7	PR-E076
589	Electrons	PULSATING	1	PR-E077
590	Protons	PULSATING	2	PR-E078
591	Brisk Vortex	PULSATING	3	PR-E079
592	SC Throbulax	PULSATING	2	PR-E080
593	SC Lonizer	PULSATING	4	PR-E081
594	diGital Pad	PULSATING	4	PR-E082
595	StepPitShift	PULSATING	2	PR-E083
596	Pad Pulses	PULSATING	3	PR-E084
597	Seq-Pad 2	PULSATING	8	PR-E085
598	DSP Chaos	PULSATING	1	PR-E086
599	Dancefloor	PULSATING	4	PR-E087
600	Minor Thirds	PULSATING	2	PR-E088
601	FX World	PULSATING	2	PR-E089
602	Mr. Fourier	PULSATING	3	PR-E090
603	Nu Trance X	PULSATING	2	PR-E091
604	Auto 5thSaws	PULSATING	4	PR-E092
605	Cross Talk	PULSATING	1	PR-E093
606	Reanimation	PULSATING	2	PR-E094
607	VoX Chopper	PULSATING	2	PR-E095
608	Trevor's Pad	PULSATING	4	PR-E096
609	Fantomas Pad	PULSATING	5	PR-E097
610	Jazzy Arps	PULSATING	4	PR-E098
611	Keep Running	PULSATING	4	PR-E099
612	Step In	PULSATING	4	PR-E100
613	Echo Echo	PULSATING	8	PR-E101
614	Keep going	PULSATING	4	PR-E102
615	Arposphere	PULSATING	4	PR-E103
616	Voco Riff	PULSATING	4	PR-E104
617	Pulsator	PULSATING	4	PR-E105
618	Motion Bass	PULSATING	2	PR-E106
619	Sine Magic	PULSATING	3	PR-E107
620	Juno-D Slice	PULSATING	3	PR-E108
621	Pulsatron	PULSATING	4	PR-E109
622	Mega Sync	PULSATING	2	PR-E110
623	Passing by	SYNTH FX	4	PR-E111
624	Lazer Points	SYNTH FX	2	PR-E112
625	Retro Sci-Fi	SYNTH FX	4	PR-E113
626	Magic Chime	SYNTH FX	4	PR-E114
627	SC Try This!	SYNTH FX	3	PR-E115
628	New Planetz	SYNTH FX	4	PR-E116
629	Jet Noise	SYNTH FX	4	PR-E117
630	Chaos 2003	SYNTH FX	4	PR-E118
631	Control Room	SYNTH FX	4	PR-E119
632	OutOf sortz	SYNTH FX	5	PR-E120
633	Scatter	SYNTH FX	7	PR-E121
634	Low Beat-S	SYNTH FX	5	PR-E122
635	WaitnOutside	SYNTH FX	2	PR-E123
636	Breath Echo	SYNTH FX	1	PR-E124
637	SoundStrange	SYNTH FX	3	PR-E125
638	Cosmic Pulse	SYNTH FX	2	PR-E126
639	Faked Piano	SYNTH FX	4	PR-E127
640	SC Crystal	SYNTH FX	2	PR-E128

PR-F (Preset F Group)

(CC#0 = 87, CC#32 = 69)

No	Name	Category	Voice	(Preset#)
641	ResoSweep Dn	SYNTH FX	1	PR-F001
642	Zap B3 & C4	SYNTH FX	1	PR-F002
643	PolySweep Nz	SYNTH FX	4	PR-F003
644	Strange Land	SYNTH FX	6	PR-F004
645	S&H Voc	SYNTH FX	2	PR-F005
646	12th Planet	SYNTH FX	2	PR-F006
647	Scare	SYNTH FX	7	PR-F007
648	Hillside	SYNTH FX	1	PR-F008
649	Mod Scanner	SYNTH FX	2	PR-F009
650	SoundOnSound	SYNTH FX	1	PR-F010
651	Gasp	SYNTH FX	8	PR-F011
652	ResoSweep Up	SYNTH FX	1	PR-F012
653	Magic Wave	SYNTH FX	2	PR-F013
654	Shangri-La	SYNTH FX	5	PR-F014
655	CerealKiller	SYNTH FX	1	PR-F015
656	Cosmic Drops	SYNTH FX	1	PR-F016
657	Space Echo	SYNTH FX	4	PR-F017
658	Robot Sci-Fi	SYNTH FX	4	PR-F018
659	Stacc Heaven	OTHER SYNTH	4	PR-F019
660	Juno Poly	OTHER SYNTH	4	PR-F020
661	DigitalDream	OTHER SYNTH	2	PR-F021
662	Jucy Saw	OTHER SYNTH	3	PR-F022
663	Cue Tip	OTHER SYNTH	1	PR-F023
664	Waspy Synth	OTHER SYNTH	2	PR-F024
665	TB-Sequence	OTHER SYNTH	1	PR-F025
666	Europe Xpres	OTHER SYNTH	2	PR-F026
667	Squeepy	OTHER SYNTH	1	PR-F027
668	DOC Stack	OTHER SYNTH	2	PR-F028
669	Sweep Lead	OTHER SYNTH	2	PR-F029
670	80s Saws 1	OTHER SYNTH	8	PR-F030
671	80s Saws 2	OTHER SYNTH	6	PR-F031
672	80s Saws 3	OTHER SYNTH	5	PR-F032
673	Digitaless	OTHER SYNTH	2	PR-F033
674	Flip Pad	OTHER SYNTH	3	PR-F034
675	Short Detune	OTHER SYNTH	2	PR-F035
676	forSequence	OTHER SYNTH	2	PR-F036
677	Memory Pluck	OTHER SYNTH	2	PR-F037
678	Metalic Bass	OTHER SYNTH	2	PR-F038
679	Aqua	OTHER SYNTH	2	PR-F039
680	Big Planet	OTHER SYNTH	2	PR-F040
681	Wet Atax	OTHER SYNTH	2	PR-F041
682	Houze Clavi	OTHER SYNTH	2	PR-F042
683	SuperSawSlow	OTHER SYNTH	2	PR-F043
684	Cell Trance	OTHER SYNTH	3	PR-F044
685	Trancy X	OTHER SYNTH	4	PR-F045
686	Trancy Synth	OTHER SYNTH	2	PR-F046
687	Juno Trnce	OTHER SYNTH	4	PR-F047
688	Saw Stack	OTHER SYNTH	2	PR-F048
689	Frgile Saws	OTHER SYNTH	2	PR-F049
690	Steamed Sawz	OTHER SYNTH	2	PR-F050
691	RAVtune	OTHER SYNTH	2	PR-F051
692	Bustranza	OTHER SYNTH	2	PR-F052
693	AftTch Ji-n	OTHER SYNTH	2	PR-F053
694	JP OctAttack	OTHER SYNTH	2	PR-F054
695	Oct Unison	OTHER SYNTH	6	PR-F055
696	Xtatic	OTHER SYNTH	4	PR-F056
697	Dirty Combo	OTHER SYNTH	2	PR-F057
698	FM's Attack	OTHER SYNTH	3	PR-F058
699	Digi-vox Syn	OTHER SYNTH	1	PR-F059
700	Fairy Factor	OTHER SYNTH	6	PR-F060
701	Tempest	OTHER SYNTH	2	PR-F061
702	X-Racer	OTHER SYNTH	2	PR-F062
703	TB Booster	OTHER SYNTH	2	PR-F063
704	Syn-Orch/Mod	OTHER SYNTH	4	PR-F064
705	Pressyn	OTHER SYNTH	2	PR-F065
706	High Five	OTHER SYNTH	2	PR-F066
707	4DaCommonMan	OTHER SYNTH	4	PR-F067
708	Orgaenia	OTHER SYNTH	5	PR-F068
709	Sleeper	OTHER SYNTH	4	PR-F069
710	Sugar Synth	OTHER SYNTH	5	PR-F070
711	Ice Palace	OTHER SYNTH	4	PR-F071
712	Story Harp	OTHER SYNTH	7	PR-F072
713	LostParadise	OTHER SYNTH	5	PR-F073
714	Magnetic 5th	OTHER SYNTH	2	PR-F074
715	DigimaX	OTHER SYNTH	2	PR-F075
716	Exhale	OTHER SYNTH	2	PR-F076
717	X-panda	OTHER SYNTH	2	PR-F077
718	Saw Keystep	OTHER SYNTH	2	PR-F078
719	4mant Cycle	OTHER SYNTH	1	PR-F079
720	Modular	OTHER SYNTH	2	PR-F080
721	Angel Pipes	OTHER SYNTH	2	PR-F081
722	Wired Synth	OTHER SYNTH	8	PR-F082
723	Analog Dream	OTHER SYNTH	3	PR-F083
724	DCO Bell Pad	OTHER SYNTH	4	PR-F084
725	Cell Fanta	OTHER SYNTH	3	PR-F085
726	Juno 5th	OTHER SYNTH	2	PR-F086
727	DoubleBubble	OTHER SYNTH	4	PR-F087
728	Cell Comb	BRIGHT PAD	3	PR-F088
729	Super SynStr	BRIGHT PAD	2	PR-F089
730	80s Str	BRIGHT PAD	8	PR-F090
731	PhaseStrings	BRIGHT PAD	2	PR-F091
732	Voyager	BRIGHT PAD	4	PR-F092
733	Cosmic Rays	BRIGHT PAD	4	PR-F093
734	Stringship	BRIGHT PAD	4	PR-F094
735	Fat Stacks	BRIGHT PAD	4	PR-F095
736	Strings R Us	BRIGHT PAD	2	PR-F096
737	Electric Pad	BRIGHT PAD	3	PR-F097
738	Neo RS-202	BRIGHT PAD	2	PR-F098
739	OB Rezo Pad	BRIGHT PAD	3	PR-F099
740	Synthi Ens	BRIGHT PAD	4	PR-F100
741	Giant Sweep	BRIGHT PAD	2	PR-F101
742	Mod Dare	BRIGHT PAD	4	PR-F102
743	Cell Space	BRIGHT PAD	4	PR-F103
744	Digi-Swell	BRIGHT PAD	3	PR-F104
745	Sonic Surfer	BRIGHT PAD	2	PR-F105
746	New Year Day	BRIGHT PAD	4	PR-F106
747	Polar Morn	BRIGHT PAD	4	PR-F107
748	Distant Sun	BRIGHT PAD	4	PR-F108
749	PG Chimes	BRIGHT PAD	4	PR-F109
750	Saturn Rings	BRIGHT PAD	4	PR-F110
751	Brusky	BRIGHT PAD	4	PR-F111
752	"2 Point 2"	BRIGHT PAD	7	PR-F112
753	2.2 Pad	BRIGHT PAD	7	PR-F113
754	two.two Pad	BRIGHT PAD	4	PR-F114
755	SaturnHolida	BRIGHT PAD	2	PR-F115
756	Neuro-Drone	BRIGHT PAD	7	PR-F116
757	In The Pass	BRIGHT PAD	3	PR-F117
758	Polar Night	BRIGHT PAD	4	PR-F118
759	Cell 5th	BRIGHT PAD	3	PR-F119
760	MistOver5ths	BRIGHT PAD	4	PR-F120
761	Gritty Pad	BRIGHT PAD	1	PR-F121
762	India Garden	BRIGHT PAD	6	PR-F122
763	BillionStars	BRIGHT PAD	4	PR-F123
764	Sand Pad	BRIGHT PAD	2	PR-F124
765	ReverseSweep	BRIGHT PAD	2	PR-F125
766	HugeSoundMod	BRIGHT PAD	4	PR-F126
767	Metal Swell	BRIGHT PAD	5	PR-F127
768	NuSoundtrack	BRIGHT PAD	4	PR-F128

PR-G (Preset G Group)

(CC#0 = 87, CC#32 = 70)

No	Name	Category	Voice	(Preset#)
769	Phat Strings	BRIGHT PAD	4	PR-G001
770	Soft OB Pad	SOFT PAD	3	PR-G002
771	SC Hollow	SOFT PAD	4	PR-G003
772	SC Sqr Pad	SOFT PAD	4	PR-G004
773	Silk Pad	SOFT PAD	3	PR-G005
774	WarmReso Pad	SOFT PAD	2	PR-G006
775	SC Soft Pad	SOFT PAD	3	PR-G007
776	Air Pad	SOFT PAD	4	PR-G008
777	Soft Breeze	SOFT PAD	2	PR-G009
778	JP Strings 1	SOFT PAD	3	PR-G010
779	JP Strings 2	SOFT PAD	5	PR-G011
780	DelayStrings	SOFT PAD	3	PR-G012
781	NorthStrings	SOFT PAD	4	PR-G013
782	SC Syn Str	SOFT PAD	5	PR-G014
783	Slow Saw Str	SOFT PAD	2	PR-G015
784	Syn Strings	SOFT PAD	2	PR-G016
785	OB Slow Str	SOFT PAD	2	PR-G017
786	Strings Pad	SOFT PAD	2	PR-G018
787	R&B SoftPad	SOFT PAD	2	PR-G019
788	Reso Pad	SOFT PAD	3	PR-G020
789	Phat Pad	SOFT PAD	2	PR-G021
790	SC PhaserPad	SOFT PAD	2	PR-G022
791	Mystic Str	SOFT PAD	5	PR-G023
792	Glass Organ	SOFT PAD	3	PR-G024
793	Wind Pad	SOFT PAD	4	PR-G025
794	Combination	SOFT PAD	4	PR-G026
795	HumanKindnes	SOFT PAD	4	PR-G027
796	BeautyPad	SOFT PAD	4	PR-G028
797	Atmospherics	SOFT PAD	2	PR-G029
798	Terra Nostra	SOFT PAD	8	PR-G030
799	OB Aaahs	SOFT PAD	4	PR-G031
800	Vulcano Pad	SOFT PAD	5	PR-G032
801	Cloud #9	SOFT PAD	3	PR-G033
802	Organic Pad	SOFT PAD	3	PR-G034
803	Hum Pad	SOFT PAD	4	PR-G035
804	Vox Pad	SOFT PAD	4	PR-G036
805	Digital Aahs	SOFT PAD	3	PR-G037
806	Tri 5th Pad	SOFT PAD	4	PR-G038
807	SC MovinPad	SOFT PAD	8	PR-G039
808	Seq-Pad 1	SOFT PAD	8	PR-G040
809	Follow	SOFT PAD	2	PR-G041
810	Consolament	SOFT PAD	3	PR-G042
811	Spacious Pad	SOFT PAD	4	PR-G043
812	JD Pop Pad	SOFT PAD	3	PR-G044
813	JP-8 Phase	SOFT PAD	4	PR-G045
814	Nu Epic Pad	SOFT PAD	2	PR-G046
815	Forever	SOFT PAD	5	PR-G047
816	Flange Dream	SOFT PAD	4	PR-G048
817	Evolution X	SOFT PAD	2	PR-G049
818	Heaven Pad	SOFT PAD	3	PR-G050
819	Angelis Pad	SOFT PAD	4	PR-G051
820	Juno-106 Str	SOFT PAD	1	PR-G052
821	JupiterMoves	SOFT PAD	2	PR-G053
822	Oceanic Pad	SOFT PAD	2	PR-G054
823	Fairy's Song	SOFT PAD	4	PR-G055
824	Borealis	SOFT PAD	2	PR-G056
825	JX Warm Pad	SOFT PAD	2	PR-G057
826	Analog Bgrnd	SOFT PAD	3	PR-G058
827	Choir Aahs 1	VOX	4	PR-G059
828	Choir Aahs 2	VOX	4	PR-G060
829	ChoirOoh/Aft	VOX	4	PR-G061
830	Angels Choir	VOX	4	PR-G062
831	Angelique	VOX	4	PR-G063
832	Gospel Oohs	VOX	2	PR-G064
833	Choir&Str	VOX	7	PR-G065
834	Aah Vox	VOX	2	PR-G066
835	Synvox	VOX	2	PR-G067
836	Uhmmm	VOX	8	PR-G068
837	Morning Star	VOX	3	PR-G069
838	Syn Opera	VOX	4	PR-G070
839	BeautifulOne	VOX	4	PR-G071
840	Ooze	VOX	2	PR-G072
841	Aerial Choir	VOX	4	PR-G073
842	3D Vox	VOX	3	PR-G074
843	Film Cue	VOX	4	PR-G075
844	Paradise	VOX	4	PR-G076
845	Sad ceremony	VOX	8	PR-G077
846	Lost Voices	VOX	4	PR-G078
847	Jazz Doos	VOX	4	PR-G079
848	Beat Vox	VOX	1	PR-G080
849	Talk 2 Me	VOX	2	PR-G081
850	FM Vox	VOX	4	PR-G082
851	Let's Talk!	VOX	3	PR-G083
852	Nice Kalimba	PLUCKED	1	PR-G084
853	Quiet River	PLUCKED	4	PR-G085
854	Teky Drop	PLUCKED	4	PR-G086
855	Pat is away	PLUCKED	5	PR-G087
856	SC Sitar 1	PLUCKED	4	PR-G088
857	SC Sitar 2	PLUCKED	5	PR-G089
858	Sitar on C	PLUCKED	6	PR-G090
859	Sitar Baby	PLUCKED	1	PR-G091
860	Elec Sitar	PLUCKED	3	PR-G092
861	Neo Sitar	PLUCKED	2	PR-G093
862	SaraswatiRvr	PLUCKED	3	PR-G094
863	Bosporus	PLUCKED	3	PR-G095
864	Santur Stack	PLUCKED	4	PR-G096
865	Aerial Harp	PLUCKED	2	PR-G097
866	Harpiness	PLUCKED	2	PR-G098
867	Skydiver	PLUCKED	2	PR-G099
868	TroubadorEns	PLUCKED	4	PR-G100
869	Jamisen	PLUCKED	2	PR-G101
870	Koto	PLUCKED	8	PR-G102
871	Monsoon	PLUCKED	4	PR-G103
872	Bend Koto	PLUCKED	2	PR-G104
873	LongDistance	ETHNIC	1	PR-G105
874	Ambi Shaku	ETHNIC	3	PR-G106
875	SC Lochscape	ETHNIC	2	PR-G107
876	SC PipeDream	ETHNIC	4	PR-G108
877	SC Far East	ETHNIC	4	PR-G109
878	Banjo	FRETTED	2	PR-G110
879	Timpani+Low	PERCUSSION	4	PR-G111
880	Timpani Roll	PERCUSSION	2	PR-G112
881	Bass Drum	PERCUSSION	4	PR-G113
882	Ambidextrous	SOUND FX	2	PR-G114
883	En-co-re	SOUND FX	4	PR-G115
884	Mobile Phone	SOUND FX	1	PR-G116
885	ElectroDisco	BEAT&GROOVE	5	PR-G117
886	Groove 007	BEAT&GROOVE	4	PR-G118
887	In Da Groove	BEAT&GROOVE	4	PR-G119
888	Sweet 80s	BEAT&GROOVE	4	PR-G120
889	Autotrance	BEAT&GROOVE	4	PR-G121
890	Juno Pop	BEAT&GROOVE	4	PR-G122
891	Compusonic 1	BEAT&GROOVE	4	PR-G123
892	Compusonic 2	BEAT&GROOVE	4	PR-G124
893	80s Combo	COMBINATION	3	PR-G125
894	Analog Days	COMBINATION	3	PR-G126
895	Techno Craft	COMBINATION	3	PR-G127
896	Lounge Kit	COMBINATION	2	PR-G128

GM (GM2 Group)

No	Name	Category	Voices	LSB	PC
1	Piano 1	AC.PIANO	2	0	1
2	Piano 1w	AC.PIANO	2	1	
3	European Pf	AC.PIANO	2	2	
4	Piano 2	AC.PIANO	2	0	2
5	Piano 2w	AC.PIANO	2	1	
6	Piano 3	AC.PIANO	2	0	3
7	Piano 3w	AC.PIANO	2	1	
8	Honky-tonk	AC.PIANO	2	0	4
9	Honky-tonk 2	AC.PIANO	2	4	
10	E.Piano 1	EL.PIANO	1	0	5
11	St.Soft EP	EL.PIANO	3	1	
12	FM+SA EP	EL.PIANO	3	2	
13	Wurly	EL.PIANO	1	3	
14	E.Piano 2	EL.PIANO	4	0	6
15	Detuned EP 2	EL.PIANO	4	1	
16	St.FM EP	EL.PIANO	4	2	
17	EP Legend	EL.PIANO	4	3	
18	EP Phase	EL.PIANO	2	4	
19	Harpsichord	KEYBOARDS	2	0	7
20	Coupled Hps.	KEYBOARDS	7	1	
21	Harpsi.w	KEYBOARDS	2	2	
22	Harpsi.o	KEYBOARDS	4	3	
23	Clav.	KEYBOARDS	2	0	8
24	Pulse Clav	KEYBOARDS	2	1	
25	Celesta	KEYBOARDS	1	0	9
26	Glockenspiel	BELL	1	0	10
27	Music Box	BELL	2	0	11
28	Vibraphone	MALLET	1	0	12
29	Vibraphone w	MALLET	1	1	
30	Marimba	MALLET	1	0	13
31	Marimba w	MALLET	1	1	
32	Xylophone	MALLET	1	0	14
33	Tubular-bell	BELL	1	0	15
34	Church Bell	BELL	1	1	
35	Carillon	BELL	4	2	
36	Santur	PLUCKED	4	0	16
37	Organ 1	ORGAN	3	0	17
38	Trem. Organ	ORGAN	2	1	
39	60's Organ 1	ORGAN	1	2	
40	70's E.Organ	ORGAN	2	3	
41	Organ 2	ORGAN	3	0	18
42	Chorus Or.2	ORGAN	3	1	
43	Perc. Organ	ORGAN	4	2	
44	Organ 3	ORGAN	4	0	19
45	Church Org.1	ORGAN	2	0	20
46	Church Org.2	ORGAN	4	1	
47	Church Org.3	ORGAN	6	2	
48	Reed Organ	ORGAN	3	0	21
49	Puff Organ	ORGAN	1	1	
50	Accordion Fr	ACCRDION	3	0	22
51	Accordion It	ACCRDION	3	1	
52	Harmonica	HARMONICA	2	0	23
53	Bandoneon	ACCRDION	3	0	24
54	Nylon-str.Gt	AC.GUITAR	1	0	25
55	Ukulele	AC.GUITAR	1	1	
56	Nylon Gt.o	AC.GUITAR	2	2	
57	Nylon Gt.2	AC.GUITAR	1	3	
58	Steel-str.Gt	AC.GUITAR	4	0	26
59	12-str.Gt	AC.GUITAR	3	1	
60	Mandolin	AC.GUITAR	2	2	
61	Steel + Body	AC.GUITAR	4	3	
62	Jazz Gt.	EL.GUITAR	1	0	27
63	Pedal Steel	EL.GUITAR	1	1	
64	Clean Gt.	EL.GUITAR	1	0	28
65	Chorus Gt.	EL.GUITAR	2	1	
66	Mid Tone GTR	EL.GUITAR	1	2	
67	Muted Gt.	EL.GUITAR	1	0	29
68	Funk Pop	EL.GUITAR	1	1	
69	Funk Gt.2	EL.GUITAR	1	2	
70	Jazz Man	EL.GUITAR	1	3	
71	Overdrive Gt	DIST.GUITAR	2	0	30
72	Guitar Pinch	DIST.GUITAR	1	1	
73	DistortionGt	DIST.GUITAR	1	0	31
74	Feedback Gt.	DIST.GUITAR	2	1	
75	Dist Rtm GTR	DIST.GUITAR	2	2	
76	Gt.Harmonics	EL.GUITAR	2	0	32
77	Gt. Feedback	EL.GUITAR	1	1	
78	Acoustic Bs.	BASS	1	0	33
79	Fingered Bs.	BASS	3	0	34
80	Finger Slap	BASS	3	1	
81	Picked Bass	BASS	3	0	35
82	Fretless Bs.	BASS	2	0	36
83	Slap Bass 1	BASS	2	0	37
84	Slap Bass 2	BASS	3	0	38
85	Synth Bass 1	SYNTH BASS	1	0	39
86	SynthBass101	SYNTH BASS	1	1	
87	Acid Bass	SYNTH BASS	1	2	
88	Clavi Bass	SYNTH BASS	2	3	
89	Hammer	SYNTH BASS	2	4	
90	Synth Bass 2	SYNTH BASS	3	0	40
91	Beef FM Bass	SYNTH BASS	2	1	
92	RubberBass 2	SYNTH BASS	2	2	
93	Attack Pulse	SYNTH BASS	1	3	
94	Violin	STRINGS	1	0	41
95	Slow Violin	STRINGS	1	1	
96	Viola	STRINGS	1	0	42
97	Cello	STRINGS	1	0	43
98	Contrabass	STRINGS	1	0	44
99	Tremolo Str	STRINGS	4	0	45
100	PizzicatoStr	STRINGS	4	0	46
101	Harp	PLUCKED	2	0	47
102	Yang Qin	PLUCKED	3	1	
103	Timpani	PERCUSSION	4	0	48
104	Strings	STRINGS	4	0	49
105	Orchestra	ORCHESTRA	7	1	
106	60s Strings	STRINGS	4	2	
107	Slow Strings	STRINGS	4	0	50
108	Syn.Strings1	STRINGS	3	0	51
109	Syn.Strings3	STRINGS	3	1	
110	Syn.Strings2	SOFT PAD	2	0	52
111	Choir Aahs	VOX	4	0	53
112	Chorus Aahs	VOX	4	1	
113	Voice Oohs	VOX	4	0	54
114	Humming	VOX	4	1	
115	SynVox	VOX	4	0	55
116	Analog Voice	VOX	2	1	
117	OrchestraHit	HIT&STAB	2	0	56
118	Bass Hit	HIT&STAB	2	1	
119	6th Hit	HIT&STAB	2	2	
120	Euro Hit	HIT&STAB	2	3	
121	Trumpet	AC.BRASS	2	0	57
122	Dark Trumpet	AC.BRASS	1	1	
123	Trombone	AC.BRASS	1	0	58
124	Trombone 2	AC.BRASS	2	1	
125	Bright Tb	AC.BRASS	2	2	
126	Tuba	AC.BRASS	1	0	59
127	MutedTrumpet	AC.BRASS	3	0	60
128	MuteTrumpet2	AC.BRASS	1	1	

No	Name	Category	Voices	LSB	PC
129	French Horns	AC.BRASS	3	0	61
130	Fr.Horn 2	AC.BRASS	1	1	
131	Brass 1	AC.BRASS	4	0	62
132	Brass 2	AC.BRASS	4	1	
133	Synth Brass1	SYNTH BRASS	4	0	63
134	JP Brass	SYNTH BRASS	4	1	
135	Oct SynBrass	SYNTH BRASS	4	2	
136	Jump Brass	SYNTH BRASS	3	3	
137	Synth Brass2	SYNTH BRASS	3	0	64
138	SynBrass sfz	SYNTH BRASS	2	1	
139	Velo Brass 1	SYNTH BRASS	2	2	
140	Soprano Sax	SAX	1	0	65
141	Alto Sax	SAX	1	0	66
142	Tenor Sax	SAX	1	0	67
143	Baritone Sax	SAX	1	0	68
144	Oboe	WIND	3	0	69
145	English Horn	WIND	1	0	70
146	Bassoon	WIND	1	0	71
147	Clarinet	WIND	2	0	72
148	Piccolo	FLUTE	2	0	73
149	Flute	FLUTE	2	0	74
150	Recorder	FLUTE	1	0	75
151	Pan Flute	FLUTE	1	0	76
152	Bottle Blow	FLUTE	2	0	77
153	Shakuhachi	ETHNIC	2	0	78
154	Whistle	FLUTE	2	0	79
155	Ocarina	FLUTE	3	0	80
156	Square Wave	HARD LEAD	2	0	81
157	MG Square	HARD LEAD	1	1	
158	2600 Sine	HARD LEAD	1	2	
159	Saw Wave	HARD LEAD	2	0	82
160	OB2 Saw	HARD LEAD	1	1	
161	Doctor Solo	HARD LEAD	2	2	
162	Natural Lead	HARD LEAD	2	3	
163	SequencedSaw	HARD LEAD	2	4	
164	Syn.Calliope	SOFT LEAD	2	0	83
165	Chiffer Lead	SOFT LEAD	2	0	84
166	Charang	HARD LEAD	2	0	85
167	Wire Lead	HARD LEAD	2	1	
168	Solo Vox	SOFT LEAD	2	0	86
169	5th Saw Wave	HARD LEAD	2	0	87
170	Bass & Lead	HARD LEAD	2	0	88
171	Delayed Lead	HARD LEAD	2	1	
172	Fantasia	OTHER SYNTH	4	0	89
173	Warm Pad	SOFT PAD	1	0	90
174	Sine Pad	SOFT PAD	2	1	
175	Polysynth	OTHER SYNTH	2	0	91
176	Space Voice	VOX	4	0	92
177	Itopia	VOX	3	1	
178	Bowed Glass	SOFT PAD	3	0	93
179	Metal Pad	BRIGHT PAD	4	0	94
180	Halo Pad	BRIGHT PAD	3	0	95
181	Sweep Pad	SOFT PAD	3	0	96
182	Ice Rain	OTHER SYNTH	3	0	97
183	Soundtrack	SOFT PAD	5	0	98
184	Crystal	BELL	2	0	99
185	Syn Mallet	BELL	2	1	
186	Atmosphere	AC.GUITAR	3	0	100
187	Brightness	OTHER SYNTH	4	0	101
188	Goblin	PULSATING	3	0	102
189	Echo Drops	BRIGHT PAD	2	0	103
190	Echo Bell	BRIGHT PAD	3	1	
191	Echo Pan	BRIGHT PAD	2	2	
192	Star Theme	BRIGHT PAD	3	0	104

No	Name	Category	Voices	LSB	PC
193	Sitar	PLUCKED	2	0	105
194	Sitar 2	PLUCKED	5	1	
195	Banjo	FRETTED	2	0	106
196	Shamisen	PLUCKED	2	0	107
197	Koto	PLUCKED	4	0	108
198	Taisho Koto	PLUCKED	3	1	
199	Kalimba	PLUCKED	1	0	109
200	Bagpipe	ETHNIC	3	0	110
201	Fiddle	STRINGS	1	0	111
202	Shanai	ETHNIC	2	0	112
203	Tinkle Bell	BELL	3	0	113
204	Agogo	PERCUSSION	1	0	114
205	Steel Drums	MALLET	2	0	115
206	Woodblock	PERCUSSION	1	0	116
207	Castanets	PERCUSSION	1	1	
208	Taiko	PERCUSSION	3	0	117
209	Concert BD	PERCUSSION	4	1	
210	Melo. Tom 1	PERCUSSION	1	0	118
211	Melo. Tom 2	PERCUSSION	1	1	
212	Synth Drum	PERCUSSION	1	0	119
213	808 Tom	PERCUSSION	1	1	
214	Elec Perc	PERCUSSION	1	1	
215	Reverse Cym.	PERCUSSION	1	0	120
216	Gt.FretNoise	AC.GUITAR	1	0	121
217	Gt.Cut Noise	AC.GUITAR	1	1	
218	String Slap	AC.GUITAR	1	2	
219	Breath Noise	SYNTH FX	1	0	122
220	Fl.Key Click	SYNTH FX	1	1	
221	Seashore	SOUND FX	2	0	123
222	Rain	SOUND FX	2	1	
223	Thunder	SOUND FX	1	2	
224	Wind	SOUND FX	2	3	
225	Stream	SOUND FX	2	4	
226	Bubble	SOUND FX	2	5	
227	Bird	SOUND FX	2	0	124
228	Dog	SOUND FX	1	1	
229	Horse-Gallop	SOUND FX	1	2	
230	Bird 2	SOUND FX	1	3	
231	Telephone 1	SOUND FX	1	0	125
232	Telephone 2	SOUND FX	1	1	
233	DoorCreaking	SOUND FX	1	2	
234	Door	SOUND FX	1	3	
235	Scratch	SOUND FX	1	4	
236	Wind Chimes	SOUND FX	2	5	
237	Helicopter	SOUND FX	1	0	126
238	Car-Engine	SOUND FX	1	1	
239	Car-Stop	SOUND FX	1	2	
240	Car-Pass	SOUND FX	1	3	
241	Car-Crash	SOUND FX	2	4	
242	Siren	SOUND FX	1	5	
243	Train	SOUND FX	1	6	
244	Jetplane	SOUND FX	3	7	
245	Starship	SOUND FX	4	8	
246	Burst Noise	SOUND FX	2	9	
247	Applause	SOUND FX	2	0	127
248	Laughing	SOUND FX	1	1	
249	Screaming	SOUND FX	1	2	
250	Punch	SOUND FX	1	3	
251	Heart Beat	SOUND FX	1	4	
252	Footsteps	SOUND FX	1	5	
253	Gun Shot	SOUND FX	1	0	128
254	Machine Gun	SOUND FX	1	1	
255	Lasergun	SOUND FX	1	2	
256	Explosion	SOUND FX	2	3	

Rhythm Set List

USER (User Group)

No	Name
1	SonicCellKit
2	WD Std Kit
3	LD Std Kit
4	TY Std Kit
5	StandardKit1
6	StandardKit2
7	StandardKit3
8	Rock Kit 1
9	Rock Kit 2
10	Brush Jz Kit
11	Orch Kit
12	909 808 Kit
13	Limiter Kit
14	HipHop Kit 1
15	R&B Kit
16	HiFi R&B Kit
17	Machine Kit1
18	Kit-Euro:POP
19	House Kit
20	Nu Technica
21	Machine Kit2
22	ArtificalKit
23	Noise Kit
24	Kick Menu
25	Snare Menu
26	Snr/Rim Menu
27	HiHat Menu
28	Tom Menu
29	Clp&Cym&Hit
30	FX/SFX Menu
31	Percussion
32	Scrh&Voi&Wld

* Rhthm Set are common to Preset Group and User Group.

PRST (Preset Group)

No	Name
1	SonicCellKit
2	WD Std Kit
3	LD Std Kit
4	TY Std Kit
5	StandardKit1
6	StandardKit2
7	StandardKit3
8	Rock Kit 1
9	Rock Kit 2
10	Brush Jz Kit
11	Orch Kit
12	909 808 Kit
13	Limiter Kit
14	HipHop Kit 1
15	R&B Kit
16	HiFi R&B Kit
17	Machine Kit1
18	Kit-Euro:POP
19	House Kit
20	Nu Technica
21	Machine Kit2
22	ArtificalKit
23	Noise Kit
24	Kick Menu
25	Snare Menu
26	Snr/Rim Menu
27	HiHat Menu
28	Tom Menu
29	Clp&Cym&Hit
30	FX/SFX Menu
31	Percussion
32	Scrh&Voi&Wld

GM (GM Group)

No	Name
1	GM2 STANDARD
2	GM2 ROOM
3	GM2 POWER
4	GM2 ELECTRIC
5	GM2 ANALOG
6	GM2 JAZZ
7	GM2 BRUSH
8	GM2 ORCHSTRA
9	GM2 SFX

USER (User Group)/PRS (Preset Group)

Prst:	1	2	3	4	5	6
User:	1	2	3	4	5	6
Note No.	SonicCellKit	WD Std Kit	LD Std Kit	TY Std Kit	StandardKit1	StandardKit2
28	Dance Kick	Dance Kick	Dance Kick	Dance Kick	MaxLow Kick2	Dance Kick
29	Dry Kick 1	Dry Kick 1	Dry Kick 1	Dry Kick 1	Rk CmpKick	Dry Kick 1
30	Snr Roll	Snr Roll	Snr Roll	Snr Roll	Gospel Clap	Snr Roll
31	Power Kick	Power Kick	Power Kick	Power Kick	Sweep Bass	Power Kick
32	Amb.Snr 2	Amb.Snr 2	Amb.Snr 2	Amb.Snr2 p	Sft Snr Gst	Amb.Snr 2p
33	Power Kick	Reg.Kick 2	Reg.Kick 2	Power Kick	HipHop Kick2	Power Kick
34	Reg.PHH	Reg.PHH	Reg.PHH	Reg.PHH	Reg.PHH	Reg.PHH
35	Reg.Kick	Reg.Kick 1	Reg.Kick 1	Reg.Kick	Reg.Kick 1	Reg.Kick 1
C2 36	SF Kick 1	WD Kick	LD Kick	TY Kick	Reg.Kick 2	Reg.Kick 2
37	SF CStk	WD CStk	LD CStk	TY CStk	Reg.Stick	Wild Stick
38	SF Snr	WD Snr	LD Snr	TY Snr	Reg.Snr 2	Amb.Snr 1
39	SF Snr Gst	SF Snr Gst	Reg.Snr Gst	SF SnrGst	Reg.Snr Gst	Reg.Snr Gst
40	SF Rim	WD Rim	LD Rim	TY Rim	Reg.Snr 1	Amb.Snr 2
41	RR F.Tom	RR F.Tom	RR F.Tom	RR F.Tom	Reg.F.Tom	Reg.F.Tom
42	Reg.CHH 1	Reg.CHH 1	Reg.CHH 1	Reg.CHH 1	Reg.CHH 1	Reg.CHH 1
43	SF L.Tom	TY L.Tom	LD L.Tom	TY L.Tom	Reg.L.Tom	Reg.L.Tom
44	Reg.CHH 2	Reg.CHH 2	Reg.CHH 2	Reg.CHH 2	Reg.CHH 2	Reg.CHH 2
45	SF M.Tom	TY M.Tom	LD M.Tom	TY M.Tom	Reg.M.Tom 1	Reg.M.Tom
46	Reg.OHH	Reg.OHH	Reg.OHH	Reg.OHH	Reg.OHH	Reg.OHH
47	SF MT Flm	TY M.Tom	LD M.Tom	TY M.Tom	Reg.M.Tom 2	Reg.M.TomFlm
C3 48	SF H.Tom	TY H.Tom	LD H.Tom	TY H.Tom	Reg.H.Tom 1	Reg.H.Tom
49	Crash Cym1a	Crash Cym1a	Crash Cym1a	Crash Cym 2	Crash Cym1	Crash Cym1a
50	SF HT Flm	TY H.Tom	LD H.Tom	TY H.Tom	Reg.H.Tom 2	Reg.H.TomFlm
51	Rock Ride 1	Rock Ride 1	Rock Ride 1	Rock Ride 1	Rock Ride	Rock Ride 1
52	China Cymbal	China Cymbal	China Cymbal	China Cymbal	China Cymbal	China Cymbal
53	Splash Cym	Splash Cym	Splash Cym	Splash Cym	Ride Edge	Splash Cym
54	Tamborine2	Tamborine 3	Tamborine 3	Tamborine2	Tamborine	Tamborine
55	Rock Crash 1	Rock Crash 1	Rock Crash 1	Crash Cym1a	Crash Cym2a	Rock Crash 1
56	Cowbell3	Cowbell3	Cowbell3	Cowbell3	Cowbell Low	Cowbell Hi
57	Crash Cym1b	Crash Cym1b	Crash Cym1	Crash Cym1b	Crash Cym2b	Crash Cym1b
58	Cowbell2 Lng	Cowbell2 Lng	Cowbell	Cowbell2 Lng	Cowbell Hi	Cowbell Low
59	Rock Ride 2	Rock Ride 2	Rock Ride 2	Rock Ride 2	Ride Bell	Rock Ride 2
C4 60	Conga 2H Mt	Conga Hi Mt	Conga 2H Mt	Conga 2H Mt	Conga Hi Mt	Conga Hi Mt
61	Conga 2L Mt	Conga Lo Mt	Conga 2L Mt	Conga 2L Mt	Conga Lo Mt	Conga Lo Mt
62	Conga 2H Slp	Conga Hi Slp	Conga 2H Slp	Conga 2H Slp	Conga Lo	Conga Hi Slp
63	Conga 2H Op	Conga Hi Op	Conga 2H Op	Conga 2H Op	Conga Hi Op	Conga Hi Op
64	Conga 2L Op	Conga Lo Op	Conga Lo Op	Conga 2L Op	Conga Lo Op	Conga Lo Op
65	Timbare 4	Timbale Hi	Timbale 1	Timbare 4	Timbale Hi	Timbale Hi
66	Timbare 3	Timbale Low	Timbale 2	Timbare 3	Timbale Low	Timbale Low
67	Agogo 2 Hi	Mild Agogo H	Agogo 2 Hi	Agogo 2 Hi	Agogo Bell H	Mild Agogo H
68	Agogo 2 Low	Mild Agogo L	Agogo 2 Low	Agogo 2 Low	Agogo Bell L	Mild Agogo L
69	Cabasa 2	Cabasa Up	Cabasa 2	Cabasa 2	Cabasa Up	Cabasa Up
70	Shaker 2	Maracas	Shaker 2	Shaker 1	Maracas	Maracas
71	Whistle Shrt	Whistle Shrt	Whistle Shrt	Whistle Shrt	Whistle Shrt	Whistle Shrt
C5 72	Whistle Long	Whistle Long	Whistle	Whistle Long	Whistle Long	Whistle Long
73	Guiro 2 Up	Guiro Short	Guiro 2 Up	Guiro 2 Up	Guiro Short	Guiro Short
74	Guiro 2 Down	Guiro Long	Guiro Long	Guiro 2 Down	Guiro Long	Guiro Long
75	Claves 2	Claves	Claves 2	Claves 2	Claves	Claves
76	Wood Block2H	Wood Block H	Wood Block2H	Wood Block2H	Wood Block H	Wood Block H
77	Wood Block2L	Wood Block L	Wood Block2L	Wood Block2L	Wood Block L	Wood Block L
78	Cuica 2 Low	Cuica Mute	Cuica 2 Low	Cuica 2 Low	Cuica Mute	Cuica Mute
79	Cuica 2 Hi	Cuica Open	Cuica 2 Hi	Cuica 2 Hi	Cuica Open	Cuica Open
80	Triangle Mt	Triangle Mt	Triangle Mt	Triangle Mt	Triangle Mt	Triangle Mt
81	Triangle Op	Triangle Op	Triangle Op	Triangle Op	Triangle Op	Triangle Op
82	Cabasa2 Cut	Cabasa Cut	Cabasa2 Cut	Cabasa2 Cut	Cabasa Cut	Cabasa Cut
83	DigiSpectrum	DigiSpectrum	DigiSpectrum	DigiSpectrum	Castanet	DigiSpectrum
C6 84	Wind Chime	Wind Chime	Wind Chime	Wind Chime	Bongo Hi Mt	Wind Chime
85	Wood Block2M	Wood Block M	Wood Block2M	Wood Block2M	Bongo Hi Slp	Wood Block M
86	Cajon 2	Cajon 2	Cajon 2	Cajon 2	Bongo Lo Slp	Cajon 2
87	ConcertBD	ConcertBD	ConcertBD	ConcertBD	Bongo Hi Op	ConcertBD
88	R&B Kick	R&B Kick	R&B Kick	R&B Kick	Bongo Lo Op	R&B Kick
89	Dry Kick 2	Dry Kick 2	Dry Kick 2	Dry Kick 2	Cajon 1	Dry Kick 2
90	Old Kick	Old Kick	Old Kick	Old Kick	Cajon 2	Old Kick
91	Jazz Doos	Jazz Doos	Jazz Doos	Jazz Doos	Cajon 3	Jazz Doos
92	Agogo Noise	Agogo Noise	Agogo Noise	Agogo Noise	Vint Snr 2	Agogo Noise
93	Rock OHH	Rock OHH	Rock OHH	Rock OHH	Shaker 3	Rock OHH
94	JD Anklungs	JD Anklungs	JD Anklungs	JD Anklungs	WD Rim	JD Anklungs
95	Rock OHH	Rock OHH	Rock OHH	Rock OHH	Mix Kick 1	Rock OHH
C7 96	Cajon 3	Cajon 3	Cajon 3	Cajon 3	Mix Kick 2	Mix Kick 1
97	Cajon 1	Cajon 1	Cajon 1	Cajon 1	Mix Kick 3	Cajon 1
98	Mix Kick 4	Mix Clap	Mix Kick 4	TY Rim f	Mix Kick 4	Mix Kick 2
99	Gospel Clap	Gospel Clap	Gospel Clap	Gospel Clap	Mix Kick 5	Gospel Clap
100	Bright Clap	Bright Clap	Bright Clap	Bright Clap	Mix Clap 1	Bright Clap
101	Rock Rd Cup	Rock Rd Cup	Rock Rd Cup	Rock Rd Cup	Wind Chime	Rock Rd Cup
102	Cowbell	Cowbell	Cowbell	Cowbell	Tibet Cymbal	Cowbell
103	Crash Cym 2	Crash Cym 2	Crash Cym 2	Crash Cym 2	Crotale	Crash Cym 2

Note No.	Prst: 7 / User: 7 StandardKit3	8 / 8 Rock Kit 1	9 / 9 Rock Kit 2	10 / 10 Brush Jz Kit	11 / 11 Orch Kit	12 / 12 909 808 Kit
28	HipHop Kick2	R&B Kick	MaxLow Kick2	TR909 Kick1a	Timpani Roll	TR909 Kick 2
	Syn Swt Atk1	Rk CmpKick	MaxLow Kick1	TR909 Kick1b	ConcertBD 2	TR909 Kick 4
29	Lo-Bit Stk 1	Sft Snr Gst	LD Rim mf	Jazz Snr	R8 Shaker 1	Urbn Sn Roll
30	TR707 Kick	Dry Kick 4	Power Kick	Reg.Kick 1	Jngl pkt Snr	TR909 Kick 5
31	TR808 Snr 5	Snr Roll	Mix Clap 2	Soft Jz Roll	Reverse Cym	TR909 Snr 3
32	Vint Kick 1	SH32 Kick	Vint Kick	Reg.Kick 2	Snr Roll	TR909 Kick 3
33	Reg.PHH	Reg.PHH	Rock CHH2	Reg.PHH	Jazz Ride	TR909 PHH 2
34	Vint Kick 2	Reg.Kick 1	Rock Kick	Jazz Kick 1	Timpani Roll	TR909 Kick 6
35	Old Kick 1	Reg.Kick 2	Rk CmpKick	Jazz Kick 2	ConcertBD 1	TR909 Kick 1
C2 36	Lo-Bit Stk 4	Reg.Stick	Wild Stick	Hard Stick	Hard Stick	TR909 Rim
37	Reg.Snr 1	Reg.Snr2	Maple Snr	Jazz Rim	Amb.Snr 2	TR909 Snr 1
38	Amb Clap	Reg.Snr Gst	Sft Snr Gst	Jz Brsh Swsh	Gospel Clap	TR909 Clap 1
39	TY Rim	Reg.Snr1	Reg.Snr1	Jazz Snr	Concert SD	TR909 Snr 2
40	Jazz Lo Tom1	Reg.F.Tom	Sharp L.Tom1	Reg.F.Tom 1	Timpani F	TR909 Tom L
41	Reg.CHH 1	Reg.CHH 1	Rock CHH 1	Reg.CHH 1	Timpani F#	TR909 CHH 1
42	Jazz Lo Tom2	Reg.L.Tom	Sharp L.Tom2	Reg.L.Tom 1	Timpani G	TR909 Tom L
43	Reg.CHH 2	Reg.CHH 2	Reg.PHH	Reg.CHH 2	Timpani G#	TR909 PHH 1
44	Jazz Mid Tom	Reg.M.Tom	Sharp L.Tom3	Reg.M.Tom 1	Timpani A	TR909 Tom M
45	Reg.OHH	Reg.OHH	Rock OHH	Reg.OHH	Timpani A#	TR909 OHH 2
46	Jazz Mid Tom	Reg.M.TomFlm	Sharp H.Tom1	Reg.M.Tom 1	Timpani B	TR909 Tom M
47	Jazz Hi Tom	Reg.H.Tom	Sharp H.Tom2	Reg.H.Tom 1	Timpani C	TR909 Tom H
C3 48	Crash Cym1	Crash Cym1a	Crash Cym1	Jazz Crash	Timpani C#	TR909 Crash
49	Jazz Hi Tom	Reg.H.TomFlm	Sharp H.Tom3	Reg.H.Tom 1	Timpani D	TR909 Tom H
50	Rock Rd Edge	Rock Ride 1	Ride Cymbal	Jazz Ride 1	Timpani D#	TR909 Ride 1
51	China Cymbal	China Cymbal	China Cymbal	China Cym 1	Timpani E	TR909 Crash1
52	Rock Rd Cup	Splash Cym	Ride Bell	Ride Edge	Timpani f	TR909 Ride 2
53	Tamborine	Tamborine	Tamborine 3	Tamborine	Tamborine 3	CR78 Tamb 1
54	Splash Cym	Rock Crash 1	Rock Crash 2	Crash Cym	Concert Cym	TR909 Crash2
55	Cowbell	Cowbell Hi	Cowbell Mute	Cowbell Low	Cowbell Mute	JD Sm Metal
56	Rock Crash 2	Crash Cym1b	Splash Cym	Crash Cym	Concert Cym2	TR909 Ride 3
57	TR808 Cym	Cowbell Low	Cowbell	Cowbell Hi	Ride Cymbal	Syn Swt Atk3
58	Jazz Ride	Rock Ride 2	Rock Rd Cup	Ride Bell	Crash Cym1	TR808 Kick 1
59	Bongo Hi	Conga Hi Mt	Conga Hi Mt	Conga Hi Mt	Bongo Hi Op	TR808 Kick 2
C4 60	Bongo Lo	Conga Lo Mt	Conga Lo Mt	Conga Lo Mt	Bongo Lo Op	TR808 Rim
61	Conga Hi Mt	Conga Hi Slp	Conga Slp Op	Conga Lo Slp	Conga Hi Mt	TR808 Snr 2
62	Conga Hi	Conga Hi Op	Conga Hi Op	Conga Hi Op	Conga Hi Op	TR808 Clap 2
63	Conga Lo	Conga Lo Op	Conga Lo Op	Conga Lo Op	Conga Lo Op	TR808 Snr 4
64	Timbale Hi	Timbale Hi	Timbale Hi	Timbale Hi	Timbale Hi	TR808 Tom L
65	Timbale Low	Timbale Low	Timbale Low	Timbale Low	Timbale Low	TR808 CHH 1
66	Cowbell Hi	Agogo Bell H	Agogo Bell H	Agogo Bell H	Agogo Bell H	TR808 Tom L
67	Cowbell Low	Agogo Bell L	Agogo Bell L	Agogo Bell L	Agogo Bell L	TR808 CHH 2
68	Cabasa	Cabasa Up	Cabasa Up	Cabasa Up	Cabasa Up	TR808 Tom M
69	Shaker	Maracas	Maracas	Maracas	Maracas	TR808 OHH 1
70	Noise OHH 2	Whistle Shrt	Whistle Shrt	Jazz Kick 1	Whistle Shrt	TR808 Tom M
71	Scratch 5	Whistle Long	Whistle Long	Jazz Kick 2	Whistle Long	TR808 Tom H
C5 72	Syn Low Atk2	Guiro Short	Guiro Short	Hard Stick	Guiro Short	TR808Cowbell
73	MG Zap 3	Guiro Long	Guiro Long	Jazz Rim	Guiro Long	TR808 Tom H
74	Syn Swt Atk1	Claves	Claves	Sft Snr Gst	Claves	TR606 Cym
75	Syn Swt Atk4	Wood Block H	Wood Block H	Jazz Snr	Wood Block H	TR606 OHH 1
76	Bongo Hi Slp	Wood Block L	Wood Block L	Reg.F.Tom 2	Wood Block L	TR606 OHH 2
77	Noise OHH	Cuica Mute	Cuica Mute	Reg.CHH 1	Cuica Mute	CR78 Tamb 2
78	Noise CHH	Cuica Open	Cuica Open	Reg.L.Tom 2	Cuica Open	CR78 OHH 1
79	Triangle 1	Triangle Mt	Triangle Mt	Reg.CHH 2	Triangle Mt	Cowbell Mute
80	Triangle 2	Triangle Op	Triangle Op	Reg.M.Tom 2	Triangle Op	CR78 OHH 2
81	Cajon 1	Cabasa Cut	Cabasa Cut	Reg.OHH	Cabasa Cut	Syn Swt Atk5
82	Cajon 3	DigiSpectrum	Wind Chime	Reg.M.TomFlm	Finger Snap	TR808 OHH 2
83	Wind Chime	Wind Chime	Dist Chord 1	Reg.H.Tom 2	Wind Chime	808 Maracas
C6 84	SprgDrm Hit	Dist Chord 1	Dist Chord 2	Jazz Cymbal	Tibet Cymbal	TR808 Claves
85	Crotale	Dist Chord 2	Dist Chord 3	Reg.H.TomFlm	Vibraslap	Triangle Mt
86	R8 Click	Dist Chord 3	Dist Chord 4	Jazz Ride 2	Crotale	Triangle Op
87	Metro Bell	Dist Chord 4	Dist Chord 5	China Cym 2	Applause	Narrow Hit 2
88	DR202 Beep	Dist Chord 5	Dist Chord 6	Cajon 1	TubulrBel F	TR808 Cym1
89	Reverse Cym	Rock CHH 2	Rock CHH 2	Cajon 2	TubulrBel F#	MG Zap 4
90	Xylo Seq.	Cowbell 2a	Dist Chord 7	Cajon 3	TubulrBel G	Scratch 1
91	Vinyl Noise	Rock CHH 1	DistGtr Nz 1	Vint Snr 2	TubulrBel G#	MG Zap 1
92	Mobile Phone	Cowbell 2b	DistGtr Nz 2	Shaker 3	TubulrBel A	TR606 Snr 2
93	Group Snap	Rock OHH	DistGtr Nz 3	WD Rim f	TubulrBel A#	Synth Saw
94	Laser	Fng.EB2 Sld	JD Switch	Mix Kick 1	TubulrBel B	Digi Breath
95	Siren	Cajon 3	Cajon 3	Mix Kick 2	TubulrBel C	TR808 Cym2
C7 96	AnalogKick 3	Cajon 2	Cajon 2	Mix Kick 3	TubulrBel C#	TR808 Conga1
97	Old Kick 2	Cajon 1	Cajon 1	Mix Kick 4	TubulrBel D	TR808 Conga2
98	Reg.Kick	Gospel Clap	Real Clap	Mix Kick 5	TubulrBel D#	Cajon 1
99	TR909 Snr 4	Rock Crash 2	Gospel Clap	Mix Clap 1	TubulrBel E	Vint Snr 3
100	TR808 Snr 2	Rock Rd Cup	Tibet Cymbal	Wind Chime	TubulrBel f	Door Creak
101	Short Snr1	Club FinSnap	Tamborine 1	Tibet Cymbal	Church Bell1	Vint.Phone
102	Vint Snr 4	TR909 Snr 6	Tamborine 2	Crotale	Church Bell2	Door Creak
103						

Note No.	Prst: 13 / User: 13 Limiter Kit	14 / 14 HipHop Kit 1	15 / 15 R&B Kit	16 / 16 HiFi R&B Kit	17 / 17 Machine Kit1	18 / 18 Kit-Euro:POP
28	Dance Kick 1	PlasticKick2	70's Kick	MaxLow Kick2	TR909 Kick 2	TR707 Kick
29	HipHop Kick1	Group Snap	AnalogKick 6	FB Kick	TR909 Kick 4	AnalogKick 1
30	WD CStk	Snr Roll	Urbn Sn Roll	Rough Kick1a	Light Snr	Dirty Snr 6
31	R&B Kick 1	AnalogKick 3	HipHop Kick2	MaxLow Kick1	Mix Kick 5	FB Kick
32	Wild Stick	GoodOld Snr5	R&B ShrtSnr1	Rough Kick3	DR660 Snr	BrushRoll
33	Dance Kick 2	Dist Kick	Old Kick	Rk CmpKick	Mix Kick 2	PlasticKick2
34	Hip PHH	Noise CHH	HipHop CHH	TR909 Kick 5	TR808 PHH	Reg.CHH 2
35	LD Kick	TR707 Kick	EuroHit Kick	Rough Kick1b	AnalogKick 6	Power Kick
C2 36	R&B Kick 2	Dry Kick 4	TR909 Kick 1	R&B Kick	70's Kick 1	TR909 Kick 6
37	Lo-Bit Stk 2	Jazz Rim	Dry Stick 4	Hard Stick	TR808 Rim	R&B ShrtRim1
38	Wild Stick	Dirty Snr 2	Dirty Snr 2	GoodOld Snr3	Jngl pktSnr1	TR909 Snr 3
39	Dist Clap	Old Clap	Maple Snr	GoodOld Snr4	Funk Clap	TR909 Clap 1
40	DR660 Snr	Vint Snr 4a	Short Snr2	GoodOld Snr2	Jngl pktSnr2	TR909 Snr 4a
41	Reg.F.Tom p	TR909 Tom L	TR808 Tom 1	Lo-Bit Snr 1	MG Attack	Sharp L.Tom2
42	Lo-Bit CHH 2	HipHop CHH 2	TR606 CHH 2	Noise CHH	TR808 CHH 1	TR909 CHH 1
43	Reg.F.Tom f	Deep Tom L	Reg.F.Tom	Jazz Snr	MG Attack	Sharp L.Tom1
44	Lo-Bit CHH 4	Lo-Bit PHH	TR909 CHH 2	Hip PHH	TR808 PHH	TR909 PHH 1
45	Reg.L.Tom	TR909 Tom M	TR808 Tom 2	Lo-Bit Snr 2	MG Blip	Sharp M.Tom
46	Lo-Bit OHH 2	Lo-Bit OHH 2	Lo-Bit OHH 2	Reg.OHH	TR808 OHH 1	TR909 OHH 2
47	Reg.L.TomFlm	Deep Tom M	Reg.M.Tom	Vint Snr 2	MG Blip	Sharp M.Tom
C3 48	Reg.H.Tom	TR909 Tom H	TR808 Tom 3	WD Snr	Beam HiQ	Sharp H.Tom
49	Crash Cym 1	Crash Cym1 p	Rock Crash 1	TR808 Cym 1	TR606 Cym 2a	TR909 Crash
50	Reg.H.TomFlm	Deep Tom H	Reg.H.Tom	GoodOld Snr6	Beam HiQ	Sharp H.Tom
51	Lo-Bit OHH 1	Rock Crash 1	Splash Cym	TR606 Cym 2	Lo-Bit OHH1a	TR909 Ride
52	TR606 Cym 2	Rock Rd Edge	Rock Rd Edge	White Noise	TR606 Cym 2	China Cymbal
53	Jazz Ride 1	China Cymbal	Concert Cym	Bright Form	Lo-Bit OHH1b	Rock Rd Edge
54	Tamborine 1	Snap	Cheap Clap	CR78 Tamb	CR78 Tamb 1	Tamborine 3
55	TR606 OHH	TR808 Conga2	Snap	SBF Hrd Ld 1	TR606 Cym 2b	Crash Cym1 p
56	Vibraslap	Vint Snr 4	Lo-Bit Snr 2	JD Sm Metal	JD Sm Metal1	Cowbell
57	Mix Kick 2	TR808Cowbell	Wood Block	TR808 Cym 2	Lo-Bit OHH1c	Rock Crash 2
58	Hip PHH	Guiro Long	Shaku Noise	Syn Swt Atk3	Syn Swt Atk3	Vibraslap
59	Mix Kick 2	Guiro 2	Syn Hrd Atk1	TR909 Kick4a	AnalogKick 6	TR606 Cym 2
C4 60	Rough Kick	Guiro 1	JD MetalWind	TR909 Kick4b	70's Kick 2	Bongo Lo Op
61	Dry Stick	Shaker 3	Maracas	TR808 Rim	R8 Comp Rim	Bongo Hi Op
62	GoodOld Snr5	Noise CHH	Cabasa Up	TR808 Snr 2	Pocket Snr	Conga Hi Mt
63	R8 Clap	Cabasa 2	Cabasa Down	TR808 Clap 2	TR909 Clap 2	Conga Hi Op
64	Jngl pkt Snr	Vibraslap	Cabasa Cut	TR808 Snr 4	Vint Snr 4	Conga Lo Op
65	TR808 Tom	Mix Kick 2	Tamborine 1	TR808 Tom 4	TR606 Tom L	Conga Efx
66	Noise CHH 1	Dist Snr	Tamborine 2	TR808 CHH 1	Dance CHH	Shaker 3
67	TR808 Tom	Sweep Bass	Tamborine 1	TR808 Tom 3	TR606 Tom L	Shaker 2
68	Noise CHH 2	Short Snr1	Triangle Mt	TR808 CHH 2	Lo-Bit CHH 1	CR78 Beat
69	TR606 Tom L1	CR78 CHH	Triangle Op	TR808 Tom 2	TR606 Tom M	Cabasa Cut 1
70	Lo-Bit OHH 2	Shaker 2	Xylo Seq.	TR808 OHH 1	Reg.OHH	Cabasa Cut 2
71	TR606 Tom L2	CR78 Tamb	Philly Hit	TR808 Tom 1	TR606 Tom M	Lo-Bit PHH
C5 72	TR606 Tom H1	Noise OHH	LoFi Min Hit	Scratch 3	TR606 Tom H	Scratch 7
73	Crash Cym 2	Slight Bell	Vinyl Noise	Scratch 4	TR909 Crash1	Syn Low Atk2
74	TR606 Tom H2	Tibet Cymbal	Cajon 1	Scratch 5	TR606 Tom H	MG Zap 7
75	Jazz Ride 2	Wind Chime	Cajon 2	Scratch 6	Lite OHH 1	Syn Swt Atk1
76	Splash Cym	Scratch 2	Cajon 3	Old Clap	TR909 Crash2	Syn Swt Atk4
77	Rock Rd Edge	Scratch 1	Conga Hi Mt	Hand Clap	Lite OHH 2	Conga Thumb
78	Tamborine 3	Scratch 10	Conga Lo Mt	R8 Clap	CR78 Tamb 2	Triangle 1
79	Guiro Long	Scratch 9	Conga Hi Slp	Cabasa Cut	TR909 Crash	Triangle 2
80	Gospel Clap	Smear Hit 2	Conga Lo Slp	R8 Shaker	JD Sm Metal2	Euro Hit 1
81	Tibet Cymbal	Lofi Min Hit	Conga Hi Op	Tamborine 2	Lite OHH 3	Tao Hit
82	Wind Chime	Thin Beef	Conga Lo Op	Cabasa Down	Syn Swt Atk1	Narrow Hit 2
83	Mix Kick 1	Dist Hit	Conga Slp Op	Cabasa Cut	TR808 OHH 2	Euro Hit 2
C6 84	Mix Kick 2	Narrow Hit 2	Conga Efx	Tibet Cymbal	808 Maracas	Wind Chime
85	Mix Kick 4	MG Attack	Conga Thumb	Crotale	TR808 Claves	Timpani Roll
86	Vint Snr 1	MG Zap 9	Noise OHH	Slight Bell	Triangle Mt	Crotale
87	Vint Snr 2	Mix Clap 3	Shaker 3	Wind Chime	Triangle Op	R8 Click
88	Vint Snr 3	R8 Shaker	Castanet	Triangle 1	Narrow Hit 2	Metro Bell
89	Vint Snr 4	Cabasa Down	CR78 Beat	Mild CanWave	Euro Hit	MC500 Beep 1
90	Noise CHH	Cabasa Cut	CR78 OHH	Cheap Clap	MG Zap 4	MC500 Beep 2
91	CR78 CHH	MaxLow Kick1	CR78 CHH	JD Plunk	Scratch 1	Atmosphere
92	Noise CHH 3	MaxLow Kick2	Lite OHH	Syn Swt Atk2	MG Zap 1	Agogo Noise
93	Noise OHH 2	Lo-Bit Snr 1	CR78 Tamb	DistGtr Nz 2	TR606 Snr 2	Car Slip
94	Noise OHH 1	Dance CHH	JD Vox Noise	River	Synth Saw	Group Snap
95	Heartbeat	Wild Stick	Guiro 2 Fast	Bubble	Digi Breath	Laser
C7 96	Scratch 2	MC500 Beep 1	Metro Click	Train Pass	DigiSpectrum	ConcertBD
97	Scratch 5	MC500 Beep 2	Metro Bell	LoFi Min Hit	Shaker 3	AnalogKick 3
98	Scratch 1	Gospel Clap	Wind Chime	Pink Noise	Conga 2H Slp	Old Kick
99	Scratch 4	TR606 Cym	Crotale	Agogo Noise	Cajon 1	Reg.Kick
100	Scratch 6	China Cymbal	Crash Cym1 p	SynVox Nz 1	Vint Snr 3	TR909 Snr 4b
101	Mobile Phone	Rock Crash 2	TR909 Crash	SynVox Nz 2	Door Creak 1	TR808 Snr 2
102	Sweep Bass 1	CR78 OHH	CR78 OHH	R8 Click	Vint.Phone	Vint Snr 4
103	Sweep Bass 2	Concert Cym	Rev.Lite OHH	Syn Swt Atk1	Door Creak 2	Light Snr

Prst:	19	20	21	22	23	24
User:	19	20	21	22	23	24
Note No.	House Kit	Nu Technica	Machine Kit2	ArtificalKit	Noise Kit	Kick Menu
28	TR909 Kick 3	SH32 Kick 1	AnalogKick 5	TR909 Kick 2	TR909 Kick 2	—
	SH32 Kick	JD EML 5th 1	AnalogKick6a	AnalogKick 2	TR909 Kick 4	—
29	Urbn Sn Roll	AnalogKick 6	Analog Snr 1	TR808 Snr 5	Urbn SnRoll1	—
30	TR909 Kick 2	TR909 Kick 5	AnalogKick1a	TR909 Kick 3	TR909 Kick 5	—
31	TR909 Snr 6	Plastic Kc3a	TR808 Snr 4	Vint Snr 3	Door Creak 1	—
32	TR909 Kick 5	R&B Kick	FB Kick	FB Kick	TR909 Kick 1	—
33	TR909 PHH 2	TR707 Kick	TR808 PHH	TR606 Cym 2a	SynSwt Atk7a	—
34	TR909 Kick4a	Plastic Kc3b	AnalogKick6b	AnalogKick 3	Cajon 3a	Reg.Kick p
35	TR909 Kick4b	SH32 Kick 2	AnalogKick6c	TVF Trigger	Cajon 3b	Reg.Kick f
C2 36	TR909 Rim	TR909 Snr 5	R&B ShrtRim2	TR909 Rim	Laser	Reg.Kick ff
37	TR909 Snr 4	Syn Mtl Atk2	TR909 Snr 1	TR909 Snr 1	Door Creak2a	Rock Kick p
38	TR909 Clap 2	Flange Snr	TR707 Clap	Claptail	Train Pass	Rock Kick f
39	TR909 Snr 5	TR909 Snr 3	Lo-Bit Snr 2	TR909 Snr 3	Door Creak2b	Jazz Kick p
40	TR909 Tom L	Dance CHH	Deep Tom L	TR909 Tom L2	Syn Swt AtkL	Jazz Kick mf
41	TR909 CHH 2	TR606DstCHH1	TR606 CHH 1	TR909 CHH 1	SynSwt Atk7b	Jazz Kick f
42	TR909 Tom L	TR909 PHH 2	Deep Tom L	TR909 Tom L1	Syn Swt AtkL	Dry Kick 1
43	TR909 PHH 2	TR606 PHH 2a	TR606 PHH 1	TR909 PHH 1	Syn Mtl Atk2	Tight Kick
44	TR909 Tom M	TR909 OHH 1	Deep Tom M	TR909 Tom M2	Syn Swt AtkM	Old Kick
45	TR909 OHH 2	Lite OHH	TR909 OHH 2	TR909 OHH 2	White Noise	Jz Dry Kick
46	TR909 Tom M	Rock Rd Cup	Deep Tom M	TR909 Tom M1	Syn Swt AtkM	Dry Kick 2
47	TR909 Tom H	Syn Hrd Atk4	Deep Tom H	TR909 Tom H2	Syn Swt AtkH	Dry Kick 3
C3 48	TR909 Crash1	MG Zap 7a	Lite OHH	TR909 Crash	Syn Mtl Atk1	Power Kick
49	TR909 Tom H	MG Zap 9	Deep Tom H	TR909 Tom H1	Syn Swt AtkH	R&B Kick L
50	TR909 Ride 1	MG Zap 8	TR808 OHH 1	TR909 Ride	SynLow Atk1a	Rk CmpKick
51	TR909 Crash2	MG Zap 10	TR606 Cym 2a	White Noise1	Crotale 1	Dance Kick
52	TR909 Ride 2	HipHop CHH 2	TR909 Ride 1	CR78 Beat	Laser 1	HipHop Kick1
53	CR78 Tamb	Syn Swt Atk3	CR78 Tamb	Tamborine 3	MG Zap 11	HipHop Kick2
54	MG Zap 4	Reg.PHH	TR606 Cym 2b	Atmosphere	Laser 2	TR909 Kick 1
55	JD Sm Metal	Syn Swt Atk6	JD Sm Metal	Cowbell Mute	MG Zap 4a	TR808 Kick
56	MG Zap 5	HipHop OHH	TR909 Ride 2	Syn Swt Atk1	Digi Loop 1	TR909 Kick 4
57	Syn Swt Atk3	TR909 OHH 2	Syn Swt Atk3	Cowbell	MG Zap 6a	WD Kick mf
58	AnalogKick 2	TR909 R.Crsh	AnalogKick1b	Reverse Cym	SynLow Atk2a	WD Kick f
59	TR909 Kick 2	TR909 Crash	AnalogKick 4	AnalogKick 5	SynLow Atk2b	WD Kick ff
C4 60	TR909 Rim	Rock Crash 1	Urbn SnRoll1	Metal Vox W1	MG Attack	LD Kick mf
61	TR909 Snr 1	MG Zap 2	Analog Snr 2	Metal Vox W2	Syn Hrd Atk4	LD Kick f
62	TR909 Clap 1	MG Zap 9	Dist Clap	Metal Vox W3	Train Pass	LD Kick ff
63	TR909 Snr 2	Smear Hit 2	Analog Snr 3	White Noise2	Syn Mtl Atk1	TY Kick mf
64	TR909 D.TomL	Low Square	R8 Shaker	White Noise3	Syn Swt AtkL	TY Kick f
65	TR909 CHH 1	JD WoodCrak1	TR909 CHH 2	TR606 Cym 2b	Syn Swt Atk7	TY Kick ff
66	TR909 D.TomL	Piano Atk Nz	R8 Shaker	MG Blip	Syn Swt AtkL	SF Kick 1
67	TR808 CHH 2	JD WoodCrak2	TR909 PHH 2	MG Blip Rev.	Syn Mtl Atk2	SF Kick 2
68	TR909 D.TomM	DR202 Beep 1	Syn Hrd Atk1	DigiSpectrum	Syn Swt AtkM	MaxLow Kick1
69	TR909 OHH 1	JD WoodCrak3	TR909 OHH 2	Ice Crash	DigiSpectrum	MaxLow Kick2
70	TR909 D.TomM	Syn Pulse 2	SynHrd Atk1a	Metal Vox L2	Syn Swt AtkM	Dist Kick
71	TR909 D.TomH	DR202 Beep 2	SynHrd Atk1b	Thin Beef	Syn Swt AtkH	FB Kick
C5 72	TR909 Crash3	Narrow Hit2a	TR909 Crash	LoFi Min Hit	Digi Loop 1	Rough Kick1
73	TR909 D.TomH	E.Gtr Harm	SynHrd Atk1c	Trance Saw	Syn Swt AtkH	Rough Kick2
74	TR909 Ride 3	Narrow Hit2b	TR909 Ride 3	TB DstSqr	SynLow Atk1b	Rough Kick3
75	TR909 Crash4	Euro Hit	TR909 Crash	Finger Snap	Crotale 2	PlasticKick1
76	TR909 Ride 4	Jazz Lo Tom1	TR909 Ride 1	Conga Slp Op	Laser 3	70's Kick
77	Tamborine 2	TR909 D.TomL	CR78 Tamb	Conga Lo Op	MG Zap 11	AnalogKick 1
78	MG Zap 2	Jazz Lo Tom2	MG Zap 2	Conga Hi Op	Laser 4	PlasticKick2
79	Cowbell Low	TR909 D.TomM	JD Sm Metal	Triangle Mt	MG Zap 4b	PlasticKick3
80	MG Zap 6	Jazz Lo Tom3	MG Zap 6	Triangle Op	Crotale 3	TR909 Kick 2
81	Cowbell Hi	TR909 D.TomH	Syn Swt Atk1	Cabasa Cut	MG Zap 6b	AnalogKick 2
82	MG Zap 7	AnalogKick 3	MG Zap 7	R8 Shaker	Syn Low Atk2	TR909 Kick 3
83	Conga Hi Mt	AnalogKick 5	808 Maracas	AnalogKick 1	808 Maracas	AnalogKick 3
C6 84	Conga Lo Mt	Club Clap	TR808 Claves	PlasticKick2	TR808 Claves	AnalogKick 4
85	Conga Lo Slp	TR808 Snr 7	Triangle Mt	PlasticKick3	Triangle Mt	AnalogKick 5
86	Conga Hi Op	TR808 Snr 3	Triangle Op	TR909 Kick 1	Triangle Op	AnalogKick 6
87	Conga Lo Op	TR909 Snr 6a	Euro Hit	AnalogKick 4	Dry Lo Tom	TR606DstKick
88	Timbale Hi	TR909 CHH 2	Scratch 4	AnalogKick 6	Conga Thumb	TR909 Kick 5
89	Timbale Low	TR606DstCHH2	Brt Strat C	TR909 Snr 2	Funk Gtr	SH32 Kick
90	Agogo Bell H	Dance CHH	Crotale	TR909 Snr 4	Digi Loop 1	TR707 Kick
91	Agogo Bell L	TR606 PHH 2b	MG Zap 4	TR909 Snr 5	MG Zap 4c	TR909 Kick 6
92	Cabasa Down	TR909 OHH 2	Urbn SnRoll2	TR909 Snr 6	Urbn SnRoll2	Mix Kick 1
93	Maracas	TR606 OHH	Calc.Saw	TR808 Snr 1	Sweep Saw	Mix Kick 2
94	Guiro Short	CR78 OHH	White Noise	TR808 Snr 2	White Noise	Mix Kick 3
95	Guiro Long	Juno Sqr HD	Blow Loop	TR808 CHH 1	Monsoon	Mix Kick 4
C7 96	Claves	TR909 Snr 6b	Shaker 2	TR808 OHH 1	Shaker 3	Mix Kick 5
97	Wood Block L	TR808 Kick	Shaker 3	TR909 CHH 2	Scream	Dry Kick 4
98	Wood Block H	JD EML 5th 2	Cajon 1	TR909 OHH 2	Cajon 1	Sweep Bass
99	Triangle Mt	TR707 Clap	Euro Hit	Lite CHH	Euro Hit	Vint Kick
100	Triangle Op	Dist Clap	Laugh	Lite OHH	Laugh	Small Kick
101	Castanet	MG Zap 5	Office Phone	TR606 Cym 2c	ConcertBD	—
102	Whistle	MG Zap 7b	Door Creak	China Cymbal	Timpani	—
103						

Prst: / User: / Note No.	25 / 25 Snare Menu	26 / 26 Snr/Rim Menu	27 / 27 HiHat Menu	28 / 28 Tom Menu	29 / 29 Clp&Cym&Hit	30 / 30 FX/SFX Menu
28	—	—	—	—	—	—
29	—	—	—	—	—	—
30	—	—	—	—	—	—
31	—	—	—	—	—	—
32	—	—	—	—	—	—
33	—	—	—	—	—	—
34	—	—	—	—	—	—
35	Reg.Snr1 p	GoodOld Snr1	Reg.CHH 1 p	Reg.F.Tom p	Hand Clap	MG Zap 1
C2 36	Reg.Snr1mf	GoodOld Snr2	Reg.CHH 1 mf	Reg.F.Tom f	Club Clap	MG Zap 2
37	Reg.Snr1 f	GoodOld Snr3	Reg.CHH 1 f	Reg.L.Tom p	Real Clap	MG Zap 3
38	Reg.Snr1ff	GoodOld Snr4	Reg.CHH 1 ff	Reg.L.Tom f	Bright Clap	MG Zap 4
39	Reg.Snr2 p	GoodOld Snr5	Reg.CHH 2 mf	Reg.M.Tom p	R8 Clap	MG Zap 5
40	Reg.Snr2 f	GoodOld Snr6	Reg.CHH 2 f	Reg.M.Tom f	Gospel Clap	MG Zap 6
41	Reg.Snr2ff	Dirty Snr 1	Reg.CHH 2 ff	Reg.H.Tom p	Amb Clap	MG Zap 7
42	Amb.Snr1 p	Dirty Snr 2	Reg.PHH mf	Reg.H.Tom f	TR808 Clap 1	MG Zap 8
43	Amb.Snr1 f	Dirty Snr 4	Reg.PHH f	Reg.L.TomFlm	TR808 Clap 2	MG Zap 9
44	Amb.Snr2 p	Dirty Snr 5	Reg.OHH mf	Reg.M.TomFlm	TR909 Clap 1	MG Zap 10
45	Amb.Snr2 f	Dirty Snr 6	Reg.OHH f	Reg.H.TomFlm	TR909 Clap 2	MG Zap 11
46	Piccolo Snr	Dirty Snr 7	Reg.OHH ff	Jazz Lo Tom	TR707 Clap	MG Blip
47	Maple Snr	Grit Snr 1	Rock CHH1 mf	Jazz Mid Tom	Cheap Clap	Beam HiQ
C3 48	Reg.Snr Gst	Grit Snr 2	Rock CHH1 f	Jazz Hi Tom	Mix Clap 1	MG Attack
49	Sft Snr Gst	Grit Snr 3	Rock CHH2 mf	Jazz Lo Flm	Mix Clap 2	Syn Low Atk1
50	Jazz Snr p	LoBit SnrFlm	Rock CHH2 f	Jazz Mid Flm	Mix Clap 3	Syn Low Atk2
51	Jz Brsh Slap	Lo-Bit Snr 1	Rock OHH	Jazz Hi Flm	Mix Clap 4	Syn Hrd Atk1
52	Jz Brsh Swsh	Dirty Snr 3	Lo-Bit CHH 1	Sharp Lo Tom	Dist Clap	Syn Hrd Atk2
53	Swish&Turn p	Lo-Bit Snr 2	Lo-Bit CHH 2	Sharp Hi Tom	Dist Clap 2	Syn Hrd Atk3
54	Swish&Turn f	Analog Snr 1	Lo-Bit CHH 3	Dry Lo Tom	Crash Cym1 p	Syn Hrd Atk4
55	Concert SD	Tiny Snare	Lo-Bit CHH 4	TR909 Tom	Crash Cym1 f	Syn Mtl Atk1
56	Snr Roll Lp	R&B ShrtSnr1	Lo-Bit CHH 5	TR909 DstTom	Crash Cym 2	Syn Mtl Atk2
57	BrushRoll Lp	TR808 Snr 1	HipHop CHH	TR808 Tom	Rock Crash 1	Syn Swt Atk1
58	WD Snr p	TR808 Snr 2	TR909 CHH 1	TR606 Tom	Rock Crash 2	Syn Swt Atk2
59	WD Snr mf	TR808 Snr 3	TR909 CHH 2	Deep Tom	Splash Cym	Syn Swt Atk3
C4 60	WD Snr f	TR606 Snr 1	TR808 CHH 1	RR F.Tom mp	Jazz Crash	Syn Swt Atk4
61	WD Snr ff	MrchCmp Snr	TR808 CHH 2	RR F.Tom f	Ride Cymbal	Syn Swt Atk5
62	WD Rim p	Reggae Snr	TR606 CHH 1	RR F.Tom ff	Ride Bell	Syn Swt Atk6
63	WD Rim mf	DR660 Snr	TR606 CHH 2	LD L.Tom mf	Rock Rd Cup	Syn Swt Atk7
64	WD Rim f	Jngl pkt Snr	TR606 DstCHH	LD L.Tom f	Rock Rd Edge	R8 Click
65	WD Rim ff	Pocket Snr	Noise CHH	LD L.Tom ff	Jazz Ride p	MC500 Beep 1
66	LD Snr p	Flange Snr	Lite CHH	LD M.Tom mf	Jazz Ride mf	MC500 Beep 2
67	LD Snr mf	Analog Snr 2	CR78 CHH	LD M.Tom f	China Cymbal	DR202 Beep
68	LD Snr f	Analog Snr 3	Dance CHH	LD M.Tom ff	TR909 Crash	JD Switch
69	LD Snr ff	TR909 Snr 1	Lo-Bit PHH	LD H.Tom mf	TR909 Ride	Cutting Nz
70	LD Rim mf	TR909 Snr 2	Hip PHH	LD H.Tom f	Concert Cym1	Vinyl Noise
71	LD Rim f	TR909 Snr 3	TR909 PHH 1	LD H.Tom ff	Concert Cym2	Applause
C5 72	LD Rim ff	TR909 Snr 4	TR909 PHH 2	TY L.Tom mf	TR606 Cym	River
73	TY Snr p	TR909 Snr 5	TR808 PHH	TY L.Tom f	TR808 Cym	Thunder
74	TY Snr mf	TR909 Snr 6	TR606 PHH 1	TY L.Tom ff	Reverse Cym	Monsoon
75	TY Snr f	TR808 Snr 4	TR606 PHH 2	TY M.Tom mf	ClassicHseHt	Stream
76	TY Snr ff	Lite Snare	HipHop OHH	TY M.Tom f	Narrow Hit 1	Bubble
77	TY Rim p	TR808 Snr 5	TR909 OHH 1	TY M.Tom ff	Narrow Hit 2	Bird Song
78	TY Rim mf	TR808 Snr 6	TR909 OHH 2	TY H.Tom mf	Euro Hit	Dog Bark
79	TY Rim f	TR606 Snr 2	TR808 OHH 1	TY H.Tom f	Dist Hit	Gallop
80	TY Rim ff	CR78 Snare	TR808 OHH 2	TY H.Tom ff	Thin Beef	Vint.Phone
81	SF Snr p	Urbn Sn Roll	TR606 OHH	SF L.Tom mf	Tao Hit	Office Phone
82	SF Snr mf	Reg.Stick	Lo-Bit OHH 1	SF L.Tom ff	Smear Hit 1	Mobile Phone
83	SF Snr f	Soft Stick	Lo-Bit OHH 2	SF M.Tom mf	Smear Hit 2	Door Creak
C6 84	SF Snr ff	Hard Stick	Lo-Bit OHH 3	SF M.Tom f	LoFi Min Hit	Door Slam
85	SF SnrGst1	Wild Stick	Lite OHH	SF M.Tom ff	Orch. Hit	Car Engine
86	SF SnrGst2	R&B ShrtRim1	CR78 OHH	SF H.Tom mf	Punch Hit	Car Slip
87	SF Rim p	R&B ShrtRim2	Noise OHH 1	SF H.Tom f	O'Skool Hit	Car Pass
88	SF Rim mf	WD CStk mf	Noise OHH 2	SF H.Tom ff	Philly Hit	Crash Seq.
89	SF Rim f	WD CStk f	—	RR FT Flm ff	—	Gun Shot
90	SF Rim ff	LD CStk mf	—	SF LT Flm ff	—	Siren
91	Light Snr ff	LD CStk f	—	SF MT Flm f	—	Train Pass
92	Click Snr p	TY CStk mf	—	SF HT Flm p	—	Airplane
93	Click Snr ff	TY CStk f	—	SF HT Flm f	—	Laugh
94	Jazz Snr mf	SfCrsStk p	—	SF HT Flm ff	—	Scream
95	Jazz Snr f	SfCrsStk f	—	—	—	Punch
C7 96	Jazz Rim p	Lo-Bit Stk 1	—	—	—	Heartbeat
97	Soft Jz Roll	Lo-Bit Stk 2	—	—	—	Footsteps
98	—	Dry Stick 1	—	—	—	Machine Gun
99	—	Dry Stick 2	—	—	—	Laser
100	—	Dry Stick 3	—	—	—	Thunder Lp
101	—	R8 Comp Rim	—	—	—	Metro Bell
102	—	TR909 Rim	—	—	—	Metro Click
103	—	TR808 Rim	—	—	—	—

Note No.	31 Percussion	32 Scrh&Voi&Wld
28	Cowbell	—
	Cowbell Mute	—
29	Cowbell2 Lng	—
30	Cowbell2 Edg	—
31	Cowbell3 mf	—
32	Cowbell3 f	—
33	Wood Block	—
34	Wood Block2H	Scratch 1
35	Wood Block2L	Scratch 2
C2 36	Claves	Scratch 3
37	TR808 Claves	Scratch 4
38	Claves 2	Scratch 5
39	CR78 Beat	Scratch 6
40	Castanet	Scratch 7
41	Whistle	Scratch 9
42	Whistle Long	Scratch 10
43	Whistle Shrt	Aah Formant
44	Bongo Hi Mt	Eeh Formant
45	Bongo Hi Slp	Iih Formant
46	Bongo Lo Slp	Ooh Formant
47	Bongo Hi Op	Uuh Formant
C3 48	Bongo Lo Op	Metal Vox W1
49	Conga Hi Mt	Metal Vox W2
50	Conga Lo Mt	Metal Vox W3
51	Conga Hi Slp	JD Gamelan 1
52	Conga Lo Slp	JD Gamelan 2
53	Conga Hi Op	JD Gamelan 3
54	Conga Lo Op	JD Gamelan 4
55	Conga Slp Op	JD Gamelan 5
56	Conga Efx	JD Gamelan 6
57	Conga Thumb	JD Gamelan 7
58	Conga 2H Op	JD Gamelan 8
59	Conga 2H Mt	JD Gamelan 9
C4 60	Conga 2H Slp	JD Gamelan10
61	Conga 2L Op	JD Gamelan11
62	Conga 2L Mt	JD Gamelan12
63	Timbale 1	Cajon 1
64	Timbale 2	Cajon 2
65	Timbare 3	Cajon 3
66	Timbare 4	Cajon 4
67	Cabasa Up	SprgDrm Hit
68	Cabasa Down	Cuica
69	Cabasa Cut	Cuica 2 Hi
70	Cabasa2	Cuica 2 Low
71	Cabasa2 Cut	—
C5 72	Shaker	—
73	Maracas	—
74	808 Maracas	—
75	R8 Shaker	—
76	Guiro 1	—
77	Guiro 2	—
78	Guiro Long	—
79	Guiro 2 Up	—
80	Guiro 2 Down	—
81	Guiro 2 Fast	—
82	Vibraslap	—
83	Tamborine 1	—
C6 84	Tamborine 2	—
85	Tamborine 3	—
86	Tamborine4 f	—
87	Tamborine4 p	—
88	CR78 Tamb	—
89	Timpani p	—
90	Timpani f	—
91	Timpani Roll	—
92	Timpani Lp	—
93	ConcertBD p	—
94	ConcertBD f	—
95	ConcertBD ff	—
C7 96	ConcertBD Lp	—
97	Triangle 1Op	—
98	Triangle 1Mt	—
99	Triangle 2	—
100	Tibet Cymbal	—
101	Wind Chime	—
102	Crotale	—
103		

GM (GM2 Group)

Note No.	1(PC: 1) GM2 STANDARD	2(PC: 9) GM2 ROOM	3(PC: 17) GM2 POWER	4(PC: 25) GM2 ELECTRIC	5(PC: 26) GM2 ANALOG	6(PC: 33) GM2 JAZZ
27	High Q	High Q	High Q	High Q	High Q	High Q
28	Slap	Slap	Slap	Slap	Slap	Slap
29	Scratch Push	Scratch Push	Scratch Push	Scratch Push	Scratch Push	Scratch Push
30	Scratch Pull	Scratch Pull	Scratch Pull	Scratch Pull	Scratch Pull	Scratch Pull
31	Sticks	Sticks	Sticks	Sticks	Sticks	Sticks
32	Square Click	Square Click	Square Click	Square Click	Square Click	Square Click
33	Metron Click	Metron Click	Metron Click	Metron Click	Metron Click	Metron Click
34	Metron Bell	Metron Bell	Metron Bell	Metron Bell	Metron Bell	Metron Bell
35	Kick Drum 2	Kick Drum 2	Power Kick 2	Kick Drum 2	Kick Drum 2	Jazz Kick 2
C2 36	Kick Drum 1	Kick Drum 1	Power Kick 1	Elec.Kick 1	Ana.Kick 1	Jazz Kick 1
37	Side Stick	Side Stick	Side Stick	Side Stick	Ana.Rim Sho	Side Stick
38	Aco.Snare	Aco.Snare	PowerSnareDr	E.SnareDrum1	Ana.Snare 1	Aco.Snare
39	Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap	Hand Clap
40	Elec.Snare	Elec.Snare	Elec.Snare	E.SnareDrum2	Elec.Snare	Elec.Snare
41	Low Tom 2	Room LowTom2	PowerLowTom2	E.Low Tom 2	Ana.Low Tom2	Low Tom 2
42	ClosedHi-hat	ClosedHi-hat	ClosedHi-hat	ClosedHi-hat	Ana.ClosedHH	ClosedHi-hat
43	Low Tom 1	Room LowTom1	PowerLowTom1	E.Low Tom 1	Ana.Low Tom1	Low Tom 1
44	Pedal Hi-hat	Pedal Hi-hat	Pedal Hi-hat	Pedal Hi-hat	Ana.ClosedHH	Pedal Hi-hat
45	Mid Tom 2	Room MidTom2	PowerMidTom2	E.Mid Tom 2	Ana.Mid Tom2	Mid Tom 2
46	Open Hi-hat	Open Hi-hat	Open Hi-hat	Open Hi-hat	Ana.Open HH	Open Hi-hat
47	Mid Tom 1	Room MidTom1	PowerMidTom1	E.Mid Tom 1	Ana.Mid Tom1	Mid Tom 1
C3 48	High Tom 2	Room Hi Tom2	Power HiTom2	E.Hi Tom 2	Ana.Hi Tom2	High Tom 2
49	CrashCymbal1	CrashCymbal1	CrashCymbal1	CrashCymbal1	Ana.Cymbal	CrashCymbal1
50	High Tom 1	Room Hi Tom1	Power HiTom1	E.Hi Tom 1	Ana.Hi Tom1	High Tom 1
51	Ride Cymbal1	Ride Cymbal1	Ride Cymbal1	Ride Cymbal1	Ride Cymbal1	Ride Cymbal1
52	China Cymbal	China Cymbal	China Cymbal	Reverse Cym.	China Cymbal	China Cymbal
53	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell	Ride Bell
54	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine	Tambourine
55	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal	SplashCymbal
56	Cowbell	Cowbell	Cowbell	Cowbell	Ana.Cowbell	Cowbell
57	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2	CrashCymbal2
58	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap	Vibra-slap
59	Ride Cymbal2	Ride Cymbal2	Ride Cymbal2	Ride Cymbal2	Ride Cymbal2	Ride Cymbal2
C4 60	High Bongo	High Bongo	High Bongo	High Bongo	High Bongo	High Bongo
61	Low Bongo	Low Bongo	Low Bongo	Low Bongo	Low Bongo	Low Bongo
62	MuteHi Conga	MuteHi Conga	MuteHi Conga	MuteHi Conga	Ana.Hi Conga	MuteHi Conga
63	OpenHi Conga	OpenHi Conga	OpenHi Conga	OpenHi Conga	Ana.MidConga	OpenHi Conga
64	Low Conga	Low Conga	Low Conga	Low Conga	Ana.LowConga	Low Conga
65	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale	High Timbale
66	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale	Low Timbale
67	High Agogo	High Agogo	High Agogo	High Agogo	High Agogo	High Agogo
68	Low Agogo	Low Agogo	Low Agogo	Low Agogo	Low Agogo	Low Agogo
69	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa	Cabasa
70	Maracas	Maracas	Maracas	Maracas	Ana.Maracas	Maracas
71	ShortWhistle	ShortWhistle	ShortWhistle	ShortWhistle	ShortWhistle	ShortWhistle
C5 72	Long Whistle	Long Whistle	Long Whistle	Long Whistle	Long Whistle	Long Whistle
73	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro	Short Guiro
74	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro	Long Guiro
75	Claves	Claves	Claves	Claves	Ana.Claves	Claves
76	Hi WoodBlock	Hi WoodBlock	Hi WoodBlock	Hi WoodBlock	Hi WoodBlock	Hi WoodBlock
77	LowWoodBlock	LowWoodBlock	LowWoodBlock	LowWoodBlock	LowWoodBlock	LowWoodBlock
78	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica	Mute Cuica
79	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica	Open Cuica
80	MuteTriangle	MuteTriangle	MuteTriangle	MuteTriangle	MuteTriangle	MuteTriangle
81	OpenTriangle	OpenTriangle	OpenTriangle	OpenTriangle	OpenTriangle	OpenTriangle
82	Shaker	Shaker	Shaker	Shaker	Shaker	Shaker
83	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell	Jingle Bell
C6 84	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree	Bell Tree
85	Castanets	Castanets	Castanets	Castanets	Castanets	Castanets
86	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo	Mute Surdo
87	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo	Open Surdo
88	—	—	—	—	—	—

Note No.	7(PC: 41) GM2 BRUSH	8(PC: 49) GM2 ORCHSTRA	9(PC: 57) GM2 SFX
27	High Q	ClosedHi-hat	—
28	Slap	Pedal Hi-hat	—
29	Scratch Push	Open Hi-hat	—
30	Scratch Pull	Ride Cymbal1	—
31	Sticks	Sticks	—
32	Square Click	Square Click	—
33	Metron Click	Metron Click	—
34	Metron Bell	Metron Bell	—
35	Jazz Kick 2	Concert BD 2	—
C2 36	Jazz Kick 1	Concert BD 1	—
37	Side Stick	Side Stick	—
38	Brush Tap	Concert SD	—
39	Brush Slap	Castanets	High Q
40	Brush Swirl	Concert SD	Slap
41	BrushLowTom2	Timpani F	Scratch Push
42	ClosedHi-hat	Timpani F#	Scratch Pull
43	BrushLowTom1	Timpani G	Sticks
44	Pedal Hi-hat	Timpani G#	Square Click
45	BrushMidTom2	Timpani A	Metron Click
46	Open Hi-hat	Timpani A#	Metron Bell
47	BrushMidTom1	Timpani B	GtFret Noise
C3 48	Brush HiTom2	Timpani c	Cut Noise Up
49	CrashCymbal1	Timpani c#	Cut Noise Dw
50	Brush HiTom1	Timpani d	Slap_St.Bass
51	Ride Cymbal1	Timpani d#	Fl.Key Click
52	China Cymbal	Timpani e	Laughing
53	Ride Bell	Timpani f	Scream
54	Tambourine	Tambourine	Punch
55	SplashCymbal	SplashCymbal	Heart Beat
56	Cowbell	Cowbell	Footsteps 1
57	CrashCymbal2	Concert Cym2	Footsteps 2
58	Vibra-slap	Vibra-slap	Applause
59	Ride Cymbal2	Concert Cym1	Door Creak
C4 60	High Bongo	High Bongo	Door
61	Low Bongo	Low Bongo	Scratch
62	MuteHi Conga	MuteHi Conga	Wind Chimes
63	OpenHi Conga	OpenHi Conga	Car-Engine
64	Low Conga	Low Conga	Car-Stop
65	High Timbale	High Timbale	Car-Pass
66	Low Timbale	Low Timbale	Car-Crash
67	High Agogo	High Agogo	Siren
68	Low Agogo	Low Agogo	Train
69	Cabasa	Cabasa	Jetplane
70	Maracas	Maracas	Helicopter
71	ShortWhistle	ShortWhistle	Starship
C5 72	Long Whistle	Long Whistle	Gun Shot
73	Short Guiro	Short Guiro	Machine Gun
74	Long Guiro	Long Guiro	Lasergun
75	Claves	Claves	Explosion
76	Hi WoodBlock	Hi WoodBlock	Dog
77	LowWoodBlock	LowWoodBlock	Horse-Gallop
78	Mute Cuica	Mute Cuica	Birds
79	Open Cuica	Open Cuica	Rain
80	MuteTriangle	MuteTriangle	Thunder
81	OpenTriangle	OpenTriangle	Wind
82	Shaker	Shaker	Seashore
83	Jingle Bell	Jingle Bell	Stream
C6 84	Bell Tree	Bell Tree	Bubble
85	Castanets	Castanets	—
86	Mute Surdo	Mute Surdo	—
87	Open Surdo	Open Surdo	—
88	—	Applause	—

Waveform List

In waveform numbers 0001-0040, note numbers 91–108 are set to Damper Free in order to accurately reproduce the characteristics of an acoustic piano.

No.	Name	No.	Name	No.	Name	No.	Name	No.	Name
1	Ult.P*mp A L	71	XPr.P ff C L	141	Wurly mf B	211	Positive '8	281	E.Gtr Harm
2	Ult.P*mp A R	72	XPr.P ff C R	142	Wurly mf C	212	Pipe Organ	282	Harp A
3	Ult.P*mp B L	73	Ac.Pno p A L	143	Wurly ff A	213	Cathedrl Org	283	Harp B
4	Ult.P*mp B R	74	Ac.Pno p A R	144	Wurly ff B	214	BrtN.Gtr p A	284	Harp C
5	Ult.P*mp C L	75	Ac.Pno p B L	145	Wurly ff C	215	BrtN.Gtr p B	285	Banjo A
6	Ult.P*mp C R	76	Ac.Pno p B R	146	Soft SA EP A	216	BrtN.Gtr p C	286	Banjo B
7	Ult.P* f A L	77	Ac.Pno p C L	147	Soft SA EP B	217	BrtN.Gtr mfA	287	Banjo C
8	Ult.P* f A R	78	Ac.Pno p C R	148	Soft SA EP C	218	BrtN.Gtr mfB	288	Sitar A
9	Ult.P* f B L	79	Ac.Pno f A L	149	Hard SA EP A	219	BrtN.Gtr mfC	289	Sitar B
10	Ult.P* f B R	80	Ac.Pno f A R	150	Hard SA EP B	220	BrtN.Gtr ffA	290	Sitar C
11	Ult.P* f C L	81	Ac.Pno f B L	151	Hard SA EP C	221	BrtN.Gtr ffB	291	Sitar Drn A
12	Ult.P* f C R	82	Ac.Pno f B R	152	SA E.Piano A	222	BrtN.Gtr ffC	292	Sitar Drn B
13	Ult.P*ff A L	83	Ac.Pno f C L	153	SA E.Piano B	223	BrtN.GtrSldA	293	Sitar Drn C
14	Ult.P*ff A R	84	Ac.Pno f C R	154	SA E.Piano C	224	BrtN.GtrSldB	294	E.Sitar A
15	Ult.P*ff B L	85	JD Piano A	155	80's E.Pno 1	225	BrtN.GtrSldC	295	E.Sitar B
16	Ult.P*ff B R	86	JD Piano B	156	80's E.Pno 2	226	Nylon Gtr1 A	296	E.Sitar C
17	Ult.P*ff C L	87	JD Piano C	157	80's E.Pno1f	227	Nylon Gtr1 B	297	Santur A
18	Ult.P*ff C R	88	Piano Atk Nz	158	80's E.Pno2f	228	Nylon Gtr1 C	298	Santur B
19	XPr.P*mp A L	89	MKS Piano A	159	Hard E.Pno	229	Nylon Gtr2 A	299	Santur C
20	XPr.P*mp A R	90	MKS Piano B	160	Celesta	230	Nylon Gtr2 B	300	Dulcimer A
21	XPr.P*mp B L	91	MKS Piano C	161	Music Box	231	Nylon Gtr2 C	301	Dulcimer B
22	XPr.P*mp B R	92	Vint.EP pp A	162	ClavDB Brt A	232	Bright Gtr A	302	Dulcimer C
23	XPr.P*mp C L	93	Vint.EP pp B	163	ClavDB Brt B	233	Bright Gtr B	303	Shamisen A
24	XPr.P*mp C R	94	Vint.EP pp C	164	ClavDB Brt C	234	Bright Gtr C	304	Shamisen B
25	XPr.P* f A L	95	Vint.EP mp A	165	Reg.Clav A	235	Ac.Gtr mp A	305	Shamisen C
26	XPr.P* f A R	96	Vint.EP mp B	166	Reg.Clav B	236	Ac.Gtr mp B	306	Koto A
27	XPr.P* f B L	97	Vint.EP mp C	167	Reg.Clav C	237	Ac.Gtr mp C	307	Koto B
28	XPr.P* f B R	98	Vint.EP f A	168	Retro Clav A	238	Ac.Gtr mf A	308	Koto C
29	XPr.P* f C L	99	Vint.EP f B	169	Retro Clav B	239	Ac.Gtr mf B	309	FatAc.Bs p A
30	XPr.P* f C R	100	Vint.EP f C	170	Retro Clav C	240	Ac.Gtr mf C	310	FatAc.Bs p B
31	XPr.P*ff A L	101	Vint.EP ff A	171	Tight Clav A	241	Ac.Gtr ff A	311	FatAc.Bs p C
32	XPr.P*ff A R	102	Vint.EP ff B	172	Tight Clav B	242	Ac.Gtr ff B	312	FatAc.Bs f A
33	XPr.P*ff B L	103	Vint.EP ff C	173	Tight Clav C	243	Ac.Gtr ff C	313	FatAc.Bs f B
34	XPr.P*ff B R	104	Stage EP p A	174	Hard Clav A	244	Ac.Gtr Sld A	314	FatAc.Bs f C
35	XPr.P*ff C L	105	Stage EP p B	175	Hard Clav B	245	Ac.Gtr Sld B	315	Ac.Bass A
36	XPr.P*ff C R	106	Stage EP p C	176	Hard Clav C	246	Ac.Gtr Sld C	316	Ac.Bass B
37	Ult.P mp A L	107	Stage EP f A	177	ClvMtRs DB f	247	Ac.Gtr Hrm A	317	Ac.Bass C
38	Ult.P mp A R	108	Stage EP f B	178	Harpsi A	248	Ac.Gtr Hrm B	318	Fng.EB1 mf A
39	Ult.P mp B L	109	Stage EP f C	179	Harpsi B	249	Ac.Gtr Hrm C	319	Fng.EB1 mf B
40	Ult.P mp B R	110	Tine EP p A	180	Harpsi C	250	Jazz Gtr A	320	Fng.EB1 mf C
41	Ult.P mp C L	111	Tine EP p B	181	JLOrg Slow L	251	Jazz Gtr B	321	Fng.EB1 ff A
42	Ult.P mp C R	112	Tine EP p C	182	JLOrg Slow R	252	Jazz Gtr C	322	Fng.EB1 ff B
43	Ult.P f A L	113	Tine EP mf A	183	JLOrg Fast L	253	Clean Gtr A	323	Fng.EB1 ff C
44	Ult.P f A R	114	Tine EP mf B	184	JLOrg Fast R	254	Clean Gtr B	324	Fng.EB2 mf A
45	Ult.P f B L	115	Tine EP mf C	185	JD Full Draw	255	Clean Gtr C	325	Fng.EB2 mf B
46	Ult.P f B R	116	Tine EP ff A	186	Org Basic 1	256	Clr Mt Gtr A	326	Fng.EB2 mf C
47	Ult.P f C L	117	Tine EP ff B	187	Org Basic 2	257	Clr Mt Gtr B	327	Fng.EB2 f A
48	Ult.P f C R	118	Tine EP ff C	188	Ballad Org	258	Clr Mt Gtr C	328	Fng.EB2 f B
49	Ult.P ff A L	119	Dyno EP mp A	189	3rd Perc Org	259	E.Gtr Ld	329	Fng.EB2 f C
50	Ult.P ff A R	120	Dyno EP mp B	190	Perc Organ	260	Brt Strat A	330	FngrCmp Bs A
51	Ult.P ff B L	121	Dyno EP mp C	191	Rock Organ A	261	Brt Strat B	331	FngrCmp Bs B
52	Ult.P ff B R	122	Dyno EP mf A	192	Rock Organ B	262	Brt Strat C	332	FngrCmp Bs C
53	Ult.P ff C L	123	Dyno EP mf B	193	Rock Organ C	263	FstPick70s A	333	Finger Bs A
54	Ult.P ff C R	124	Dyno EP mf C	194	RtryOrg1 A L	264	FstPick70s B	334	Finger Bs B
55	XPr.P mp A L	125	Dyno EP ff A	195	RtryOrg1 A R	265	FstPick70s C	335	Finger Bs C
56	XPr.P mp A R	126	Dyno EP ff B	196	RtryOrg1 B L	266	Funk Gtr A	336	Precision Bs
57	XPr.P mp B L	127	Dyno EP ff C	197	RtryOrg1 B R	267	Funk Gtr B	337	ThumbMtBs pA
58	XPr.P mp B R	128	Wurly DI p A	198	RtryOrg1 C L	268	Funk Gtr C	338	ThumbMtBs pB
59	XPr.P mp C L	129	Wurly DI p B	199	RtryOrg1 C R	269	Funk MtGtr A	339	ThumbMtBs pC
60	XPr.P mp C R	130	Wurly DI p C	200	RtryOrg2 A L	270	Funk MtGtr B	340	Fretlss Bs A
61	XPr.P f A L	131	Wurly DI f A	201	RtryOrg2 A R	271	Funk MtGtr C	341	Fretlss Bs B
62	XPr.P f A R	132	Wurly DI f B	202	RtryOrg2 B L	272	Nasty Gtr	342	Fretlss Bs C
63	XPr.P f B L	133	Wurly DI f C	203	RtryOrg2 B R	273	Overdrive A	343	Fretlss SftA
64	XPr.P f B R	134	Wurly DI ffA	204	RtryOrg2 C L	274	Overdrive C	344	Fretlss SftB
65	XPr.P f C L	135	Wurly DI ffB	205	RtryOrg2 C R	275	Distortion A	345	Fretlss SftC
66	XPr.P f C R	136	Wurly DI ffC	206	LoFi RtryOrg	276	Distortion B	346	Pick EB f A
67	XPr.P ff A L	137	Wurly mp A	207	Vint.Org 1	277	Distortion C	347	Pick EB f B
68	XPr.P ff A R	138	Wurly mp B	208	Vint.Org 2	278	Dist Chord A	348	Pick EB f C
69	XPr.P ff B L	139	Wurly mp C	209	Vint.Org 3	279	Dist Chord B	349	Pick Bass
70	XPr.P ff B R	140	Wurly mf A	210	Vint.Org 4	280	Dist Chord C	350	Slp.E.BassA

No.	Name
351	Slp.E.BassB
352	Slp.E.BassC
353	Slp.EB HO A
354	Slp.EB HO B
355	Slp.EB HO C
356	Pul.E.BassA
357	Pul.E.BassB
358	Pul.E.BassC
359	Pul.EB HO A
360	Pul.EB HO B
361	Pul.EB HO C
362	Slap Bass
363	Slap +Pull 1
364	Slap +Pull 2
365	Slap +Pull 3
366	Jz Slap Bass
367	Jz Slp+Pull1
368	Jz Slp+Pull2
369	Jz Slp+Pull3
370	Jungle Bass
371	Garage Bass
372	SH-101 Bs A
373	SH-101 Bs B
374	SH-101 Bs C
375	Organ Bass
376	MG Bass 1 A
377	MG Bass 1 B
378	MG Bass 1 C
379	MG Bass 2
380	MG Bass 3
381	MC Bass A
382	MC Bass B
383	MC Bass C
384	Atk Syn Bass
385	Flute A
386	Flute B
387	Flute C
388	Piccolo A
389	Piccolo B
390	Piccolo C
391	Pan Flute
392	Shakuhachi
393	JD Fl Push
394	Clarinet A
395	Clarinet B
396	Clarinet C
397	Oboe Mezzo A
398	Oboe Mezzo B
399	Oboe Mezzo C
400	Oboe Forte A
401	Oboe Forte B
402	Oboe Forte C
403	E.Horn A
404	E.Horn B
405	E.Horn C
406	Bassoon A
407	Bassoon B
408	Bassoon C
409	Recorder A
410	Recorder B
411	Recorder C
412	SopranoSax A
413	SopranoSax B
414	SopranoSax C
415	Alto Sax Vib
416	Soft Alto A
417	Soft Alto B
418	Soft Alto C
419	Wide Sax A
420	Wide Sax B
421	Wide Sax C
422	BreathySax A
423	BreathySax B
424	BreathySax C
425	TenorBreathy
426	Tenor Sax A
427	Tenor Sax B
428	Tenor Sax C
429	Bari.Sax 1 A
430	Bari.Sax 1 B
431	Bari.Sax 1 C
432	Bari.Sax 2 A
433	Bari.Sax 2 B
434	Bari.Sax 2 C
435	Musette
436	Accord 4' A
437	Accord 4' B
438	Accord 4' C
439	Accord 8' A
440	Accord 8' B
441	Accord 8' C
442	Accord PadNz
443	Harmonica A
444	Harmonica B
445	Harmonica C
446	Blues G-harp
447	Flugel A
448	Flugel B
449	Flugel C
450	Trumpet A
451	Trumpet B
452	Trumpet C
453	Wide Tp A
454	Wide Tp B
455	Wide Tp C
456	Mute Tp A
457	Mute Tp B
458	Mute Tp C
459	Trombone A
460	Trombone B
461	Trombone C
462	Tbn mf A
463	Tbn mf B
464	Tbn mf C
465	Tuba A
466	Tuba B
467	Tuba C
468	Sft F.Horn A
469	Sft F.Horn B
470	Sft F.Horn C
471	French Hrn A
472	French Hrn C
473	XP Horn A
474	XP Horn B
475	F.HornSect A
476	F.HornSect B
477	F.HornSect C
478	Tp Section A
479	Tp Section B
480	Tp Section C
481	OctBrs p A L
482	OctBrs p A R
483	OctBrs p B L
484	OctBrs p B R
485	OctBrs p C L
486	OctBrs p C R
487	OctBrs f A L
488	OctBrs f A R
489	OctBrs f B L
490	OctBrs f B R
491	OctBrs f C L
492	OctBrs f C R
493	XP Brass
494	OrchUnis A L
495	OrchUnis A R
496	OrchUnis B L
497	OrchUnis B R
498	OrchUnis C L
499	OrchUnis C R
500	Violin f A
501	Violin f B
502	Violin f C
503	Violin Vib A
504	Violin Vib B
505	Violin Vib C
506	Cello f A
507	Cello f B
508	Cello f C
509	Cello Vib A
510	Cello Vib B
511	Cello Vib C
512	Vl Sect. A L
513	Vl Sect. A R
514	Vl Sect. B L
515	Vl Sect. B R
516	Vl Sect. C L
517	Vl Sect. C R
518	Vc Sect. A L
519	Vc Sect. A R
520	Vc Sect. B L
521	Vc Sect. B R
522	Vc Sect. C L
523	Vc Sect. C R
524	Full Str A L
525	Full Str A R
526	Full Str B L
527	Full Str B R
528	Full Str C L
529	Full Str C R
530	JV Strings L
531	JV Strings R
532	JV Strings A
533	JV Strings C
534	F.Str mf A L
535	F.Str mf A R
536	F.Str mf B L
537	F.Str mf B R
538	F.Str mf C L
539	F.Str mf C R
540	F.Str mf lpL
541	F.Str mf lpR
542	F.Str ff A L
543	F.Str ff A R
544	F.Str ff B L
545	F.Str ff B R
546	F.Str ff C L
547	F.Str ff C R
548	F.Str ff lpL
549	F.Str ff lpR
550	F.StrStacA L
551	F.StrStacA R
552	F.StrStacB L
553	F.StrStacB R
554	F.StrStacC L
555	F.StrStacC R
556	ChmbrStrAtkA
557	ChmbrStrAtkB
558	ChmbrStrAtkC
559	ChmbrStrRevA
560	ChmbrStrRevB
561	ChmbrStrRevC
562	Vls Pizz A
563	Vls Pizz B
564	Vls Pizz C
565	VlsPizzRev A
566	VlsPizzRev B
567	VlsPizzRev C
568	Vcs Pizz A
569	Vcs Pizz B
570	Vcs Pizz C
571	Unison Saw A
572	Unison Saw B
573	Unison Saw C
574	Super Saw A
575	Super Saw B
576	Super Saw C
577	Trance Saw A
578	Trance Saw B
579	Trance Saw C
580	Warm Pad A
581	Warm Pad B
582	Warm Pad C
583	OB2 Pad 1 A
584	OB2 Pad 1 B
585	OB2 Pad 1 C
586	OB2 Pad 2 A
587	OB2 Pad 2 B
588	OB2 Pad 2 C
589	D-50 HeavenA
590	D-50 HeavenB
591	D-50 HeavenC
592	SBF Vox A
593	SBF Vox B
594	SBF Vox C
595	Syn Vox 1 A
596	Syn Vox 1 B
597	Syn Vox 1 C
598	Syn Vox 2 A
599	Syn Vox 2 B
600	Syn Vox 2 C
601	Female Ahs A
602	Female Ahs B
603	Female Ahs C
604	Female Oos A
605	Female Oos B
606	Female Oos C
607	Male Aahs A
608	Male Aahs B
609	Male Aahs C
610	Jazz Doos A
611	Jazz Doos B
612	Jazz Doos C
613	Jz Doos Lp A
614	Jz Doos Lp B
615	Jz Doos Lp C
616	Gospel Hum A
617	Gospel Hum B
618	Gospel Hum C
619	Soprano Vox
620	Kalimba
621	JD Klmba Atk
622	JD Wood Crak
623	JD Gamelan 1
624	JD Gamelan 2
625	JD Log Drum
626	JD Xylo
627	Marimba
628	Vibraphone
629	Glocken
630	Steel Drums
631	D-50 Bell A
632	D-50 Bell B
633	D-50 Bell C
634	D-50 Bell Lp
635	Agogo Bell
636	Agogo 2 Hi
637	Agogo 2 Low
638	Finger Bell
639	JD Cowbell
640	Tubular Bell
641	Church Bell
642	Mild CanWave
643	JD Crystal
644	Bell Organ
645	Old DigiBell
646	JD Bell Wave
647	TinyBellWave
648	Vib Wave
649	JD Brt Digi
650	Bagpipe
651	Digital Vox
652	JD WallyWave
653	JD Brusky Lp
654	Bright Form
655	JD Nasty
656	JD Spark Vox
657	JD Cutters
658	SBF Hrd Ld
659	JD EML 5th
660	Juno Saw HD
661	TB303 Saw HD
662	Custm Saw HD
663	MG Saw HD
664	DigitalSawHD
665	P5 Saw HD
666	Calc.Saw
667	Calc.Saw inv
668	Synth Saw
669	JD Syn Saw
670	JD Fat Saw
671	JP-8 Saw
672	D-50 Saw
673	SH-1000 Saw
674	SH-2 Saw
675	LA-Saw
676	Air Wave
677	GR-300 Saw 1
678	GR-300 Saw 2
679	TB Dst Saw A
680	TB Dst Saw B
681	TB Dst Saw C
682	Juno Sqr HD
683	P5 Sqr HD
684	Fat Square
685	JP-8 Square
686	SH-2 Square
687	TB303 Sqr HD
688	LA-Square
689	TB DstSqr 1A
690	TB DstSqr 1B
691	TB DstSqr 1C
692	Dist SquareA
693	Dist SquareB
694	Dist SquareC
695	Juno Pls HD
696	JP8 Pls 10HD
697	JP8 Pls 15HD
698	JP8 Pls 25HD
699	JP8 Pls 30HD
700	JP8 Pls 40HD

No.	Name
701	JP8 Pls 45HD
702	Syn Pulse 1
703	Syn Pulse 2
704	SH-1000 Puls
705	700 Triangle
706	Syn Triangle
707	JD Triangle
708	VS-Triangle
709	Mild Form
710	VS-Ramp
711	Sync Sweep
712	Sine
713	JD Fine Wine
714	Digi Loop
715	JD MetalWind
716	Atmosphere
717	DigiSpectrum
718	JD Vox Noise
719	SynVox Noise
720	Shaku Noise
721	Digi Breath
722	Agogo Noise
723	Vinyl Noise
724	White Noise
725	Pink Noise
726	Aah Formant
727	Eeh Formant
728	Iih Formant
729	Ooh Formant
730	Uuh Formant
731	Metal Vox W1
732	Metal Vox L1
733	Metal Vox W2
734	Metal Vox L2
735	Metal Vox W3
736	Metal Vox L3
737	JD Rattles
738	Xylo Seq.
739	JD Anklungs
740	JD Shami
741	SynBassClick
742	JD EP Atk
743	Key On Click
744	Org Click 1
745	Org Click 2
746	Org Click 3
747	Org Click 4
748	Org Click 5
749	JD Sm Metal
750	Ice Crash
751	JD Switch
752	JD Tuba Slap
753	JD Plink
754	JD Plunk
755	TVF Trigger
756	Hi Q
757	Slap
758	Stick
759	Click
760	Cutting Nz
761	Ac.Bass Body
762	Flute Pad Nz
763	Applause
764	River
765	Thunder
766	Monsoon
767	Stream
768	Bubble
769	Bird Song
770	Dog Bark

No.	Name
771	Gallop
772	Vint.Phone
773	Office Phone
774	Mobile Phone
775	Door Creak
776	Door Slam
777	Car Engine
778	Car Slip
779	Car Pass
780	Crash Seq.
781	Gun Shot
782	Siren
783	Train Pass
784	Airplane
785	Helicopter
786	Space Voyage
787	Blow Loop
788	Laugh
789	Scream
790	Punch
791	Heartbeat
792	Footsteps
793	Machine Gun
794	Laser
795	Thunder Lp
796	Ac.Bass Nz
797	E.Bass Nz 1
798	E.Bass Nz 2
799	E.Bass Slide
800	Fng.EB2 Sld
801	DistGtr Nz 1
802	DistGtr Nz 2
803	DistGtr Nz 3
804	Gtr Fret Nz1
805	Gtr Fret Nz2
806	ClassicHseHt
807	Narrow Hit 1
808	Narrow Hit 2
809	Euro Hit
810	Dist Hit
811	Thin Beef
812	Tao Hit
813	Smear Hit 1
814	Smear Hit 2
815	LoFi Min Hit
816	Orch. Hit
817	Punch Hit
818	O'Skool Hit
819	Philly Hit
820	Scratch 1
821	Scratch 2
822	Scratch 3
823	Scratch 4
824	Scratch 5
825	Scratch 6
826	Scratch 7
827	Scratch 9
828	Scratch 10
829	Scratch Push
830	Scratch Pull
831	MG Zap 1
832	MG Zap 2
833	MG Zap 3
834	MG Zap 4
835	MG Zap 5
836	MG Zap 6
837	MG Zap 7
838	MG Zap 8
839	MG Zap 9
840	MG Zap 10

No.	Name
841	MG Zap 11
842	MG Blip
843	Beam HiQ
844	MG Attack
845	Syn Low Atk1
846	Syn Low Atk2
847	Syn Hrd Atk1
848	Syn Hrd Atk2
849	Syn Hrd Atk3
850	Syn Hrd Atk4
851	Syn Mtl Atk1
852	Syn Mtl Atk2
853	Syn Swt Atk1
854	Syn Swt Atk2
855	Syn Swt Atk3
856	Syn Swt Atk4
857	Syn Swt Atk5
858	Syn Swt Atk6
859	Syn Swt Atk7
860	WD Kick mf L
861	WD Kick mf R
862	WD Kick f L
863	WD Kick f R
864	WD Kick ff L
865	WD Kick ff R
866	LD Kick mf L
867	LD Kick mf R
868	LD Kick f L
869	LD Kick f R
870	LD Kick ff L
871	LD Kick ff R
872	TY Kick mf L
873	TY Kick mf R
874	TY Kick f L
875	TY Kick f R
876	TY Kick ff L
877	TY Kick ff R
878	SF Kick 1 L
879	SF Kick 1 R
880	SF Kick 2 L
881	SF Kick 2 R
882	Reg.Kick p L
883	Reg.Kick p R
884	Reg.Kick f L
885	Reg.Kick f R
886	Reg.Kick ffL
887	Reg.Kick ffR
888	Rock Kick p
889	Rock Kick f
890	Jazz Kick p
891	Jazz Kick mf
892	Jazz Kick f
893	Dry Kick 1
894	Tight Kick
895	Old Kick
896	Jz Dry Kick
897	Dry Kick 2
898	Dry Kick 3
899	Power Kick
900	R&B Kick L
901	R&B Kick R
902	Rk CmpKick L
903	Rk CmpKick R
904	MaxLow Kick1
905	MaxLow Kick2
906	Dist Kick
907	FB Kick
908	Rough Kick1
909	Rough Kick2
910	Rough Kick3

No.	Name
911	PlasticKick1
912	70's Kick
913	Dance Kick
914	HipHop Kick1
915	HipHop Kick2
916	AnalogKick 1
917	PlasticKick2
918	PlasticKick3
919	TR909 Kick 1
920	TR909 Kick 2
921	AnalogKick 2
922	TR909 Kick 3
923	AnalogKick 3
924	AnalogKick 4
925	AnalogKick 5
926	AnalogKick 6
927	TR606DstKick
928	TR808 Kick
929	TR909 Kick 4
930	TR909 Kick 5
931	SH32 Kick
932	TR707 Kick
933	TR909 Kick 6
934	Mix Kick 1 L
935	Mix Kick 1 R
936	Mix Kick 2 L
937	Mix Kick 2 R
938	Mix Kick 3
939	Mix Kick 4
940	Mix Kick 5
941	Dry Kick 4
942	Small Kick
943	Vint Kick
944	Sweep Bass
945	WD Snr p L
946	WD Snr p R
947	WD Snr mf L
948	WD Snr mf R
949	WD Snr f L
950	WD Snr f R
951	WD Snr ff L
952	WD Snr ff R
953	WD Rim p L
954	WD Rim p R
955	WD Rim mf L
956	WD Rim mf R
957	WD Rim f L
958	WD Rim f R
959	WD Rim ff L
960	WD Rim ff R
961	LD Snr p L
962	LD Snr p R
963	LD Snr mf L
964	LD Snr mf R
965	LD Snr f L
966	LD Snr f R
967	LD Snr ff L
968	LD Snr ff R
969	LD Rim mf L
970	LD Rim mf R
971	LD Rim f L
972	LD Rim f R
973	LD Rim ff L
974	LD Rim ff R
975	TY Snr p L
976	TY Snr p R
977	TY Snr mf L
978	TY Snr mf R
979	TY Snr f L
980	TY Snr f R

No.	Name
981	TY Snr ff L
982	TY Snr ff R
983	TY Rim p L
984	TY Rim p R
985	TY Rim mf L
986	TY Rim mf R
987	TY Rim f L
988	TY Rim f R
989	TY Rim ff L
990	TY Rim ff R
991	SF Snr p L
992	SF Snr p R
993	SF Snr mf L
994	SF Snr mf R
995	SF Snr f L
996	SF Snr f R
997	SF Snr ff L
998	SF Snr ff R
999	SF Rim p L
1000	SF Rim p R
1001	SF Rim mf L
1002	SF Rim mf R
1003	SF Rim f L
1004	SF Rim f R
1005	SF Rim ff L
1006	SF Rim ff R
1007	Reg.Snr1 p L
1008	Reg.Snr1 p R
1009	Reg.Snr1mf L
1010	Reg.Snr1mf R
1011	Reg.Snr1 f L
1012	Reg.Snr1 f R
1013	Reg.Snr1ff L
1014	Reg.Snr1ff R
1015	Reg.Snr2 p L
1016	Reg.Snr2 p R
1017	Reg.Snr2 f L
1018	Reg.Snr2 f R
1019	Reg.Snr2ff L
1020	Reg.Snr2ff R
1021	Amb.Snr1 p L
1022	Amb.Snr1 p R
1023	Amb.Snr1 f L
1024	Amb.Snr1 f R
1025	Amb.Snr2 p L
1026	Amb.Snr2 p R
1027	Amb.Snr2 f L
1028	Amb.Snr2 f R
1029	Piccolo Snr
1030	Maple Snr
1031	Light Snr ff
1032	Click Snr p
1033	Click Snr ff
1034	SF SnrGst1 L
1035	SF SnrGst1 R
1036	SF SnrGst2 L
1037	SF SnrGst2 R
1038	Reg.SnrGst L
1039	Reg.SnrGst R
1040	Sft Snr Gst
1041	Jazz Snr p
1042	Jazz Snr mf
1043	Jazz Snr f
1044	Jazz Rim p
1045	Jz Brsh Slap
1046	Jz Brsh Swsh
1047	Swish&Turn p
1048	Swish&Turn f
1049	Snr Roll Lp
1050	BrushRoll Lp

No.	Name
1051	Soft Jz Roll
1052	Concert SD
1053	GoodOld Snr1
1054	GoodOld Snr2
1055	GoodOld Snr3
1056	GoodOld Snr4
1057	GoodOld Snr5
1058	GoodOld Snr6
1059	Dirty Snr 1
1060	Dirty Snr 2
1061	Dirty Snr 3
1062	Dirty Snr 4
1063	Dirty Snr 5
1064	Dirty Snr 6
1065	Dirty Snr 7
1066	Grit Snr 1
1067	Grit Snr 2
1068	Grit Snr 3
1069	LoBit SnrFlm
1070	Lo-Bit Snr 1
1071	Lo-Bit Snr 2
1072	MrchCmp Snr
1073	Reggae Snr
1074	DR660 Snr
1075	Jngl pkt Snr
1076	Pocket Snr
1077	Flange Snr
1078	Analog Snr 1
1079	Analog Snr 2
1080	Analog Snr 3
1081	Tiny Snare
1082	R&B ShrtSnr1
1083	TR909 Snr 1
1084	TR909 Snr 2
1085	TR909 Snr 3
1086	TR909 Snr 4
1087	TR909 Snr 5
1088	TR909 Snr 6
1089	TR808 Snr 1
1090	TR808 Snr 2
1091	TR808 Snr 3
1092	TR808 Snr 4
1093	Lite Snare
1094	TR808 Snr 5
1095	TR808 Snr 6
1096	TR606 Snr 1
1097	TR606 Snr 2
1098	CR78 Snare
1099	Urbn Sn Roll
1100	Vint Snr 1
1101	Vint Snr 2
1102	Vint Snr 3
1103	Vint Snr 4
1104	Dist Snr
1105	Short Snr1
1106	Short Snr2
1107	WD CStk mf L
1108	WD CStk mf R
1109	WD CStk f L
1110	WD CStk f R
1111	LD CStk mf L
1112	LD CStk mf R
1113	LD CStk f L
1114	LD CStk f R
1115	TY CStk mf L
1116	TY CStk mf R
1117	TY CStk f L
1118	TY CStk f R
1119	SF CStk p L
1120	SF CStk p R

No.	Name
1121	SF CStk f L
1122	SF CStk f R
1123	Reg.Stick L
1124	Reg.Stick R
1125	Soft Stick
1126	Hard Stick
1127	Wild Stick
1128	Lo-Bit Stk 1
1129	Lo-Bit Stk 2
1130	Dry Stick 1
1131	Dry Stick 2
1132	Dry Stick 3
1133	R8 Comp Rim
1134	R&B ShrtRim1
1135	R&B ShrtRim2
1136	TR909 Rim
1137	TR808 Rim
1138	LD L.Tom mf
1139	LD L.Tom f
1140	LD L.Tom ff
1141	LD M.Tom mf
1142	LD M.Tom f
1143	LD M.Tom ff
1144	LD H.Tom mf
1145	LD H.Tom f
1146	LD H.Tom ff
1147	TY L.Tom mf
1148	TY L.Tom f
1149	TY L.Tom ff
1150	TY M.Tom mf
1151	TY M.Tom f
1152	TY M.Tom ff
1153	TY H.Tom mf
1154	TY H.Tom f
1155	TY H.Tom ff
1156	RR F.Tom mp
1157	RR F.Tom f
1158	RR F.Tom ff
1159	SF L.Tom mf
1160	SF L.Tom ff
1161	SF M.Tom mf
1162	SF M.Tom f
1163	SF M.Tom ff
1164	SF H.Tom mf
1165	SF H.Tom f
1166	SF H.Tom ff
1167	RR FT Flm ff
1168	SF LT Flm ff
1169	SF MT Flm f
1170	SF HT Flm p
1171	SF HT Flm f
1172	SF HT Flm ff
1173	Reg.F.Tom p
1174	Reg.F.Tom f
1175	Reg.L.Tom p
1176	Reg.L.Tom f
1177	Reg.M.Tom p
1178	Reg.M.Tom f
1179	Reg.H.Tom p
1180	Reg.H.Tom f
1181	Reg.L.TomFlm
1182	Reg.M.TomFlm
1183	Reg.H.TomFlm
1184	Jazz Lo Tom
1185	Jazz Mid Tom
1186	Jazz Hi Tom
1187	Jazz Lo Flm
1188	Jazz Mid Flm
1189	Jazz Hi Flm
1190	Sharp Lo Tom

No.	Name
1191	Sharp Hi Tom
1192	Dry Lo Tom
1193	TR909 Tom
1194	TR909 DstTom
1195	TR808 Tom
1196	TR606 Tom
1197	Deep Tom
1198	Reg.CHH 1 p
1199	Reg.CHH 1 mf
1200	Reg.CHH 1 f
1201	Reg.CHH 1 ff
1202	Reg.CHH 2 mf
1203	Reg.CHH 2 f
1204	Reg.CHH 2 ff
1205	Reg.PHH mf
1206	Reg.PHH f
1207	Reg.OHH mf
1208	Reg.OHH f
1209	Reg.OHH ff
1210	Rock CHH1 mf
1211	Rock CHH1 f
1212	Rock CHH2 mf
1213	Rock CHH2 f
1214	Rock OHH
1215	Lo-Bit CHH 1
1216	Lo-Bit CHH 2
1217	Lo-Bit CHH 3
1218	Lo-Bit CHH 4
1219	Lo-Bit CHH 5
1220	HipHop CHH
1221	TR909 CHH 1
1222	TR909 CHH 2
1223	TR808 CHH 1
1224	TR808 CHH 2
1225	TR606 CHH 1
1226	TR606 CHH 2
1227	TR606 DstCHH
1228	Lite CHH
1229	CR78 CHH
1230	Dance CHH
1231	Noise CHH
1232	Hip PHH
1233	TR909 PHH 1
1234	TR909 PHH 2
1235	TR808 PHH
1236	TR606 PHH 1
1237	TR606 PHH 2
1238	Lo-Bit PHH
1239	Lo-Bit OHH 1
1240	Lo-Bit OHH 2
1241	Lo-Bit OHH 3
1242	HipHop OHH
1243	TR909 OHH 1
1244	TR909 OHH 2
1245	TR808 OHH 1
1246	TR808 OHH 2
1247	TR606 OHH
1248	Lite OHH
1249	CR78 OHH
1250	Noise OHH
1251	Noise OHH 2
1252	Crash Cym1 p
1253	Crash Cym1 f
1254	Crash Cym 2
1255	Rock Crash 1
1256	Rock Crash 2
1257	Splash Cym
1258	Jazz Crash
1259	TR909 Crash
1260	TR909 Crash2

No.	Name
1261	TR808 Cym
1262	TR606 Cym 2
1263	Ride Cymbal
1264	Ride Bell
1265	Rock Rd Cup
1266	Rock Rd Edge
1267	Jazz Ride p
1268	Jazz Ride mf
1269	TR909 Ride
1270	China Cymbal
1271	Concert Cym
1272	Concert Cym2
1273	Hand Clap
1274	Club Clap
1275	Real Clap
1276	Bright Clap
1277	R8 Clap
1278	Gospel Clap
1279	Amb Clap
1280	Hip Clap
1281	Funk Clap
1282	Claptail
1283	TR808 Clap 1
1284	Disc Clap
1285	Dist Clap
1286	Dist Clap 2
1287	Old Clap
1288	TR909 Clap 1
1289	TR909 Clap 2
1290	TR808 Clap 2
1291	TR707 Clap
1292	Cheap Clap
1293	Mix Clap 1 L
1294	Mix Clap 1 R
1295	Mix Clap 2 L
1296	Mix Clap 2 R
1297	Mix Clap 3
1298	Mix Clap 4
1299	Finger Snap
1300	Club FinSnap
1301	Snap
1302	Group Snap
1303	Cowbell
1304	Cowbell Mute
1305	Cowbell2 Lng
1306	Cowbell2 Edg
1307	Cowbell3 mf
1308	Cowbell3 f
1309	TR808Cowbell
1310	Wood Block
1311	Wood Block2H
1312	Wood Block2L
1313	Claves
1314	Claves 2
1315	TR808 Claves
1316	CR78 Beat
1317	Castanet
1318	Whistle
1319	Whistle Long
1320	Whistle Shrt
1321	Bongo Hi Mt
1322	Bongo Hi Slp
1323	Bongo Hi Op
1324	Bongo Lo Op
1325	Bongo Lo Slp
1326	Conga Hi Mt
1327	Conga Lo Mt
1328	Conga Hi Slp
1329	Conga Lo Slp
1330	Conga Hi Op

No.	Name
1331	Conga Lo Op
1332	Conga Slp Op
1333	Conga Efx
1334	Conga Thumb
1335	Conga 2H Op
1336	Conga 2H Mt
1337	Conga 2H Slp
1338	Conga 2L Op
1339	Conga 2L Mt
1340	TR808 Conga1
1341	TR808 Conga2
1342	Timbale 1
1343	Timbale 2
1344	Timbare 3
1345	Timbare 4
1346	Cabasa Up
1347	Cabasa Down
1348	Cabasa Cut
1349	Cabasa 2
1350	Cabasa 2 Cut
1351	Maracas
1352	808 Maracas
1353	R8 Shaker
1354	Shaker 1
1355	Shaker 2
1356	Shaker 3
1357	Guiro 1
1358	Guiro 2
1359	Guiro Long
1360	Guiro 2 Up
1361	Guiro 2 Down
1362	Guiro 2 Fast
1363	Vibraslap
1364	Tamborine 1
1365	Tamborine 2
1366	Tamborine 3
1367	Tamborine4 p
1368	Tamborine4 f
1369	CR78 Tamb
1370	Cajon 1
1371	Cajon 2
1372	Cajon 3
1373	Cajon 4
1374	SprgDrm Hit
1375	Cuica
1376	Cuica 2 Hi
1377	Cuica 2 Low
1378	Timpani p
1379	Timpani f
1380	Timpani Roll
1381	Timpani Lp
1382	ConcertBD p
1383	ConcertBD f
1384	ConcertBD ff
1385	ConcertBD Lp
1386	Triangle 1
1387	Triangle 2
1388	Tibet Cymbal
1389	Slight Bell
1390	Wind Chime
1391	Crotale
1392	R8 Click
1393	Metro Bell
1394	Metro Click
1395	MC500 Beep 1
1396	MC500 Beep 2
1397	DR202 Beep
1398	Low Square
1399	Low Sine
1400	DC
1401	Reverse Cym

1. Receive data

■Channel Voice Messages

* Not received in Performance mode when the Receive Switch parameter (Part Edit) is OFF.

●Note off

Status	2nd byte	3rd byte
8nH	kkH	vvH
9nH	kkH	00H
n = MIDI channel number:		0H - FH (ch.1 - 16)
kk = note number:		00H - 7FH (0 - 127)
vv = note off velocity:		00H - 7FH (0 - 127)

* Not received when the Tone Env Mode parameter (Patch Ctrl and Rhythm General) is NO-SUS.

●Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH
n = MIDI channel number:		0H - FH (ch.1 - 16)
kk = note number:		00H - 7FH (0 - 127)
vv = note on velocity:		01H - 7FH (1 - 127)

●Polyphonic Key Pressure

Status	2nd byte	3rd byte
AnH	kkH	vvH
n = MIDI channel number:		0H - FH (ch.1 - 16)
kk = note number:		00H - 7FH (0 - 127)
vv = Polyphonic Key Pressure:		00H - 7FH (0 - 127)

* Not received in Performance mode when the Receive Poly Key Pressure parameter (Performance MIDI) is OFF.

●Control Change

* If the corresponding Controller number is selected for the Patch Matrix Control Source parameter (Patch Mtrx Ctrl1-4), the corresponding effect will occur.

* If a Controller number that corresponds to the System Control Source 1, 2, 3 or 4 parameter (System Control) is selected, the specified effect will apply if Patch Control Source 1, 2, 3 or 4 parameter (Patch Mtrx Ctrl1-4) is set to SYS CTRL1, SYS CTRL2, SYS CTRL3 or SYS CTRL4.

❍Bank Select (Controller number 0, 32)

Status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH
n = MIDI channel number:		0H - FH (ch.1 - 16)
mm, ll = Bank number:		00 00H - 7F 7FH (bank.1 - bank.16384)

* Not received in Performance mode when the Receive Bank Select (Performance MIDI) is OFF.

* The Performances, Patches, and Rhythms corresponding to each Bank Select are as follows.

* The SRX series corresponding to each Bank Select are to see the SRX series owner's manual.

BANK SELECT MSB	BANK SELECT LSB	PROGRAM NUMBER	GROUP	NUMBER
000		001 - 128	GM Patch	001 - 256
:				
063		001 - 128	GM Patch	001 - 256
085	000	001 - 064	User Performance	001 - 064
	064	001 - 064	Preset Performance	001 - 064
086	000	001 - 032	User Rhythm	001 - 032
	064	001 - 032	Preset Rhythm	001 - 032
087	000	001 - 128	User Patch	001 - 128
	001	001 - 128	User Patch	129 - 256
	064	001 - 128	Preset Patch A	001 - 128
	065	001 - 128	Preset Patch B	001 - 128
	:		:	
092	000 -	001 -	SRX Rhythm	001 -
	:		:	
093	000 -	001 -	SRX Patch	001 -
	:		:	
120		001 - 057	GM Rhythm	001 - 009
121	000 -	001 - 128	GM Patch	001 - 256

❍Modulation (Controller number 1)

Status	2nd byte	3rd byte
BnH	01H	vvH
n = MIDI channel number:		0H - FH (ch.1 - 16)
vv = Modulation depth:		00H - 7FH (0 - 127)

* Not received in Performance mode when the Receive Modulation parameter (Performance MIDI) is OFF.

❍Breath type (Controller number 2)

Status	2nd byte	3rd byte
BnH	02H	vvH
n = MIDI channel number:		0H - FH (ch.1 - 16)
vv = Control value:		00H - 7FH (0 - 127)

❍Foot type (Controller number 4)

Status	2nd byte	3rd byte
BnH	04H	vvH
n = MIDI channel number:		0H - FH (ch.1 - 16)
vv = Control value:		00H - 7FH (0 - 127)

❍Portamento Time (Controller number 5)

Status	2nd byte	3rd byte
BnH	05H	vvH
n = MIDI channel number:		0H - FH (ch.1 - 16)
vv = Portamento Time:		00H - 7FH (0 - 127)

* In Performance mode the Part Portament Time parameter (Part Edit) will change.

❍Data Entry (Controller number 6, 38)

Status	2nd byte	3rd byte
BnH	06H	mmH
BnH	26H	llH

n = MIDI channel number: 0H - FH (ch.1 - 16)
mm, ll = the value of the parameter specified by RPN/NRPN
mm = MSB, ll = LSB

❍Volume (Controller number 7)

Status	2nd byte	3rd byte
BnH	07H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Volume:	00H - 7FH (0 - 127)	

* Not received in Performance mode when the Receive Volume parameter (Performance MIDI) is OFF.
* In Performance mode the Part Level parameter (Part Edit) will change.

❍Balance (Controller number 8)

Status	2nd byte	3rd byte
BnH	08H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Balance:	00H - 7FH (0 - 127)	

❍Panpot (Controller number 10)

Status	2nd byte	3rd byte
BnH	0AH	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Panpot:	00H - 40H - 7FH (Left - Center - Right)	

* Not received in Performance mode when the Receive Pan parameter (Performance MIDI) is OFF.
* In Performance mode the Part Pan parameter (Part Edit) will change.

❍Expression (Controller number 11)

Status	2nd byte	3rd byte
BnH	0BH	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Expression:	00H - 7FH (0 - 127)	

* Not received when Tone Receive Expression parameter (Patch Ctrl or Rhythm General) is OFF.
* Not received in Performance mode when Receive Expression parameter (Performance MIDI) is OFF.

❍Hold 1 (Controller number 64)

Status	2nd byte	3rd byte
BnH	40H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Control value:	00H - 7FH (0 - 127) 0-63 = OFF, 64-127 = ON	

* Not received when Tone Receive Hold-1 parameter (Patch Ctrl or Rhythm General) is OFF.
* Not received in Performance mode when Receive Hold-1 parameter (Performance MIDI) is OFF.

❍Portamento (Controller number 65)

Status	2nd byte	3rd byte
BnH	41H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Control value:	00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON	

* In Performance mode the Part Portamento Switch parameter (Part Edit) will change.

❍Sostenuto (Controller number 66)

Status	2nd byte	3rd byte
BnH	42H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Control value:	00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON	

❍Soft (Controller number 67)

Status	2nd byte	3rd byte
BnH	43H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Control value:	00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON	

❍Legato Foot Switch (Controller number 68)

Status	2nd byte	3rd byte
BnH	44H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Control value:	00H - 7FH (0 - 127) 0 - 63 = OFF, 64 - 127 = ON	

* In Performance mode the Part Legato Switch parameter (Part Edit) will change.

❍Hold-2 (Controller number 69)

Status	2nd byte	3rd byte
BnH	45H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Control value:	00H - 7FH (0 - 127)	

* A hold movement isn't done.

❍Resonance (Controller number 71)

Status	2nd byte	3rd byte
BnH	47H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv= Resonance value (relative change):	00H - 40H - 7FH (-64 - 0 - +63)	

* In Performance mode the Part Resonance Offset parameter (Part Edit) will change.

❍Release Time (Controller number 72)

Status	2nd byte	3rd byte
BnH	48H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Release Time value (relative change):	00H - 40H - 7FH (-64 - 0 - +63)	

* In Performance mode the Part Release Offset parameter (Part Edit) will change.

❍Attack time (Controller number 73)

Status	2nd byte	3rd byte
BnH	49H	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
vv = Attack time value (relative change):	00H - 40H - 7FH (-64 - 0 - +63)	

* In Performance mode the Part Attack Offset parameter (Part Edit) will change.

❍Cutoff (Controller number 74)

Status	2nd byte	3rd byte
BnH	4AH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Cutoff value (relative change): 00H - 40H - 7FH (-64 - 0 - +63)

* In Performance mode the Part Cutoff Offset parameter (Part Edit) will change.

❍Decay Time (Controller number 75)

Status	2nd byte	3rd byte
BnH	4BH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Decay Time value (relative change): 00H - 40H - 7FH (-64 - 0 - +63)

* In Performance mode the Part Decay Offset parameter (Part Edit) will change.

❍Vibrato Rate (Controller number 76)

Status	2nd byte	3rd byte
BnH	4CH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Vibrato Rate value (relative change): 00H - 40H - 7FH (-64 - 0 - +63)

* In Performance mode the Part Vibrato Rate parameter (Part Edit) will change.

❍Vibrato Depth (Controller number 77)

Status	2nd byte	3rd byte
BnH	4DH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Vibrato Depth Value (relative change): 00H - 40H - 7FH (-64 - 0 - +63)

* In Performance mode the Part Vibrato Depth parameter (Part Edit) will change.

❍Vibrato Delay (Controller number 78)

Status	2nd byte	3rd byte
BnH	4EH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Vibrato Delay value (relative change): 00H - 40H - 7FH (-64 - 0 - +63)

* In Performance mode the Part Vibrato Delay parameter (Part Edit) will change.

❍General Purpose Controller 5 (Controller number 80)

Status	2nd byte	3rd byte
BnH	50H	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Control value: 00H - 7FH (0 - 127)

* The Tone Level parameter (Patch TVA) of Tone 1 will change.

❍General Purpose Controller 6 (Controller number 81)

Status	2nd byte	3rd byte
BnH	51H	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Control value: 00H - 7FH (0 - 127)

* The Tone Level parameter (Patch TVA) of Tone 2 will change.

❍General Purpose Controller 7 (Controller number 82)

Status	2nd byte	3rd byte
BnH	52H	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Control value: 00H - 7FH (0 - 127)

* The Tone Level parameter (Patch TVA) of Tone 3 will change.

❍General Purpose Controller 8 (Controller number 83)

Status	2nd byte	3rd byte
BnH	53H	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Control value: 00H - 7FH (0 - 127)

* The Tone Level parameter (Patch TVA) of Tone 4 will change.

❍Portamento control (Controller number 84)

Status	2nd byte	3rd byte
BnH	54H	kkH

n = MIDI channel number: 0H - FH (ch.1 - 16)
kk = source note number: 00H - 7FH (0 - 127)

* A Note-on received immediately after a Portamento Control message will change continuously in pitch, starting from the pitch of the Source Note Number.
* If a voice is already sounding for a note number identical to the Source Note Number, this voice will continue sounding (i.e., legato) and will, when the next Note-on is received, smoothly change to the pitch of that Note-on.
* The rate of the pitch change caused by Portamento Control is determined by the Portamento Time value.

❍Effect 1 (Reverb Send Level) (Controller number 91)

Status	2nd byte	3rd byte
BnH	5BH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Reverb Send Level: 00H - 7FH (0 - 127)

* In Performance mode the Part Reverb Send Level parameter (Part Edit) will change.

❍Effect 3 (Chorus Send Level) (Controller number 93)

Status	2nd byte	3rd byte
BnH	5DH	vvH

n = MIDI channel number: 0H - FH (ch.1 - 16)
vv = Chorus Send Level: 00H - 7FH (0 - 127)

* In Performance mode the Part Chorus Send Level parameter (Part Edit) will change.

❍RPN MSB/LSB (Controller number 100, 101)

Status	2nd byte	3rd byte
BnH	65H	mmH
BnH	64H	llH

n = MIDI channel number: 0H - FH (ch.1 - 16)
mm = upper byte (MSB) of parameter number specified by RPN
ll = lower byte (LSB) of parameter number specified by RPN

<<< RPN >>>
Control Changes include RPN (Registered Parameter Numbers), which are extended.
When using RPNs, first RPN (Controller numbers 100 and 101; they can be sent in any order) should be sent in order to select the parameter, then Data Entry (Controller numbers 6 and 38) should be sent to set the value. Once RPN messages are received, Data Entry messages that is received at the same MIDI channel after that are recognized as changing toward the value of the RPN messages. In order not to make any mistakes, transmitting RPN Null is recommended after setting parameters you need.

This device receives the following RPNs.

RPN MSB, LSB	Data entry MSB, LSB	Notes
00H, 00H	mmH, llH	Pitch Bend Sensitivity mm: 00H - 18H (0 - 24 semitones) ll: ignored (processed as 00H) Up to 2 octave can be specified in semitone steps.

* In Performance mode, the Part Bend Range parameter (Part Edit) will change.

00H, 01H	mmH, llH	Channel Fine Tuning mm, ll: 20 00H - 40 00H - 60 00H (-4096 x 100 / 8192 - 0 - +4096 x 100 / 8192 cent)

* In Performance mode, the Part Fine Tune parameter (Part Edit) will change.

00H, 02H	mmH, llH	Channel Coarse Tuning mm: 10H - 40H - 70H (-48 - 0 - +48 semitones) ll: ignored (processed as 00H)

* In Performance mode, the Part Coarse Tune parameter (Part Edit) will change.

00H, 05H	mmH, llH	Modulation Depth Range mm: 00 00H - 06 00H (0 - 16384 x 600 / 16384 cent)

* Not received in Patch mode.

7FH, 7FH	---, ---	RPN null RPN and NRPN will be set as "unspecified." Once this setting has been made, subsequent Parameter values that were previously set will not change. mm, ll: ignored

●Program Change

Status	2nd byte	
CnH	ppH	
n = MIDI channel number:		0H - FH (ch.1 - 16)
pp = Program number:		00H - 7FH (prog.1 - prog.128)

* Not received in Performance mode when the Receive Program Change parameter (Performance MIDI) is OFF.

●Channel Pressure

Status	2nd byte	
DnH	vvH	
n = MIDI channel number:		0H - FH (ch.1 - 16)
vv = Channel Pressure:		00H - 7FH (0 - 127)

* Not received in Performance mode when the Receive Channel Pressure parameter (Performance MIDI) is OFF.

●Pitch Bend Change

Status	2nd byte	3rd byte
EnH	llH	mmH
n = MIDI channel number:		0H - FH (ch.1 - 16)
mm, ll = Pitch Bend value:		00 00H - 40 00H - 7F 7FH (-8192 - 0 - +8191)

* Not received when the Tone Receive Bender parameter (Patch Ctrl) is OFF.
* Not received in Performance mode when the Receive Pitch Bend parameter (Performance MIDI) is OFF.

■Channel Mode Messages

* Not received in Performance mode when the Receive Switch parameter (Part Edit) is OFF.

●All Sounds Off (Controller number 120)

Status	2nd byte	3rd byte
BnH	78H	00H

n = MIDI channel number: 0H - FH (ch.1 - 16)

* When this message is received, all notes currently sounding on the corresponding channel will be turned off.

●Reset All Controllers (Controller number 121)

Status	2nd byte	3rd byte
BnH	79H	00H

n = MIDI channel number: 0H - FH (ch.1 - 16)

* When this message is received, the following controllers will be set to their reset values.

Controller	Reset value
Pitch Bend Change	+/-0 (center)
Polyphonic Key Pressure	0 (off)
Channel Pressure	0 (off)
Modulation	0 (off)
Breath Type	0 (min)
Expression	127 (max) However the controller will be at minimum.
Hold 1	0 (off)
Sostenuto	0 (off)
Soft	0 (off)
Hold 2	0 (off)
RPN	unset; previously set data will not change
NRPN	unset; previously set data will not change

●All Notes Off (Controller number 123)

Status	2nd byte	3rd byte
BnH	7BH	00H

n = MIDI channel number: 0H - FH (ch.1 - 16)

* When All Notes Off is received, all notes on the corresponding channel will be turned off. However, if Hold 1 or Sostenuto is ON, the sound will be continued until these are turned off.

●OMNI OFF (Controller number 124)

Status	2nd byte	3rd byte
BnH	7CH	00H

n = MIDI channel number: 0H - FH (ch.1 - 16)

* The same processing will be carried out as when All Notes Off is received.

●OMNI ON (Controller number 125)

Status	2nd byte	3rd byte
BnH	7DH	00H

n = MIDI channel number: 0H - FH (ch.1 - 16)

* The same processing will be carried out as when All Notes Off is received. OMNI ON will not be turned on.

●MONO (Controller number 126)

Status	2nd byte	3rd byte
BnH	7EH	mmH
n = MIDI channel number:		0H - FH (ch.1 - 16)
mm = mono number:		00H - 10H (0 - 16)

* The same processing will be carried out as when All Notes Off is received.
* In Performance mode, the Part Mono/Poly parameter (Part Edit) will change.

●POLY (Controller number 127)

Status	2nd byte	3rd byte
BnH	7FH	00H

n = MIDI channel number: 0H - FH (ch.1 - 16)

* The same processing will be carried out as when All Notes Off is received.
* In Performance mode, the Part Mono/Poly parameter (Part Edit) will change.

■System Realtime Message

●Timing Clock

Status

F8H

* This is received when Sync Mode parameter (System) is SLAVE.

●Active Sensing

Status

FEH

* When Active Sensing is received, the unit will begin monitoring the intervals of all further messages. While monitoring, if the interval between messages exceeds 420 ms, the same processing will be carried out as when All Sounds Off, All Notes Off and Reset All Controllers are received, and message interval monitoring will be halted.

■System Exclusive Message

Status	Data byte	Status
F0H	iiH, ddH, ...,eeH	F7H

F0H: System Exclusive Message status
ii = ID number: an ID number (manufacturer ID) to indicate the manufacturer whose Exclusive message this is. Roland's manufacturer ID is 41H.
ID numbers 7EH and 7FH are extensions of the MIDI standard; Universal Non-realtime Messages (7EH) and Universal Realtime Messages (7FH).
dd,...,ee = data: 00H - 7FH (0 - 127)
F7H: EOX (End Of Exclusive)

Of the System Exclusive messages received by this device, the Universal Non-realtime messages and the Universal Realtime messages and the Data Request (RQ1) messages and the Data Set (DT1) messages will be set automatically.

●Universal Non-realtime System Exclusive Messages

❍Identity Request Message

Status	Data byte	Status
F0H	7EH, dev, 06H, 01H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
dev	Device ID (dev: 10H - 1FH, 7FH)
06H	Sub ID#1 (General Information)
01H	Sub ID#2 (Identity Request)
F7H	EOX (End Of Exclusive)

* When this message is received, Identity Reply message (p. 256) will be transmitted.

❍GM1 System On

Status	Data byte	Status
F0H	7EH, 7FH, 09H, 01H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
7FH	Device ID (Broadcast)
09H	Sub ID#1 (General MIDI Message)
01H	Sub ID#2 (General MIDI 1 On)
F7H	EOX (End Of Exclusive)

* When this messages is received, this instrument will turn to the Performance mode.
* Not received when the Receive GM1 System On parameter (System MIDI) is OFF.

❍GM2 System On

Status	Data byte	Status
F0H	7EH 7FH 09H 03H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
7FH	Device ID (Broadcast)
09H	Sub ID#1 (General MIDI Message)
03H	Sub ID#2 (General MIDI 2 On)
F7H	EOX (End Of Exclusive)

* When this messages is received, this instrument will turn to the Performance mode.
* Not received when the Receive GM2 System On parameter (System MIDI) is OFF.

❍GM System Off

Status	Data byte	Status
F0H	7EH, 7F, 09H, 02H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
7FH	Device ID (Broadcast)
09H	Sub ID#1 (General MIDI Message)
02H	Sub ID#2 (General MIDI Off)
F7H	EOX (End Of Exclusive)

* When this messages is received, this instrument will return to the Performance mode.

●Universal Realtime System Exclusive Messages

❍Master Volume

Status	Data byte	Status
F0H	7FH, 7FH, 04H, 01H, llH, mmH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
04H	Sub ID#1 (Device Control)
01H	Sub ID#2 (Master Volume)
llH	Master Volume lower byte
mmH	Master Volume upper byte
F7H	EOX (End Of Exclusive)

* The lower byte (llH) of Master Volume will be handled as 00H.
* The Master Level parameter (System) will change.

❍Master Fine Tuning

Status	Data byte	Status
F0H	7FH, 7FH, 04H, 03H, llH, mmH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
04H	Sub ID#1 (Device Control)
03H	Sub ID#2 (Master Fine Tuning)
llH	Master Fine Tuning LSB
mmH	Master Fine Tuning MSB
F7H	EOX (End Of Exclusive)

mm, ll: 00 00H - 40 00H - 7F 7FH (-100 - 0 - +99.9 [cents])

* The Master Tune parameter (System) will change.

❍Master Coarse Tuning

Status	Data byte	Status
F0H	7FH, 7FH, 04H, 04H, llH, mmH	F7

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
04H	Sub ID#1 (Device Control)
04H	Sub ID#2 (Master Coarse Tuning)
llH	Master Coarse Tuning LSB
mmH	Master Coarse Tuning MSB
F7H	EOX (End Of Exclusive)

llH:	ignored (processed as 00H)
mmH:	28H - 40H - 58H (-24 - 0 - +24 [semitones])

* The Master Key Shift parameter (System) will change.

●Global Parameter Control

* Not received in Patch mode.

❍Reverb Parameters

Status	Data byte	Status
F0H	7FH, 7FH, 04H, 05H, 01H, 01H, 01H, 01H, 01H, ppH, vvH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
04H	Sub ID#1 (Device Control)
05H	Sub ID#2 (Global Parameter Control)
01H	Slot path length
01H	Parameter ID width
01H	Value width
01H	Slot path MSB
01H	Slot path LSB (Effect 0101: Reverb)
ppH	Parameter to be controlled.
vvH	Value for the parameter.
	pp=0 Reverb Type
	vv = 00H Small Room
	vv = 01H Medium Room
	vv = 02H Large Room
	vv = 03H Medium Hall
	vv = 04H Large Hall
	vv = 08H Plate
	pp=1 Reverb Time
	vv = 00H - 7FH 0 - 127
F7H	EOX (End Of Exclusive)

❍Chorus Parameters

Status	Data byte	Status
F0H	7FH, 7FH, 04H, 05H, 01H, 01H, 01H, 01H, 02H, ppH, vvH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
04H	Sub ID#1 (Device Control)
05H	Sub ID#2 (Global Parameter Control)
01H	Slot path length
01H	Parameter ID width
01H	Value width
01H	Slot path MSB
02H	Slot path LSB (Effect 0102: Chorus)
ppH	Parameter to be controlled.
vvH	Value for the parameter.
	pp=0 Chorus Type
	vv=0 Chorus1
	vv=1 Chorus2
	vv=2 Chorus3
	vv=3 Chorus4
	vv=4 FB Chorus
	vv=5 Flanger
	pp=1 Mod Rate
	vv= 00H - 7FH 0 - 127
	pp=2 Mod Depth
	vv = 00H - 7FH 0 - 127
	pp=3 Feedback
	vv = 00H - 7FH 0 - 127
	pp=4 Send To Reverb
	vv = 00H - 7FH 0 - 127
F7H	EOX (End Of Exclusive)

❍Channel Pressure

Status	Data byte	Status
F0H	7FH, 7FH, 09H, 01H, 0nH, ppH, rrH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
09H	Sub ID#1 (Controller Destination Setting)
01H	Sub ID#2 (Channel Pressure)
0nH	MIDI Channel (00 - 0F)
ppH	Controlled parameter
rrH	Controlled range
	pp=0 Pitch Control
	rr = 28H - 58H -24 - +24 [semitones]
	pp=1 Filter Cutoff Control
	rr = 00H - 7FH -9600 - +9450 [cents]
	pp=2 Amplitude Control
	rr = 00H - 7FH 0 - 200%
	pp=3 LFO Pitch Depth
	rr = 00H - 7FH 0 - 600 [cents]
	pp=4 LFO Filter Depth
	rr = 00H - 7FH 0 - 2400 [cents]
	pp=5 LFO Amplitude Depth
	rr = 00H - 7FH 0 - 100%
F7H	EOX (End Of Exclusive)

❍Controller

Status	Data byte	Status
F0H	7FH, 7FH, 09H, 03H, 0nH, ccH, ppH, rrH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
09H	Sub ID#1 (Controller Destination Setting)
03H	Sub ID#2 (Control Change)
0nH	MIDI Channel (00 - 0F)
ccH	Controller number (01 - 1F, 40 - 5F)
ppH	Controlled parameter
rrH	Controlled range
	pp=0 Pitch Control
	rr = 28H - 58H -24 - +24 [semitones]
	pp=1 Filter Cutoff Control
	rr = 00H - 7FH -9600 - +9450 [cents]
	pp=2 Amplitude Control
	rr = 00H - 7FH 0 - 200%
	pp=3 LFO Pitch Depth
	rr = 00H - 7FH 0 - 600 [cents]
	pp=4 LFO Filter Depth
	rr = 00H - 7FH 0 - 2400 [cents]
	pp=5 LFO Amplitude Depth
	rr = 00H - 7FH 0 - 100%
F7H	EOX (End Of Exclusive)

❍Scale/Octave Tuning Adjust

Status	Data byte	Status
F0H	7EH, 7FH, 08H, 08H, ffH, ggH, hhH, ssH...	F7

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
7FH	Device ID (Broadcast)
08H	Sub ID#1 (MIDI Tuning Standard)
08H	Sub ID#2 (scale/octave tuning 1-byte form)
ffH	Channel/Option byte 1
	bits 0 to 1 = channel 15 to 16
	bit 2 to 6 = Undefined
ggH	Channel byte 2
	bits 0 to 6 = channel 8 to 14
hhH	Channel byte 3
	bits 0 to 6 = channel 1 to 7
ssH	12 byte tuning offset of 12 semitones from C to B
	00H = -64 [cents]
	40H = 0 [cents] (equal temperament)
	7FH = +63 [cents]
F7H	EOX (End Of Exclusive)

❍Key-based Instrument Controllers

Status	Data byte	Status
F0H	7FH, 7FH, 0AH, 01H, 0nH, kkH, nnH, vvH	F7H

Byte	Explanation
F0H	Exclusive status
7FH	ID number (universal realtime message)
7FH	Device ID (Broadcast)
0AH	Sub ID#1 (Key-Based Instrument Control)
01H	Sub ID#2 (Controller)
0nH	MIDI Channel (00 - 0FH)
kkH	Key Number
nnH	Control Number
vvH	Value
	nn=07H Level
	vv = 00H - 7FH 0 - 200% (Relative)
	nn=0AH Pan
	vv = 00H - 7FH Left - Right (Absolute)
	nn=5BH Reverb Send
	vv = 00H - 7FH 0 - 127 (Absolute)
	nn=5D Chorus Send
	vv = 00H - 7FH 0 - 127 (Absolute)
:	:
F7	EOX (End Of Exclusive)

* This parameter affects drum instruments only.

●Data Transmission

This instrument can use exclusive messages to exchange many varieties of internal settings with other devices.
The model ID of the exclusive messages used by this instrument is 00H 00H 25H.

❍Data Request 1 RQ1 (11H)

This message requests the other device to transmit data. The address and size indicate the type and amount of data that is requested. When a Data Request message is received, if the device is in a state in which it is able to transmit data, and if the address and size are appropriate, the requested data is transmitted as a Data Set 1 (DT1) message. If the conditions are not met, nothing is transmitted.

status	data byte	status
F0H	41H, dev, 00H, 00H, 25H, 11H, aaH, bbH, ccH, ddH, ssH, ttH, uuH, vvH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H - 1FH, 7FH)
00H	model ID #1 (SonicCell)
00H	model ID #2 (SonicCell)
25H	model ID #3 (SonicCell)
11H	command ID (RQ1)
aaH	address MSB
bbH	address
ccH	address
ddH	address LSB
ssH	size MSB
ttH	size
uuH	size
vvH	size LSB
sum	checksum
F7H	EOX (End Of Exclusive)

* The size of data that can be transmitted at one time is fixed for each type of data. And data requests must be made with a fixed starting address and size. Refer to the address and size given in "Parameter Address Map" (p. 257).
* For the checksum, refer to (p. 275).
* Not received when the Receive Exclusive parameter (System MIDI) is OFF.

❍Data set 1 DT1 (12H)

Status	Data byte	Status
F0H	41H, dev, 00H, 00H, 25H, 12H, aaH, bbH, ccH, ddH, eeH, ... ffH, sum	F7H

Byte	Explanation	
F0H	Exclusive status	
41H	ID number (Roland)	
dev	Device ID (dev: 00H - 1FH, 7FH)	
00H	Model ID #1 (SonicCell)	
00H	Model ID #2 (SonicCell)	
25H	Model ID #3 (SonicCell)	
12H	Command ID (DT1)	
aaH	Address MSB:	upper byte of the starting address of the data to be sent
bbH	Address:	upper middle byte of the starting address of the data to be sent
ccH	Address:	lower middle byte of the starting address of the data to be sent
ddH	Address LSB:	lower byte of the starting address of the data to be sent.
eeH	Data:	the actual data to be sent. Multiple bytes of data are transmitted in order starting from the address.
:	:	
ffH	Data	
sum	Checksum	
F7H	EOX (End Of Exclusive)	

* The amount of data that can be transmitted at one time depends on the type of data, and data will be transmitted from the specified starting address and size. Refer to the address and size given in "Parameter Address Map" (p. 257).
* Data larger than 256 bytes will be divided into packets of 256 bytes or less, and each packet will be sent at an interval of about 20 ms.
* Regarding the checksum, please refer to (p. 275)
* Not received when the Receive Exclusive parameter (System MIDI) is OFF.

Status	Data byte	Status
F0H	41H, dev, 42H, 12H, aaH, bbH, ccH, ddH, ... eeH, sum	F7H

Byte	Explanation	
F0H	Exclusive status	
41H	ID number (Roland)	
dev	Device ID (dev: 10H - 1FH, 7FH)	
42H	Model ID (GS)	
12H	Command ID (DT1)	
aaH	Address MSB:	upper byte of the starting address of the transmitted data
bbH	Address:	middle byte of the starting address of the transmitted data
ccH	Address LSB:	lower byte of the starting address of the transmitted data
ddH	Data:	the actual data to be transmitted. Multiple bytes of data are transmitted starting from the address.
:	:	
eeH	Data	
sum	Checksum	
F7H	EOX (End Of Exclusive)	

* The amount of data that can be transmitted at one time depends on the type of data, and data will be transmitted from the specified starting address and size. Refer to the address and size given in "Parameter Address Map" (p. 257).
* Data larger than 256 bytes will be divided into packets of 256 bytes or less, and each packet will be sent at an interval of about 20 ms.
* Regarding the checksum, please refer to (p. 275)
* Not received when the Receive Exclusive parameter (System MIDI) is OFF.

2. Data Transmission

Messages (except System Common and System Realtime Messages) that are received are then sent out when Soft Thru parameter (System MIDI) is switched to ON.

■Channel Voice Messages

●Note off

Status	2nd byte	3rd byte
8nH	kkH	vvH
9nH	kkH	00H
n = MIDI channel number:	0H - FH (ch.1 - 16)	
kk = note number:	00H - 7FH (0 - 127)	
vv = note off velocity:	00H - 7FH (0 - 127)	

* This message is transmitted from SMF Player.

●Note on

Status	2nd byte	3rd byte
9nH	kkH	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
kk = note number:	00H - 7FH (0 - 127)	
vv = note on velocity:	01H - 7FH (1 - 127)	

* This message is transmitted from SMF Player.

●Polyphonic Key Pressure

Status	2nd byte	3rd byte
AnH	kkH	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
kk = note number:	00H - 7FH (0 - 127)	
vv = Polyphonic Key Pressure:	00H - 7FH (0 - 127)	

* This message is transmitted from SMF Player.

●Control Change

BnH	kkH	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
kk = Controller number:	00H - 77H (0 - 119)	
vv = Control value:	00H - 7FH (0 - 127)	

* This message is transmitted from SMF Player.

●Program Change

Status	2nd byte
CnH	ppH
n = MIDI channel number:	0H - FH (ch.1 - 16)
pp = Program number:	00H - 7FH (prog.1 - prog.128)

* This message is transmitted from SMF Player.

●Channel Pressure

Status	2nd byte
DnH	vvH
n = MIDI channel number:	0H - FH (ch.1 - 16)
vv = Channel Pressure:	00H - 7FH (0 - 127)

* This message is transmitted from SMF Player.

●Pitch Bend Change

Status	2nd byte	3rd byte
EnH	llH	mmH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
mm, ll = Pitch Bend value:	00 00H - 40 00H - 7F 7FH (-8192 - 0 - +8191)	

* This message is transmitted from SMF Player.

■Channel Mode Messages

●All Sounds Off (Controller number 120)

Status	2nd byte	3rd byte
BnH	78H	00H
n = MIDI channel number: 0H - FH (ch.1 - 16)		

* This message is transmitted from SMF Player.

●Reset All Controllers (Controller number 121)

Status	2nd byte	3rd byte
BnH	79H	00H
n = MIDI channel number: 0H - FH (ch.1 - 16)		

* This message is transmitted from SMF Player.

●All Notes Off (Controller number 123)

Status	2nd byte	3rd byte
BnH	7BH	00H
n = MIDI channel number: 0H - FH (ch.1 - 16)		

* This message is transmitted from SMF Player.

●MONO (Controller number 126)

Status	2nd byte	3rd byte
BnH	7EH	mmH
n = MIDI channel number:	0H - FH (ch.1 - 16)	
mm = mono number:	00H - 10H (0 - 16)	

* This message is transmitted from SMF Player.

●POLY (Controller number 127)

Status	2nd byte	3rd byte
BnH	7FH	00H
n = MIDI channel number: 0H - FH (ch.1 - 16)		

* This message is transmitted from SMF Player.

■System Realtime Messages

●Active Sensing

Status
FEH

* This message is transmitted at intervals of approximately 250 msec.

■System Exclusive Message

Status	Data byte	Status
F0H	iiH, ddH, ...,eeH	F7H

F0H:	System Exclusive Message status
ii = ID number:	an ID number (manufacturer ID) to indicate the manufacturer whose Exclusive message this is. Roland's manufacturer ID is 41H. ID numbers 7EH and 7FH are extensions of the MIDI standard; Universal Non-realtime Messages (7EH) and Universal Realtime Messages (7FH).
dd,...,ee = data:	00H - 7FH (0 - 127)
F7H:	EOX (End Of Exclusive)

Universal Non-realtime System Exclusive Messagé" and Data Set 1 (DT1) are the only System Exclusive messages transmitted by the SonicCell.

●Universal Non-realtime System Exclusive Message

❍Identity Reply Message (SonicCell)

Receiving Identity Request Message, the SonicCell send this message.

Status	Data byte	Status
F0H	7EH, dev, 06H, 02H, 41H, 25H, 02H, 00H, 00H, 00H, 00H, 00H, 00H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (Universal Non-realtime Message)
dev	Device ID (dev: 10H - 1FH)
06H	Sub ID#1 (General Information)
02H	Sub ID#2 (Identity Reply)
41H	ID number (Roland)
25H 02H	Device family code
00H 00H	Device family number code
00H 00H 00H 00H	Software revision level
F7H	EOX (End of Exclusive)

●Data Transmission

❍Data set 1 DT1 (12H)

Status	Data byte	Status
F0H	41H, dev, 00H, 00H, 25H, 12H, aaH, bbH, ccH, ddH, eeH, ... ffH, sum	F7H

Byte	Explanation	
F0H	Exclusive status	
41H	ID number (Roland)	
dev	Device ID (dev: 00H - 1FH, 7FH)	
00H	Model ID #1 (SonicCell)	
00H	Model ID #2 (SonicCell)	
25H	Model ID #3 (SonicCell)	
12H	Command ID (DT1)	
aaH	Address MSB:	upper byte of the starting address of the data to be sent
bbH	Address:	upper middle byte of the starting address of the data to be sent
ccH	Address:	lower middle byte of the starting address of the data to be sent
ddH	Address LSB:	lower byte of the starting address of the data to be sent.
eeH	Data:	the actual data to be sent. Multiple bytes of data are transmitted in order starting from the address.
:	:	
ffH	Data	
sum	Checksum	
F7H	EOX (End Of Exclusive)	

* The amount of data that can be transmitted at one time depends on the type of data, and data will be transmitted from the specified starting address and size. Refer to the address and size given in "Parameter Address Map" (see right).

* Data larger than 256 bytes will be divided into packets of 256 bytes or less, and each packet will be sent at an interval of about 20 ms.

3. Parameter Address Map

* Transmission of "#" marked address is divided to some packets. For example, ABH in hexadecimal notation will be divided to 0AH and 0BH, and is sent/received in this order.
* "<*>" marked address or parameters are ignored when the SonicCell received them.

1. Sonic Cell (ModelID = 00H 00H 25H)

Start Address	Description
01 00 00 00	Setup
02 00 00 00	System
10 00 00 00	Temporary Performance
11 00 00 00	Temporary Patch/Rhythm (Performance Mode Part 1)
11 20 00 00	Temporary Patch/Rhythm (Performance Mode Part 2)
:	
14 60 00 00	Temporary Patch/Rhythm (Performance Mode Part 16)
1F 00 00 00	Temporary Patch/Rhythm (Patch Mode)
20 00 00 00	User Performance (01)
20 01 00 00	User Performance (02)
:	
20 3F 00 00	User Performance (64)
30 00 00 00	User Patch (001)
30 01 00 00	User Patch (002)
:	
31 7F 00 00	User Patch (256)
40 00 00 00	User Rhythm Set (001)
40 10 00 00	User Rhythm Set (002)
:	
43 70 00 00	User Rhythm Set (032)

* System

Offset Address	Description
00 00 00	System Common
00 02 00	System Mastering
00 03 00	System External Input

* Temporary Patch/Rhythm

Offset Address	Description
00 00 00	Temporary Patch
10 00 00	Temporary Rhythm

* Performance

Offset Address	Description
00 00 00	Performance Common
00 02 00	Performance Common MFX1
00 04 00	Performance Common Chorus
00 06 00	Performance Common Reverb
00 08 00	Performance Common MFX2
00 0A 00	Performance Common MFX3
00 10 00	Performance MIDI (Channel 1)
00 11 00	Performance MIDI (Channel 2)
:	
00 1F 00	Performance MIDI (Channel 16)
00 20 00	Performance Part (Part 1)
00 21 00	Performance Part (Part 2)
:	
00 2F 00	Performance Part (Part 16)
00 60 00	Performance Controller

* Patch

Offset Address	Description
00 00 00	Patch Common
00 02 00	Patch Common MFX
00 04 00	Patch Common Chorus
00 06 00	Patch Common Reverb
00 10 00	Patch TMT (Tone Mix Table)
00 20 00	Patch Tone (Tone 1)
00 22 00	Patch Tone (Tone 2)
00 24 00	Patch Tone (Tone 3)
00 26 00	Patch Tone (Tone 4)

* Rhythm

Offset Address	Description
00 00 00	Rhythm Common
00 02 00	Rhythm Common MFX
00 04 00	Rhythm Common Chorus
00 06 00	Rhythm Common Reverb
00 10 00	Rhythm Tone (Key # 21)
00 12 00	Rhythm Tone (Key # 22)
:	
01 3E 00	Rhythm Tone (Key # 108)

* Setup

Offset Address		Description	
00 00	0000 0aaa	Sound Mode	(0 - 4) PATCH, PERFORM, GM1, GM2, GS
00 01	0aaa aaaa	Performance Bank Select MSB (CC# 0)	(0 - 127)
00 02	0aaa aaaa	Performance Bank Select LSB (CC# 32)	(0 - 127)
00 03	0aaa aaaa	Performance Program Number (PC)	(0 - 127)
00 04	0aaa aaaa	Patch Bank Select MSB (CC# 0)	(0 - 127)
00 05	0aaa aaaa	Patch Bank Select LSB (CC# 32)	(0 - 127)
00 06	0aaa aaaa	Patch Program Number (PC)	(0 - 127)
00 07	0aaa aaaa	(reserve) <*>	
00 08	0aaa aaaa	(reserve) <*>	
00 09	0aaa aaaa	(reserve) <*>	
00 0A	0000 000a	MFX1 Switch	(0 - 1) BYPASS, ON
00 0B	0000 000a	MFX2 Switch	(0 - 1) BYPASS, ON
00 0C	0000 000a	MFX3 Switch	(0 - 1) BYPASS, ON
00 0D	0000 000a	Chorus Switch	(0 - 1) OFF, ON
00 0E	0000 000a	Reverb Switch	(0 - 1) OFF, ON
00 0F	0000 000a	Input Effect Switch	(0 - 1) OFF, ON
00 10	0000 000a	(reserve) <*>	
00 11	0000 000a	(reserve) <*>	
00 12	0000 aaaa	(reserve) <*>	
00 13	0000 0aaa	(reserve) <*>	
00 14	0000 0aaa	(reserve) <*>	
00 15	0000 00aa	(reserve) <*>	
00 16	0000 000a	(reserve) <*>	
00 17	0aaa aaaa	(reserve) <*>	
00 18	0aaa aaaa	(reserve) <*>	
00 19	0000 000a	(reserve) <*>	
00 1A	0aaa aaaa	(reserve) <*>	
00 1B	0aaa aaaa	(reserve) <*>	
00 1C	0aaa aaaa	(reserve) <*>	
00 1D	0000 0aaa	(reserve) <*>	
00 1E	0000 000a	(reserve) <*>	
00 1F	0aaa aaaa	(reserve) <*>	
00 20	0aaa aaaa	(reserve) <*>	
00 21	0000 000a	(reserve) <*>	
00 22	0aaa aaaa	(reserve) <*>	
# 00 23	0000 aaaa		
	0000 bbbb	(reserve) <*>	
00 25	0000 000a	(reserve) <*>	
00 26	0aaa aaaa	(reserve) <*>	
00 27	0aaa aaaa	(reserve) <*>	
00 28	0aaa aaaa	(reserve) <*>	
00 29	0000 000a	(reserve) <*>	
00 2A	0aaa aaaa	(reserve) <*>	
00 2B	00aa aaaa	(reserve) <*>	
00 2C	0000 000a	(reserve) <*>	
00 2D	0000 000a	(reserve) <*>	

00 2E	0000 000a	(reserve) <*>
00 2F	0000 000a	(reserve) <*>
00 30	0aaa aaaa	(reserve) <*>
00 31	0000 000a	(reserve) <*>
00 32	0000 00aa	(reserve) <*>
00 33	00aa aaaa	(reserve) <*>
00 00 00 34	Total Size	

* System Common

Offset Address		Description	
# 00 00	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Master Tune	(24 - 2024) -100.0 - 100.0 [cent]
00 04	00aa aaaa	Master Key Shift	(40 - 88) -24 - +24
00 05	0aaa aaaa	Master Level	(0 - 127)
00 06	0000 000a	Scale Tune Switch	(0 - 1) OFF, ON
00 07	0000 000a	Patch Remain	(0 - 1) OFF, ON
00 08	0000 000a	Mix/Parallel <*>	---, PARALLEL
00 09	000a aaaa	Performance Control Channel	(0 - 16) 1 - 16, OFF
00 0A	0000 aaaa	Patch Receive Channel	(0 - 15) 1 - 16
00 0B	0000 aaaa	(reserve) <*>	
00 0C	0aaa aaaa	Patch Scale Tune for C	(0 - 127) -64 - +63
00 0D	0aaa aaaa	Patch Scale Tune for C#	(0 - 127) -64 - +63
00 0E	0aaa aaaa	Patch Scale Tune for D	(0 - 127) -64 - +63
00 0F	0aaa aaaa	Patch Scale Tune for D#	(0 - 127) -64 - +63
00 10	0aaa aaaa	Patch Scale Tune for E	(0 - 127) -64 - +63
00 11	0aaa aaaa	Patch Scale Tune for F	(0 - 127) -64 - +63
00 12	0aaa aaaa	Patch Scale Tune for F#	(0 - 127) -64 - +63
00 13	0aaa aaaa	Patch Scale Tune for G	(0 - 127) -64 - +63
00 14	0aaa aaaa	Patch Scale Tune for G#	(0 - 127) -64 - +63
00 15	0aaa aaaa	Patch Scale Tune for A	(0 - 127) -64 - +63
00 16	0aaa aaaa	Patch Scale Tune for A#	(0 - 127) -64 - +63
00 17	0aaa aaaa	Patch Scale Tune for B	(0 - 127) -64 - +63
00 18	0aaa aaaa	System Control 1 Source	(0 - 97) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT
00 19	0aaa aaaa	System Control 2 Source	(0 - 97) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT
00 1A	0aaa aaaa	System Control 3 Source	(0 - 97) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT
00 1B	0aaa aaaa	System Control 4 Source	(0 - 97) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT
00 1C	0000 000a	Receive Program Change	(0 - 1) OFF, ON
00 1D	0000 000a	Receive Bank Select	(0 - 1) OFF, ON
00 00 00 1E	Total Size		

* System Mastering

Offset Address		Description	
00 00	0000 000a	Mastering Switch	(0 - 1) OFF, ON
00 01	0aaa aaaa	Low band Attack time	(0 - 100)
00 02	0aaa aaaa	Low band Release time	(0 - 100)
00 03	00aa aaaa	Low band Threshold	(0 - 36) -36, -35, -34, -33, -32, -31, -30, -29, -28, -27, -26, -25, -24, -23, -22, -21, -20, -19, -18, -17, -16, -15, -14, -13, -12, -11, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0 [dB]
00 04	0000 aaaa	Low band Ratio	(0 - 13) 1:1.0, 1:1.1, 1:1.2, 1:1.4, 1:1.6, 1:1.8, 1:2.0, 1:2.5, 1:3.2, 1:4.0, 1:5.6, 1:8.0, 1:16, 1:INF
00 05	000a aaaa	Low band Level	(0 - 24) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 [dB]
00 06	0aaa aaaa	Mid band Attack time	(0 - 100)
00 07	0aaa aaaa	Mid band Release time	(0 - 100)
00 08	00aa aaaa	Mid band Threshold	(0 - 36) -36, -35, -34, -33, -32, -31, -30, -29, -28, -27, -26, -25, -24, -23, -22, -21, -20, -19, -18, -17, -16, -15, -14, -13, -12, -11, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0 [dB]
00 09	0000 aaaa	Mid band Ratio	(0 - 13) 1:1.0, 1:1.1, 1:1.2, 1:1.4, 1:1.6, 1:1.8, 1:2.0, 1:2.5, 1:3.2, 1:4.0, 1:5.6, 1:8.0, 1:16, 1:INF
00 0A	000a aaaa	Mid band Level	(0 - 24) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 [dB]
00 0B	0aaa aaaa	High band Attack time	(0 - 100)
00 0C	0aaa aaaa	High band Release time	(0 - 100)
00 0D	00aa aaaa	High band Threshold	(0 - 36) -36, -35, -34, -33, -32, -31, -30, -29, -28, -27, -26, -25, -24, -23, -22, -21, -20, -19, -18, -17, -16, -15, -14, -13, -12, -11, -10, -9, -8, -7, -6, -5, -4, -3, -2, -1, 0 [dB]
00 0E	0000 aaaa	High band Ratio	(0 - 13) 1:1.0, 1:1.1, 1:1.2, 1:1.4, 1:1.6, 1:1.8, 1:2.0, 1:2.5, 1:3.2, 1:4.0, 1:5.6, 1:8.0, 1:16, 1:INF
00 0F	000a aaaa	High band Level	(0 - 24) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24 [dB]
00 10	0000 0aaa	Split Freq Low	(0 - 6) 200, 250, 315, 400, 500, 630, 800 [Hz]
00 11	0000 0aaa	Split Freq High	(0 - 6) 2000, 2500, 3150, 4000, 5000, 6300, 8000 [Hz]
00 00 00 12	Total Size		

* System External Input

Offset Address		Description	
00 00	0aaa aaaa	External Dry Send Level	(0 - 127)
00 01	0aaa aaaa	External Chorus Send Level	(0 - 127)
00 02	0aaa aaaa	External Reverb Send Level	(0 - 127)
00 03	0000 aaaa	External Output Assign	(0 - 1) MFX, DRY
00 04	0000 00aa	External Output MFX Select	(0 - 2) MFX1, MFX2, MFX3
00 05	0000 aaaa	Input Effect Type	(0 - 6)
# 00 06	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Input Effect Parameter 1	(12768 - 52768) -20000 - +20000
# 00 0A	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Input Effect Parameter 2	(12768 - 52768) -20000 - +20000
# 00 0E	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Input Effect Parameter 3	(12768 - 52768) -20000 - +20000
# 00 12	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Input Effect Parameter 4	(12768 - 52768) -20000 - +20000
# 00 16	0000 aaaa 0000 bbbb		

		0000 cccc		
		0000 dddd	Input Effect Parameter 5	(12768 - 52768) -20000 - +20000
#	00 1A	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 6	(12768 - 52768) -20000 - +20000
#	00 1E	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 7	(12768 - 52768) -20000 - +20000
#	00 22	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 8	(12768 - 52768) -20000 - +20000
#	00 26	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 9	(12768 - 52768) -20000 - +20000
#	00 2A	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 10	(12768 - 52768) -20000 - +20000
#	00 2E	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 11	(12768 - 52768) -20000 - +20000
#	00 32	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 12	(12768 - 52768) -20000 - +20000
#	00 36	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 13	(12768 - 52768) -20000 - +20000
#	00 3A	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 14	(12768 - 52768) -20000 - +20000
#	00 3E	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 15	(12768 - 52768) -20000 - +20000
#	00 42	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 16	(12768 - 52768) -20000 - +20000
#	00 46	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 17	(12768 - 52768) -20000 - +20000
#	00 4A	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 18	(12768 - 52768) -20000 - +20000
#	00 4E	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 19	(12768 - 52768) -20000 - +20000
#	00 52	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Input Effect Parameter 20	(12768 - 52768) -20000 - +20000
	00 56	0000 000a	USB Audio Assign	(0 - 1) TO OUTPUT, TO INPUT FX
	00 57	0000 00aa	Input Assign	(0 - 2) TO COM+OUT, TO COM, TO INPUT FX
	00 58	0000 000a	To Computer	(0 - 1) MIX, INPUT FX
	00 59	0000 000a	MFX3 Location	(0 - 1) TG, INPUT FX
00 00 00 5A			Total Size	

* Performance Common

Offset Address		Description	
00 00	0aaa aaaa	Performance Name 1	(32 - 127) 32 - 127 [ASCII]
00 01	0aaa aaaa	Performance Name 2	(32 - 127) 32 - 127 [ASCII]
00 02	0aaa aaaa	Performance Name 3	(32 - 127) 32 - 127 [ASCII]
00 03	0aaa aaaa	Performance Name 4	(32 - 127) 32 - 127 [ASCII]
00 04	0aaa aaaa	Performance Name 5	(32 - 127) 32 - 127 [ASCII]
00 05	0aaa aaaa	Performance Name 6	(32 - 127) 32 - 127 [ASCII]
00 06	0aaa aaaa	Performance Name 7	(32 - 127) 32 - 127 [ASCII]
00 07	0aaa aaaa	Performance Name 8	(32 - 127) 32 - 127 [ASCII]
00 08	0aaa aaaa	Performance Name 9	(32 - 127) 32 - 127 [ASCII]
00 09	0aaa aaaa	Performance Name 10	(32 - 127) 32 - 127 [ASCII]
00 0A	0aaa aaaa	Performance Name 11	(32 - 127) 32 - 127 [ASCII]
00 0B	0aaa aaaa	Performance Name 12	(32 - 127) 32 - 127 [ASCII]
00 0C	00aa aaaa	Solo Part Select	(0 - 16) OFF, 1 - 16
00 0D	000a aaaa	MFX1 Control Channel	(0 - 16) 1 - 16, OFF
00 0E	0000 000a	(reserve) <*>	(1 - 0)
00 0F	0000 000a	(reserve) <*>	(1 - 0)
00 10	0aaa aaaa	Voice Reserve 1	(0 - 64) 0 - 63, FULL
00 11	0aaa aaaa	Voice Reserve 2	(0 - 64) 0 - 63, FULL
00 12	0aaa aaaa	Voice Reserve 3	(0 - 64) 0 - 63, FULL
00 13	0aaa aaaa	Voice Reserve 4	(0 - 64) 0 - 63, FULL
00 14	0aaa aaaa	Voice Reserve 5	(0 - 64) 0 - 63, FULL
00 15	0aaa aaaa	Voice Reserve 6	(0 - 64) 0 - 63, FULL
00 16	0aaa aaaa	Voice Reserve 7	(0 - 64) 0 - 63, FULL
00 17	0aaa aaaa	Voice Reserve 8	(0 - 64) 0 - 63, FULL
00 18	0aaa aaaa	Voice Reserve 9	(0 - 64) 0 - 63, FULL
00 19	0aaa aaaa	Voice Reserve 10	(0 - 64) 0 - 63, FULL
00 1A	0aaa aaaa	Voice Reserve 11	(0 - 64) 0 - 63, FULL
00 1B	0aaa aaaa	Voice Reserve 12	(0 - 64) 0 - 63, FULL
00 1C	0aaa aaaa	Voice Reserve 13	(0 - 64) 0 - 63, FULL
00 1D	0aaa aaaa	Voice Reserve 14	(0 - 64) 0 - 63, FULL
00 1E	0aaa aaaa	Voice Reserve 15	(0 - 64) 0 - 63, FULL
00 1F	0aaa aaaa	Voice Reserve 16	(0 - 64) 0 - 63, FULL
00 20	0aaa aaaa	(reserve) <*>	(0 - 64)
00 21	0aaa aaaa	(reserve) <*>	(0 - 64)
00 22	0aaa aaaa	(reserve) <*>	(0 - 64)
00 23	0aaa aaaa	(reserve) <*>	(0 - 64)
00 24	0aaa aaaa	(reserve) <*>	(0 - 64)
00 25	0aaa aaaa	(reserve) <*>	(0 - 64)
00 26	0aaa aaaa	(reserve) <*>	(0 - 64)
00 27	0aaa aaaa	(reserve) <*>	(0 - 64)
00 28	0aaa aaaa	(reserve) <*>	(0 - 64)
00 29	0aaa aaaa	(reserve) <*>	(0 - 64)
00 2A	0aaa aaaa	(reserve) <*>	(0 - 64)
00 2B	0aaa aaaa	(reserve) <*>	(0 - 64)
00 2C	0aaa aaaa	(reserve) <*>	(0 - 64)
00 2D	0aaa aaaa	(reserve) <*>	(0 - 64)

00 2E	0aaa aaaa	(reserve) <*>	(0 - 64)
00 2F	0aaa aaaa	(reserve) <*>	(0 - 64)
00 30	00aa aaaa	MFX1 Source	(0 - 16) PERFORM, 1 - 16
00 31	00aa aaaa	MFX2 Source	(0 - 16) PERFORM, 1 - 16
00 32	00aa aaaa	MFX3 Source	(0 - 16) PERFORM, 1 - 16
00 33	00aa aaaa	Chorus Source	(0 - 16) PERFORM, 1 - 16
00 34	00aa aaaa	Reverb Source	(0 - 16) PERFORM, 1 - 16
00 35	00aa aaaa	MFX2 Control Channel	(0 - 16) 1 - 16, OFF
00 36	00aa aaaa	MFX3 Control Channel	(0 - 16) 1 - 16, OFF
00 37	0000 aaaa	MFX Structure	(0 - 15) 1 - 16
00 00 00 38	Total Size		

* Performance Common MFX

Offset Address		Description	
00 00	0aaa aaaa	MFX Type	(0 - 78)
00 01	0aaa aaaa	MFX Dry Send Level	(0 - 127)
00 02	0aaa aaaa	MFX Chorus Send Level	(0 - 127)
00 03	0aaa aaaa	MFX Reverb Send Level	(0 - 127)
00 04	0000 00aa	MFX Output Assign <*>	A, ---, ---, ---
00 05	0aaa aaaa	MFX Control 1 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 06	0aaa aaaa	MFX Control 1 Sens	(1 - 127) -63 - +63
00 07	0aaa aaaa	MFX Control 2 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 08	0aaa aaaa	MFX Control 2 Sens	(1 - 127) -63 - +63
00 09	0aaa aaaa	MFX Control 3 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 0A	0aaa aaaa	MFX Control 3 Sens	(1 - 127) -63 - +63
00 0B	0aaa aaaa	MFX Control 4 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 0C	0aaa aaaa	MFX Control 4 Sens	(1 - 127) -63 - +63
00 0D	000a aaaa	MFX Control Assign 1	(0 - 16) OFF, 1 - 16
00 0E	000a aaaa	MFX Control Assign 2	(0 - 16) OFF, 1 - 16
00 0F	000a aaaa	MFX Control Assign 3	(0 - 16) OFF, 1 - 16
00 10	000a aaaa	MFX Control Assign 4	(0 - 16) OFF, 1 - 16
# 00 11	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 1	(12768 - 52768) -20000 - +20000
# 00 15	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 2	(12768 - 52768) -20000 - +20000
# 00 19	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 3	(12768 - 52768) -20000 - +20000
# 00 1D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 4	(12768 - 52768) -20000 - +20000
# 00 21	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 5	(12768 - 52768) -20000 - +20000
# 00 25	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 6	(12768 - 52768) -20000 - +20000
# 00 29	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 7	(12768 - 52768) -20000 - +20000
# 00 2D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 8	(12768 - 52768) -20000 - +20000
# 00 31	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 9	(12768 - 52768) -20000 - +20000
# 00 35	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 10	(12768 - 52768) -20000 - +20000
# 00 39	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 11	(12768 - 52768) -20000 - +20000
# 00 3D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 12	(12768 - 52768) -20000 - +20000
# 00 41	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 13	(12768 - 52768) -20000 - +20000
# 00 45	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 14	(12768 - 52768) -20000 - +20000
# 00 49	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 15	(12768 - 52768) -20000 - +20000
# 00 4D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 16	(12768 - 52768) -20000 - +20000
# 00 51	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 17	(12768 - 52768) -20000 - +20000
# 00 55	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 18	(12768 - 52768) -20000 - +20000
# 00 59	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 19	(12768 - 52768) -20000 - +20000
# 00 5D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 20	(12768 - 52768) -20000 - +20000
# 00 61	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 21	(12768 - 52768) -20000 - +20000
# 00 65	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 22	(12768 - 52768) -20000 - +20000
# 00 69	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 23	(12768 - 52768) -20000 - +20000
# 00 6D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 24	(12768 - 52768) -20000 - +20000
# 00 71	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 25	(12768 - 52768) -20000 - +20000
# 00 75	0000 aaaa 0000 bbbb 0000 cccc		

	0000 dddd	MFX Parameter 26	(12768 - 52768) -20000 - +20000
# 00 79	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 27	(12768 - 52768) -20000 - +20000
# 00 7D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 28	(12768 - 52768) -20000 - +20000
# 01 01	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 29	(12768 - 52768) -20000 - +20000
# 01 05	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 30	(12768 - 52768) -20000 - +20000
# 01 09	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 31	(12768 - 52768) -20000 - +20000
# 01 0D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 32	(12768 - 52768) -20000 - +20000
00 00 01 11	Total Size		

* Performance Common Chorus

Offset Address		Description	
00 00	0000 aaaa	Chorus Type	(0 - 3)
00 01	0aaa aaaa	Chorus Level	(0 - 127)
00 02	0000 00aa	Chorus Output Assign <*>	A, ---, ---, ---
00 03	0000 00aa	Chorus Output Select	(0 - 2) MAIN, REV, MAIN+REV
# 00 04	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 1	(12768 - 52768) -20000 - +20000
# 00 08	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 2	(12768 - 52768) -20000 - +20000
# 00 0C	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 3	(12768 - 52768) -20000 - +20000
# 00 10	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 4	(12768 - 52768) -20000 - +20000
# 00 14	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 5	(12768 - 52768) -20000 - +20000
# 00 18	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 6	(12768 - 52768) -20000 - +20000
# 00 1C	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 7	(12768 - 52768) -20000 - +20000
# 00 20	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 8	(12768 - 52768) -20000 - +20000
# 00 24	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 9	(12768 - 52768) -20000 - +20000
# 00 28	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 10	(12768 - 52768) -20000 - +20000
# 00 2C	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 11	(12768 - 52768) -20000 - +20000
# 00 30	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 12	(12768 - 52768) -20000 - +20000
# 00 34	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 13	(12768 - 52768) -20000 - +20000
# 00 38	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 14	(12768 - 52768) -20000 - +20000
# 00 3C	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 15	(12768 - 52768) -20000 - +20000
# 00 40	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 16	(12768 - 52768) -20000 - +20000
# 00 44	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 17	(12768 - 52768) -20000 - +20000
# 00 48	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 18	(12768 - 52768) -20000 - +20000
# 00 4C	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 19	(12768 - 52768) -20000 - +20000
# 00 50	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Chorus Parameter 20	(12768 - 52768) -20000 - +20000
00 00 00 54	Total Size		

* Performance Common Reverb

Offset Address		Description	
00 00	0000 aaaa	Reverb Type	(0 - 5)
00 01	0aaa aaaa	Reverb Level	(0 - 127)
00 02	0000 00aa	Reverb Output Assign <*>	A, ---, ---, ---
# 00 03	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 1	(12768 - 52768) -20000 - +20000
# 00 07	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 2	(12768 - 52768) -20000 - +20000
# 00 0B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 3	(12768 - 52768) -20000 - +20000
# 00 0F	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 4	(12768 - 52768) -20000 - +20000
# 00 13	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 5	(12768 - 52768) -20000 - +20000
# 00 17	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 6	(12768 - 52768) -20000 - +20000
# 00 1B	0000 aaaa 0000 bbbb		

		0000 cccc		
		0000 dddd	Reverb Parameter 7	(12768 - 52768) -20000 - +20000
#	00 1F	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 8	(12768 - 52768) -20000 - +20000
#	00 23	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 9	(12768 - 52768) -20000 - +20000
#	00 27	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 10	(12768 - 52768) -20000 - +20000
#	00 2B	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 11	(12768 - 52768) -20000 - +20000
#	00 2F	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 12	(12768 - 52768) -20000 - +20000
#	00 33	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 13	(12768 - 52768) -20000 - +20000
#	00 37	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 14	(12768 - 52768) -20000 - +20000
#	00 3B	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 15	(12768 - 52768) -20000 - +20000
#	00 3F	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 16	(12768 - 52768) -20000 - +20000
#	00 43	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 17	(12768 - 52768) -20000 - +20000
#	00 47	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 18	(12768 - 52768) -20000 - +20000
#	00 4B	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 19	(12768 - 52768) -20000 - +20000
#	00 4F	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	Reverb Parameter 20	(12768 - 52768) -20000 - +20000
	00 00 00 53	Total Size		

* Performance MIDI

Offset Address		Description	
00 00	0000 000a	Receive Program Change	(0 - 1) OFF, ON
00 01	0000 000a	Receive Bank Select	(0 - 1) OFF, ON
00 02	0000 000a	Receive Bender	(0 - 1) OFF, ON
00 03	0000 000a	Receive Polyphonic Key Pressure	(0 - 1) OFF, ON
00 04	0000 000a	Receive Channel Pressure	(0 - 1) OFF, ON
00 05	0000 000a	Receive Modulation	(0 - 1) OFF, ON
00 06	0000 000a	Receive Volume	(0 - 1) OFF, ON
00 07	0000 000a	Receive Pan	(0 - 1) OFF, ON
00 08	0000 000a	Receive Expression	(0 - 1) OFF, ON
00 09	0000 000a	Receive Hold-1	(0 - 1) OFF, ON
00 0A	0000 000a	Phase Lock	(0 - 1) OFF, ON
00 0B	0000 0aaa	Velocity Curve Type	(0 - 4) OFF, 1 - 4
00 00 00 0C	Total Size		

* Performance Part

Offset Address		Description	
00 00	0000 aaaa	Receive Channel	(0 - 15) 1 - 16
00 01	0000 000a	Receive Switch	(0 - 1) OFF, ON
00 02	0000 0000	(reserve) <*>	(1 - 0)
00 03	0000 0000	(reserve) <*>	(1 - 0)
00 04	0aaa aaaa	Patch Bank Select MSB (CC# 0)	(0 - 127)
00 05	0aaa aaaa	Patch Bank Select LSB (CC# 32)	(0 - 127)
00 06	0aaa aaaa	Patch Program Number (PC)	(0 - 127)
00 07	0aaa aaaa	Part Level (CC# 7)	(0 - 127)
00 08	0aaa aaaa	Part Pan (CC# 10)	(0 - 127) L64 - 63R
00 09	0aaa aaaa	Part Coarse Tune (RPN# 2)	(16 - 112) -48 - +48
00 0A	0aaa aaaa	Part Fine Tune (RPN# 1)	(14 - 114) -50 - +50
00 0B	0000 00aa	Part Mono/Poly (MONO ON/POLY ON)	(0 - 2) MONO, POLY, PATCH
00 0C	0000 00aa	Part Legato Switch (CC# 68)	(0 - 2) OFF, ON, PATCH
00 0D	000a aaaa	Part Pitch Bend Range (RPN# 0)	(0 - 25) 0 - 24, PATCH
00 0E	0000 00aa	Part Portamento Switch (CC# 65)	(0 - 2) OFF, ON, PATCH
# 00 0F	0000 aaaa		
	0000 bbbb	Part Portamento Time (CC# 5)	(0 - 128) 0 - 127, PATCH
00 11	0aaa aaaa	Part Cutoff Offset (CC# 74)	(0 - 127) -64 - +63
00 12	0aaa aaaa	Part Resonance Offset (CC# 71)	(0 - 127) -64 - +63
00 13	0aaa aaaa	Part Attack Offset (CC# 73)	(0 - 127) -64 - +63
00 14	0aaa aaaa	Part Release Offset (CC# 72)	(0 - 127) -64 - +63
00 15	0000 0aaa	Part Octave Shift	(61 - 67) -3 - +3
00 16	0aaa aaaa	Part Velocity Sens Offset	(1 - 127) -63 - +63
00 17	0aaa aaaa	Keyboard Range Lower	(0 - 127) C-1 - UPPER
00 18	0aaa aaaa	Keyboard Range Upper	(0 - 127) LOWER - G9
00 19	0aaa aaaa	Keyboard Fade Width Lower	(0 - 127)
00 1A	0aaa aaaa	Keyboard Fade Width Upper	(0 - 127)
00 1B	0000 000a	Mute Switch	(0 - 1) OFF, MUTE
00 1C	0aaa aaaa	Part Dry Send Level	(0 - 127)
00 1D	0aaa aaaa	Part Chorus Send Level (CC# 93)	(0 - 127)
00 1E	0aaa aaaa	Part Reverb Send Level (CC# 91)	(0 - 127)
00 1F	0000 aaaa	Part Output Assign	(0 - 13) MFX, A, ---, ---, ---, 1, 2, ---, ---, ---, ---, ---, ---, PATCH
00 20	0000 00aa	Part Output MFX Select	(0 - 2) MFX1, MFX2, MFX3
00 21	0aaa aaaa	Part Decay Offset (CC# 75)	(0 - 127) -64 - +63
00 22	0aaa aaaa	Part Vibrato Rate (CC# 76)	(0 - 127) -64 - +63
00 23	0aaa aaaa	Part Vibrato Depth (CC# 77)	(0 - 127) -64 - +63
00 24	0aaa aaaa	Part Vibrato Delay (CC# 78)	(0 - 127) -64 - +63
00 25	0aaa aaaa	Part Scale Tune for C	(0 - 127) -64 - +63
00 26	0aaa aaaa	Part Scale Tune for C#	(0 - 127) -64 - +63
00 27	0aaa aaaa	Part Scale Tune for D	(0 - 127) -64 - +63
00 28	0aaa aaaa	Part Scale Tune for D#	(0 - 127) -64 - +63
00 29	0aaa aaaa	Part Scale Tune for E	(0 - 127) -64 - +63

00 2A	0aaa aaaa	Part Scale Tune for F	(0 - 127) -64 - +63
00 2B	0aaa aaaa	Part Scale Tune for F#	(0 - 127) -64 - +63
00 2C	0aaa aaaa	Part Scale Tune for G	(0 - 127) -64 - +63
00 2D	0aaa aaaa	Part Scale Tune for G#	(0 - 127) -64 - +63
00 2E	0aaa aaaa	Part Scale Tune for A	(0 - 127) -64 - +63
00 2F	0aaa aaaa	Part Scale Tune for A#	(0 - 127) -64 - +63
00 30	0aaa aaaa	Part Scale Tune for B	(0 - 127) -64 - +63
00 00 00 31	Total Size		

* Performance Controller

Offset Address	Description		
00 00	0000 000a	(reserve) <*>	
00 01	0aaa aaaa	(reserve) <*>	
00 02	0aaa aaaa	(reserve) <*>	
00 03	0aaa aaaa	(reserve) <*>	
00 04	0000 aaaa	(reserve) <*>	
00 05	0aaa aaaa	(reserve) <*>	
00 06	0aaa aaaa	(reserve) <*>	
00 07	0aaa aaaa	(reserve) <*>	
00 08	0aaa aaaa	(reserve) <*>	
00 09	0aaa aaaa	(reserve) <*>	
00 0A	0aaa aaaa	(reserve) <*>	
00 0B	0aaa aaaa	(reserve) <*>	
00 0C	0aaa aaaa	(reserve) <*>	
00 0D	0000 000a	(reserve) <*>	
00 0E	0aaa aaaa	(reserve) <*>	
00 0F	0aaa aaaa	(reserve) <*>	
00 10	0000 000a	(reserve) <*>	
00 11	0aaa aaaa	(reserve) <*>	
00 12	0aaa aaaa	(reserve) <*>	
00 13	0aaa aaaa	(reserve) <*>	
00 14	0000 0aaa	(reserve) <*>	
00 15	0000 000a	(reserve) <*>	
00 16	0aaa aaaa	(reserve) <*>	
00 17	0aaa aaaa	(reserve) <*>	
00 18	0000 aaaa	(reserve) <*>	
00 19	0000 000a	(reserve) <*>	
00 1A	0aaa aaaa	(reserve) <*>	
00 1B	0aaa aaaa	(reserve) <*>	
00 1C	0aaa aaaa	(reserve) <*>	
00 1D	0aaa aaaa	(reserve) <*>	
00 1E	0000 000a	(reserve) <*>	
00 1F	0aaa aaaa	(reserve) <*>	
00 20	00aa aaaa	(reserve) <*>	
00 21	0aaa aaaa	(reserve) <*>	
00 22	0aaa aaaa	(reserve) <*>	
00 23	000a aaaa	(reserve) <*>	
00 24	0aaa aaaa	(reserve) <*>	
00 25	0aaa aaaa	(reserve) <*>	
00 26	0aaa aaaa	(reserve) <*>	
00 27	0aaa aaaa	(reserve) <*>	
00 28	0aaa aaaa	(reserve) <*>	
00 29	0aaa aaaa	(reserve) <*>	
00 2A	0aaa aaaa	(reserve) <*>	
00 2B	0aaa aaaa	(reserve) <*>	
00 2C	0aaa aaaa	(reserve) <*>	
00 2D	0aaa aaaa	(reserve) <*>	
00 2E	0aaa aaaa	(reserve) <*>	
00 2F	0aaa aaaa	(reserve) <*>	
00 30	0aaa aaaa	(reserve) <*>	
00 31	0aaa aaaa	(reserve) <*>	
00 32	0aaa aaaa	(reserve) <*>	
00 33	0aaa aaaa	(reserve) <*>	
00 34	0aaa aaaa	(reserve) <*>	
00 35	0aaa aaaa	(reserve) <*>	
00 36	0aaa aaaa	(reserve) <*>	
00 37	0aaa aaaa	(reserve) <*>	
00 38	0aaa aaaa	(reserve) <*>	
00 39	0aaa aaaa	(reserve) <*>	
00 3A	0aaa aaaa	(reserve) <*>	
00 3B	0aaa aaaa	(reserve) <*>	
00 3C	0aaa aaaa	(reserve) <*>	
00 3D	0aaa aaaa	(reserve) <*>	
00 3E	0aaa aaaa	(reserve) <*>	
00 3F	0aaa aaaa	(reserve) <*>	
00 40	0aaa aaaa	(reserve) <*>	
00 41	0aaa aaaa	(reserve) <*>	
00 42	0aaa aaaa	(reserve) <*>	
00 43	0aaa aaaa	(reserve) <*>	
00 44	0aaa aaaa	(reserve) <*>	
00 45	0aaa aaaa	(reserve) <*>	
00 46	0aaa aaaa	(reserve) <*>	
00 47	0aaa aaaa	(reserve) <*>	
00 48	0aaa aaaa	(reserve) <*>	
00 49	0aaa aaaa	(reserve) <*>	
00 4A	0aaa aaaa	(reserve) <*>	
00 4B	0aaa aaaa	(reserve) <*>	
00 4C	0aaa aaaa	(reserve) <*>	
00 4D	0aaa aaaa	(reserve) <*>	
00 4E	0aaa aaaa	(reserve) <*>	
00 4F	0aaa aaaa	(reserve) <*>	
00 50	0aaa aaaa	(reserve) <*>	
00 51	0aaa aaaa	(reserve) <*>	
00 52	0aaa aaaa	(reserve) <*>	
00 53	0aaa aaaa	(reserve) <*>	
00 54	0000 aaaa		
	0000 bbbb	Recommended Tempo	(20 - 250)
00 56	0000 000a	(reserve) <*>	
00 57	0000 00aa	(reserve) <*>	
00 00 00 58	Total Size		

* Patch Common

Offset Address	Description		
00 00	0aaa aaaa	Patch Name 1	(32 - 127) 32 - 127 [ASCII]
00 01	0aaa aaaa	Patch Name 2	(32 - 127) 32 - 127 [ASCII]
00 02	0aaa aaaa	Patch Name 3	(32 - 127) 32 - 127 [ASCII]
00 03	0aaa aaaa	Patch Name 4	(32 - 127) 32 - 127 [ASCII]
00 04	0aaa aaaa	Patch Name 5	(32 - 127) 32 - 127 [ASCII]
00 05	0aaa aaaa	Patch Name 6	(32 - 127) 32 - 127 [ASCII]
00 06	0aaa aaaa	Patch Name 7	(32 - 127) 32 - 127 [ASCII]
00 07	0aaa aaaa	Patch Name 8	(32 - 127) 32 - 127 [ASCII]
00 08	0aaa aaaa	Patch Name 9	(32 - 127) 32 - 127 [ASCII]
00 09	0aaa aaaa	Patch Name 10	(32 - 127) 32 - 127 [ASCII]
00 0A	0aaa aaaa	Patch Name 11	(32 - 127) 32 - 127 [ASCII]
00 0B	0aaa aaaa	Patch Name 12	(32 - 127) 32 - 127 [ASCII]
00 0C	0aaa aaaa	Patch Category	(0 - 127)
00 0D	0000 000a	(reserve)	
00 0E	0aaa aaaa	Patch Level	(0 - 127)
00 0F	0aaa aaaa	Patch Pan	(0 - 127) L64 - 63R
00 10	0000 000a	Patch Priority	(0 - 1) LAST, LOUDEST
00 11	0aaa aaaa	Patch Coarse Tune	(16 - 112) -48 - +48
00 12	0aaa aaaa	Patch Fine Tune	(14 - 114) -50 - +50
00 13	0000 0aaa	Octave Shift	(61 - 67) -3 - +3
00 14	0000 00aa	Stretch Tune Depth	(0 - 3) OFF, 1 - 3
00 15	0aaa aaaa	Analog Feel	(0 - 127)
00 16	0000 000a	Mono/Poly	(0 - 1) MONO, POLY
00 17	0000 000a	Legato Switch	(0 - 1) OFF, ON
00 18	0000 000a	Legato Retrigger	(0 - 1) OFF, ON
00 19	0000 000a	Portamento Switch	(0 - 1) OFF, ON
00 1A	0000 000a	Portamento Mode	(0 - 1) NORMAL, LEGATO
00 1B	0000 000a	Portamento Type	(0 - 1) RATE, TIME
00 1C	0000 000a	Portamento Start	(0 - 1) PITCH, NOTE
00 1D	0aaa aaaa	Portamento Time	(0 - 127)
00 1E	0000 000a	(reserve)	
00 1F	0000 aaaa		
	0000 bbbb	(reserve)	
00 21	0000 000a	(reserve)	
00 22	0aaa aaaa	Cutoff Offset	(1 - 127) -63 - +63
00 23	0aaa aaaa	Resonance Offset	(1 - 127) -63 - +63
00 24	0aaa aaaa	Attack Offset	(1 - 127) -63 - +63
00 25	0aaa aaaa	Release Offset	(1 - 127)

			-63 - +63
00 26	0aaa aaaa	Velocity Sens Offset	(1 - 127) -63 - +63
00 27	0000 aaaa	Patch Output Assign	(0 - 13) MFX, A, ---, ---, ---, 1, 2, ---, ---, ---, ---, ---, ---, TONE
00 28	0000 000a	TMT Control Switch	(0 - 1) OFF, ON
00 29	00aa aaaa	Pitch Bend Range Up	(0 - 48)
00 2A	00aa aaaa	Pitch Bend Range Down	(0 - 48)
00 2B	0aaa aaaa	Matrix Control 1 Source	(0 - 109) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4, VELOCITY, KEYFOLLOW, TEMPO, LFO1, LFO2, PIT-ENV, TVF-ENV, TVA-ENV
00 2C	00aa aaaa	Matrix Control 1 Destination 1	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 2D	0aaa aaaa	Matrix Control 1 Sens 1	(1 - 127) -63 - +63
00 2E	00aa aaaa	Matrix Control 1 Destination 2	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 2F	0aaa aaaa	Matrix Control 1 Sens 2	(1 - 127) -63 - +63
00 30	00aa aaaa	Matrix Control 1 Destination 3	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 31	0aaa aaaa	Matrix Control 1 Sens 3	(1 - 127) -63 - +63
00 32	00aa aaaa	Matrix Control 1 Destination 4	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 33	0aaa aaaa	Matrix Control 1 Sens 4	(1 - 127) -63 - +63
00 34	0aaa aaaa	Matrix Control 2 Source	(0 - 109) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4, VELOCITY, KEYFOLLOW, TEMPO, LFO1, LFO2, PIT-ENV, TVF-ENV, TVA-ENV
00 35	00aa aaaa	Matrix Control 2 Destination 1	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 36	0aaa aaaa	Matrix Control 2 Sens 1	(1 - 127) -63 - +63
00 37	00aa aaaa	Matrix Control 2 Destination 2	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 38	0aaa aaaa	Matrix Control 2 Sens 2	(1 - 127) -63 - +63
00 39	00aa aaaa	Matrix Control 2 Destination 3	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 3A	0aaa aaaa	Matrix Control 2 Sens 3	(1 - 127) -63 - +63
00 3B	00aa aaaa	Matrix Control 2 Destination 4	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 3C	0aaa aaaa	Matrix Control 2 Sens 4	(1 - 127) -63 - +63
00 3D	0aaa aaaa	Matrix Control 3 Source	(0 - 109) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4, VELOCITY, KEYFOLLOW, TEMPO, LFO1, LFO2, PIT-ENV, TVF-ENV, TVA-ENV
00 3E	00aa aaaa	Matrix Control 3 Destination 1	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 3F	0aaa aaaa	Matrix Control 3 Sens 1	(1 - 127) -63 - +63
00 40	00aa aaaa	Matrix Control 3 Destination 2	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 41	0aaa aaaa	Matrix Control 3 Sens 2	(1 - 127) -63 - +63
00 42	00aa aaaa	Matrix Control 3 Destination 3	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 43	0aaa aaaa	Matrix Control 3 Sens 3	(1 - 127) -63 - +63
00 44	00aa aaaa	Matrix Control 3 Destination 4	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 45	0aaa aaaa	Matrix Control 3 Sens 4	(1 - 127) -63 - +63
00 46	0aaa aaaa	Matrix Control 4 Source	(0 - 109) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4, VELOCITY, KEYFOLLOW, TEMPO, LFO1, LFO2, PIT-ENV, TVF-ENV, TVA-ENV
00 47	00aa aaaa	Matrix Control 4 Destination 1	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1,

		PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>	
00 48	0aaa aaaa	Matrix Control 4 Sens 1	(1 - 127) -63 - +63
00 49	00aa aaaa	Matrix Control 4 Destination 2	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 4A	0aaa aaaa	Matrix Control 4 Sens 2	(1 - 127) -63 - +63
00 4B	00aa aaaa	Matrix Control 4 Destination 3	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 4C	0aaa aaaa	Matrix Control 4 Sens 3	(1 - 127) -63 - +63
00 4D	00aa aaaa	Matrix Control 4 Destination 4	(0 - 34) OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1, PIT-LFO2, TVF-LFO1, TVF-LFO2, TVA-LFO1, TVA-LFO2, PAN-LFO1, PAN-LFO2, LFO1-RATE, LFO2-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX1, MFX2, MFX3, MFX4, TIME <*>
00 4E	0aaa aaaa	Matrix Control 4 Sens 4	(1 - 127) -63 - +63
00 4F	0000 000a	Part Modulation Switch	(0 - 1) OFF, ON
00 00 00 50	Total Size		

* Patch Common MFX

Offset Address		Description	
00 00	0aaa aaaa	MFX Type	(0 - 78)
00 01	0aaa aaaa	MFX Dry Send Level	(0 - 127)
00 02	0aaa aaaa	MFX Chorus Send Level	(0 - 127)
00 03	0aaa aaaa	MFX Reverb Send Level	(0 - 127)
00 04	0000 00aa	MFX Output Assign <*>	A, ---, ---, ---
00 05	0aaa aaaa	MFX Control 1 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 06	0aaa aaaa	MFX Control 1 Sens	(1 - 127) -63 - +63
00 07	0aaa aaaa	MFX Control 2 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 08	0aaa aaaa	MFX Control 2 Sens	(1 - 127) -63 - +63
00 09	0aaa aaaa	MFX Control 3 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 0A	0aaa aaaa	MFX Control 3 Sens	(1 - 127) -63 - +63
00 0B	0aaa aaaa	MFX Control 4 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 0C	0aaa aaaa	MFX Control 4 Sens	(1 - 127) -63 - +63
00 0D	000a aaaa	MFX Control Assign 1	(0 - 16) OFF, 1 - 16
00 0E	000a aaaa	MFX Control Assign 2	(0 - 16) OFF, 1 - 16
00 0F	000a aaaa	MFX Control Assign 3	(0 - 16) OFF, 1 - 16
00 10	000a aaaa	MFX Control Assign 4	(0 - 16) OFF, 1 - 16
# 00 11	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 1	(12768 - 52768) -20000 - +20000
# 00 15	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 2	(12768 - 52768) -20000 - +20000
# 00 19	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 3	(12768 - 52768) -20000 - +20000
# 00 1D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 4	(12768 - 52768) -20000 - +20000
# 00 21	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 5	(12768 - 52768) -20000 - +20000
# 00 25	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 6	(12768 - 52768) -20000 - +20000
# 00 29	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 7	(12768 - 52768) -20000 - +20000
# 00 2D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 8	(12768 - 52768) -20000 - +20000
# 00 31	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 9	(12768 - 52768) -20000 - +20000
# 00 35	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 10	(12768 - 52768) -20000 - +20000
# 00 39	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 11	(12768 - 52768) -20000 - +20000
# 00 3D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 12	(12768 - 52768) -20000 - +20000
# 00 41	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 13	(12768 - 52768) -20000 - +20000
# 00 45	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 14	(12768 - 52768) -20000 - +20000
# 00 49	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 15	(12768 - 52768) -20000 - +20000
# 00 4D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 16	(12768 - 52768) -20000 - +20000
# 00 51	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 17	(12768 - 52768) -20000 - +20000
# 00 55	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 18	(12768 - 52768) -20000 - +20000
# 00 59	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 19	(12768 - 52768) -20000 - +20000
# 00 5D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 20	(12768 - 52768) -20000 - +20000
# 00 61	0000 aaaa		

	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 21	(12768 - 52768)	
			-20000 - +20000	
# 00 65	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 22	(12768 - 52768)	
			-20000 - +20000	
# 00 69	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 23	(12768 - 52768)	
			-20000 - +20000	
# 00 6D	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 24	(12768 - 52768)	
			-20000 - +20000	
# 00 71	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 25	(12768 - 52768)	
			-20000 - +20000	
# 00 75	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 26	(12768 - 52768)	
			-20000 - +20000	
# 00 79	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 27	(12768 - 52768)	
			-20000 - +20000	
# 00 7D	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 28	(12768 - 52768)	
			-20000 - +20000	
# 01 01	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 29	(12768 - 52768)	
			-20000 - +20000	
# 01 05	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 30	(12768 - 52768)	
			-20000 - +20000	
# 01 09	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 31	(12768 - 52768)	
			-20000 - +20000	
# 01 0D	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	MFX Parameter 32	(12768 - 52768)	
			-20000 - +20000	
00 00 01 11	Total Size			

* Patch Common Chorus

Offset Address		Description	
00 00	0000 aaaa	Chorus Type	(0 - 3)
00 01	0aaa aaaa	Chorus Level	(0 - 127)
00 02	0000 00aa	Chorus Output Assign <*>	A, ---, ---, ---
00 03	0000 00aa	Chorus Output Select	(0 - 2) MAIN, REV, MAIN+REV
# 00 04	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 1	(12768 - 52768) -20000 - +20000
# 00 08	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 2	(12768 - 52768) -20000 - +20000
# 00 0C	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 3	(12768 - 52768) -20000 - +20000
# 00 10	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 4	(12768 - 52768) -20000 - +20000
# 00 14	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 5	(12768 - 52768) -20000 - +20000
# 00 18	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 6	(12768 - 52768) -20000 - +20000
# 00 1C	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 7	(12768 - 52768) -20000 - +20000
# 00 20	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 8	(12768 - 52768) -20000 - +20000
# 00 24	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 9	(12768 - 52768) -20000 - +20000
# 00 28	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 10	(12768 - 52768) -20000 - +20000
# 00 2C	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 11	(12768 - 52768) -20000 - +20000
# 00 30	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 12	(12768 - 52768) -20000 - +20000
# 00 34	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 13	(12768 - 52768) -20000 - +20000
# 00 38	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 14	(12768 - 52768) -20000 - +20000
# 00 3C	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 15	(12768 - 52768) -20000 - +20000
# 00 40	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 16	(12768 - 52768) -20000 - +20000
# 00 44	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 17	(12768 - 52768) -20000 - +20000
# 00 48	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 18	(12768 - 52768) -20000 - +20000
# 00 4C	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 19	(12768 - 52768) -20000 - +20000
# 00 50	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Chorus Parameter 20	(12768 - 52768) -20000 - +20000
00 00 00 54	Total Size		

* Patch Common Reverb

Offset Address		Description	
00 00	0000 aaaa	Reverb Type	(0 - 5)
00 01	0aaa aaaa	Reverb Level	(0 - 127)
00 02	0000 00aa	Reverb Output Assign <*>	A, ---, ---, ---
# 00 03	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 1	(12768 - 52768) -20000 - +20000

Offset Address		Description	
# 00 07	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 2	(12768 - 52768) -20000 - +20000
# 00 0B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 3	(12768 - 52768) -20000 - +20000
# 00 0F	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 4	(12768 - 52768) -20000 - +20000
# 00 13	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 5	(12768 - 52768) -20000 - +20000
# 00 17	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 6	(12768 - 52768) -20000 - +20000
# 00 1B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 7	(12768 - 52768) -20000 - +20000
# 00 1F	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 8	(12768 - 52768) -20000 - +20000
# 00 23	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 9	(12768 - 52768) -20000 - +20000
# 00 27	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 10	(12768 - 52768) -20000 - +20000
# 00 2B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 11	(12768 - 52768) -20000 - +20000
# 00 2F	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 12	(12768 - 52768) -20000 - +20000
# 00 33	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 13	(12768 - 52768) -20000 - +20000
# 00 37	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 14	(12768 - 52768) -20000 - +20000
# 00 3B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 15	(12768 - 52768) -20000 - +20000
# 00 3F	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 16	(12768 - 52768) -20000 - +20000
# 00 43	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 17	(12768 - 52768) -20000 - +20000
# 00 47	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 18	(12768 - 52768) -20000 - +20000
# 00 4B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 19	(12768 - 52768) -20000 - +20000
# 00 4F	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Reverb Parameter 20	(12768 - 52768) -20000 - +20000
00 00 00 53	Total Size		

* Patch TMT (Tone Mix Table)

Offset Address		Description	
00 00	0000 aaaa	Structure Type 1 & 2	(0 - 9) 1 - 10
00 01	0000 00aa	Booster 1 & 2	(0 - 3) 0, +6, +12, +18 [dB]
00 02	0000 aaaa	Structure Type 3 & 4	(0 - 9) 1 - 10
00 03	0000 00aa	Booster 3 & 4	(0 - 3) 0, +6, +12, +18 [dB]
00 04	0000 00aa	TMT Velocity Control	(0 - 3) OFF, ON, RANDOM, CYCLE
00 05	0000 000a	TMT1 Tone Switch	(0 - 1) OFF, ON
00 06	0aaa aaaa	TMT1 Keyboard Range Lower	(0 - 127) C-1 - UPPER
00 07	0aaa aaaa	TMT1 Keyboard Range Upper	(0 - 127) LOWER - G9
00 08	0aaa aaaa	TMT1 Keyboard Fade Width Lower	(0 - 127)
00 09	0aaa aaaa	TMT1 Keyboard Fade Width Upper	(0 - 127)
00 0A	0aaa aaaa	TMT1 Velocity Range Lower	(1 - 127) 1 - UPPER
00 0B	0aaa aaaa	TMT1 Velocity Range Upper	(1 - 127) LOWER - 127
00 0C	0aaa aaaa	TMT1 Velocity Fade Width Lower	(0 - 127)
00 0D	0aaa aaaa	TMT1 Velocity Fade Width Upper	(0 - 127)
00 0E	0000 000a	TMT2 Tone Switch	(0 - 1) OFF, ON
00 0F	0aaa aaaa	TMT2 Keyboard Range Lower	(0 - 127) C-1 - UPPER
00 10	0aaa aaaa	TMT2 Keyboard Range Upper	(0 - 127) LOWER - G9
00 11	0aaa aaaa	TMT2 Keyboard Fade Width Lower	(0 - 127)
00 12	0aaa aaaa	TMT2 Keyboard Fade Width Upper	(0 - 127)
00 13	0aaa aaaa	TMT2 Velocity Range Lower	(1 - 127) 1 - UPPER
00 14	0aaa aaaa	TMT2 Velocity Range Upper	(1 - 127) LOWER - 127
00 15	0aaa aaaa	TMT2 Velocity Fade Width Lower	(0 - 127)
00 16	0aaa aaaa	TMT2 Velocity Fade Width Upper	(0 - 127)
00 17	0000 000a	TMT3 Tone Switch	(0 - 1) OFF, ON
00 18	0aaa aaaa	TMT3 Keyboard Range Lower	(0 - 127) C-1 - UPPER
00 19	0aaa aaaa	TMT3 Keyboard Range Upper	(0 - 127) LOWER - G9
00 1A	0aaa aaaa	TMT3 Keyboard Fade Width Lower	(0 - 127)
00 1B	0aaa aaaa	TMT3 Keyboard Fade Width Upper	(0 - 127)
00 1C	0aaa aaaa	TMT3 Velocity Range Lower	(1 - 127) 1 - UPPER
00 1D	0aaa aaaa	TMT3 Velocity Range Upper	(1 - 127) LOWER - 127
00 1E	0aaa aaaa	TMT3 Velocity Fade Width Lower	(0 - 127)
00 1F	0aaa aaaa	TMT3 Velocity Fade Width Upper	(0 - 127)
00 20	0000 000a	TMT4 Tone Switch	(0 - 1) OFF, ON
00 21	0aaa aaaa	TMT4 Keyboard Range Lower	(0 - 127) C-1 - UPPER
00 22	0aaa aaaa	TMT4 Keyboard Range Upper	(0 - 127) LOWER - G9
00 23	0aaa aaaa	TMT4 Keyboard Fade Width Lower	(0 - 127)
00 24	0aaa aaaa	TMT4 Keyboard Fade Width Upper	(0 - 127)
00 25	0aaa aaaa	TMT4 Velocity Range Lower	(1 - 127) 1 - UPPER
00 26	0aaa aaaa	TMT4 Velocity Range Upper	(1 - 127) LOWER - 127
00 27	0aaa aaaa	TMT4 Velocity Fade Width Lower	(0 - 127)
00 28	0aaa aaaa	TMT4 Velocity Fade Width Upper	(0 - 127)
00 00 00 29	Total Size		

* Patch Tone

Offset Address		Description	
00 00	0aaa aaaa	Tone Level	(0 - 127)
00 01	0aaa aaaa	Tone Coarse Tune	(16 - 112) -48 - +48
00 02	0aaa aaaa	Tone Fine Tune	(14 - 114) -50 - +50
00 03	000a aaaa	Tone Random Pitch Depth	(0 - 30) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200
00 04	0aaa aaaa	Tone Pan	(0 - 127)

				L64 - 63R
	00 05	000a aaaa	Tone Pan Keyfollow	(54 - 74) -100 - +100
	00 06	00aa aaaa	Tone Random Pan Depth	(0 - 63)
	00 07	0aaa aaaa	Tone Alternate Pan Depth	(1 - 127) L63 - 63R
	00 08	0000 000a	Tone Env Mode	(0 - 1) NO-SUS, SUSTAIN
	00 09	0000 00aa	Tone Delay Mode	(0 - 3) NORMAL, HOLD, KEY-OFF-NORMAL, KEY-OFF-DECAY
#	00 0A	0000 aaaa 0000 bbbb	Tone Delay Time	(0 - 149) 0 - 127, MUSICAL-NOTES
	00 0C	0aaa aaaa	Tone Dry Send Level	(0 - 127)
	00 0D	0aaa aaaa	Tone Chorus Send Level (MFX)	(0 - 127)
	00 0E	0aaa aaaa	Tone Reverb Send Level (MFX)	(0 - 127)
	00 0F	0aaa aaaa	Tone Chorus Send Level (non MFX)	(0 - 127)
	00 10	0aaa aaaa	Tone Reverb Send Level (non MFX)	(0 - 127)
	00 11	0000 aaaa	Tone Output Assign	(0 - 12) MFX, A, ---, ---, ---, 1, 2, ---, ---, ---, ---, ---, ---
	00 12	0000 000a	Tone Receive Bender	(0 - 1) OFF, ON
	00 13	0000 000a	Tone Receive Expression	(0 - 1) OFF, ON
	00 14	0000 000a	Tone Receive Hold-1	(0 - 1) OFF, ON
	00 15	0000 000a	Tone Receive Pan Mode	(0 - 1) CONTINUOUS, KEY-ON
	00 16	0000 000a	Tone Redamper Switch	(0 - 1) OFF, ON
	00 17	0000 00aa	Tone Control 1 Switch 1	(0 - 2) OFF, ON, REVERSE
	00 18	0000 00aa	Tone Control 1 Switch 2	(0 - 2) OFF, ON, REVERSE
	00 19	0000 00aa	Tone Control 1 Switch 3	(0 - 2) OFF, ON, REVERSE
	00 1A	0000 00aa	Tone Control 1 Switch 4	(0 - 2) OFF, ON, REVERSE
	00 1B	0000 00aa	Tone Control 2 Switch 1	(0 - 2) OFF, ON, REVERSE
	00 1C	0000 00aa	Tone Control 2 Switch 2	(0 - 2) OFF, ON, REVERSE
	00 1D	0000 00aa	Tone Control 2 Switch 3	(0 - 2) OFF, ON, REVERSE
	00 1E	0000 00aa	Tone Control 2 Switch 4	(0 - 2) OFF, ON, REVERSE
	00 1F	0000 00aa	Tone Control 3 Switch 1	(0 - 2) OFF, ON, REVERSE
	00 20	0000 00aa	Tone Control 3 Switch 2	(0 - 2) OFF, ON, REVERSE
	00 21	0000 00aa	Tone Control 3 Switch 3	(0 - 2) OFF, ON, REVERSE
	00 22	0000 00aa	Tone Control 3 Switch 4	(0 - 2) OFF, ON, REVERSE
	00 23	0000 00aa	Tone Control 4 Switch 1	(0 - 2) OFF, ON, REVERSE
	00 24	0000 00aa	Tone Control 4 Switch 2	(0 - 2) OFF, ON, REVERSE
	00 25	0000 00aa	Tone Control 4 Switch 3	(0 - 2) OFF, ON, REVERSE
	00 26	0000 00aa	Tone Control 4 Switch 4	(0 - 2) OFF, ON, REVERSE
	00 27	0000 00aa	Wave Group Type	(0 - 1) INT, SRX
#	00 28	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Wave Group ID	(0 - 16384) OFF, 1 - 16384
#	00 2C	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Wave Number L (Mono)	(0 - 16384) OFF, 1 - 16384
#	00 30	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	Wave Number R	(0 - 16384) OFF, 1 - 16384
	00 34	0000 00aa	Wave Gain	(0 - 3) -6, 0, +6, +12 [dB]
	00 35	0000 000a	Wave FXM Switch	(0 - 1) OFF, ON
	00 36	0000 00aa	Wave FXM Color	(0 - 3) 1 - 4
	00 37	000a aaaa	Wave FXM Depth	(0 - 16)
	00 38	0000 000a	Wave Tempo Sync	(0 - 1) OFF, ON
	00 39	00aa aaaa	Wave Pitch Keyfollow	(44 - 84) -200 - +200
	00 3A	000a aaaa	Pitch Env Depth	(52 - 76) -12 - +12
	00 3B	0aaa aaaa	Pitch Env Velocity Sens	(1 - 127) -63 - +63
	00 3C	0aaa aaaa	Pitch Env Time 1 Velocity Sens	(1 - 127) -63 - +63
	00 3D	0aaa aaaa	Pitch Env Time 4 Velocity Sens	(1 - 127) -63 - +63
	00 3E	000a aaaa	Pitch Env Time Keyfollow	(54 - 74) -100 - +100
	00 3F	0aaa aaaa	Pitch Env Time 1	(0 - 127)
	00 40	0aaa aaaa	Pitch Env Time 2	(0 - 127)
	00 41	0aaa aaaa	Pitch Env Time 3	(0 - 127)
	00 42	0aaa aaaa	Pitch Env Time 4	(0 - 127)
	00 43	0aaa aaaa	Pitch Env Level 0	(1 - 127) -63 - +63
	00 44	0aaa aaaa	Pitch Env Level 1	(1 - 127) -63 - +63
	00 45	0aaa aaaa	Pitch Env Level 2	(1 - 127) -63 - +63
	00 46	0aaa aaaa	Pitch Env Level 3	(1 - 127) -63 - +63
	00 47	0aaa aaaa	Pitch Env Level 4	(1 - 127) -63 - +63
	00 48	0000 0aaa	TVF Filter Type	(0 - 6) OFF, LPF, BPF, HPF, PKG, LPF2, LPF3
	00 49	0aaa aaaa	TVF Cutoff Frequency	(0 - 127)
	00 4A	00aa aaaa	TVF Cutoff Keyfollow	(44 - 84) -200 - +200
	00 4B	0000 0aaa	TVF Cutoff Velocity Curve	(0 - 7) FIXED, 1 - 7
	00 4C	0aaa aaaa	TVF Cutoff Velocity Sens	(1 - 127) -63 - +63
	00 4D	0aaa aaaa	TVF Resonance	(0 - 127)
	00 4E	0aaa aaaa	TVF Resonance Velocity Sens	(1 - 127) -63 - +63
	00 4F	0aaa aaaa	TVF Env Depth	(1 - 127) -63 - +63
	00 50	0000 0aaa	TVF Env Velocity Curve	(0 - 7) FIXED, 1 - 7
	00 51	0aaa aaaa	TVF Env Velocity Sens	(1 - 127) -63 - +63
	00 52	0aaa aaaa	TVF Env Time 1 Velocity Sens	(1 - 127) -63 - +63
	00 53	0aaa aaaa	TVF Env Time 4 Velocity Sens	(1 - 127) -63 - +63
	00 54	000a aaaa	TVF Env Time Keyfollow	(54 - 74) -100 - +100
	00 55	0aaa aaaa	TVF Env Time 1	(0 - 127)
	00 56	0aaa aaaa	TVF Env Time 2	(0 - 127)
	00 57	0aaa aaaa	TVF Env Time 3	(0 - 127)
	00 58	0aaa aaaa	TVF Env Time 4	(0 - 127)
	00 59	0aaa aaaa	TVF Env Level 0	(0 - 127)
	00 5A	0aaa aaaa	TVF Env Level 1	(0 - 127)
	00 5B	0aaa aaaa	TVF Env Level 2	(0 - 127)
	00 5C	0aaa aaaa	TVF Env Level 3	(0 - 127)
	00 5D	0aaa aaaa	TVF Env Level 4	(0 - 127)
	00 5E	000a aaaa	Bias Level	(54 - 74) -100 - +100
	00 5F	0aaa aaaa	Bias Position	(0 - 127) C-1 - G9
	00 60	0000 00aa	Bias Direction	(0 - 3) LOWER, UPPER, LOWER&UPPER, ALL
	00 61	0000 0aaa	TVA Level Velocity Curve	(0 - 7) FIXED, 1 - 7
	00 62	0aaa aaaa	TVA Level Velocity Sens	(1 - 127) -63 - +63
	00 63	0aaa aaaa	TVA Env Time 1 Velocity Sens	(1 - 127) -63 - +63
	00 64	0aaa aaaa	TVA Env Time 4 Velocity Sens	(1 - 127) -63 - +63
	00 65	000a aaaa	TVA Env Time Keyfollow	(54 - 74) -100 - +100
	00 66	0aaa aaaa	TVA Env Time 1	(0 - 127)
	00 67	0aaa aaaa	TVA Env Time 2	(0 - 127)
	00 68	0aaa aaaa	TVA Env Time 3	(0 - 127)
	00 69	0aaa aaaa	TVA Env Time 4	(0 - 127)
	00 6A	0aaa aaaa	TVA Env Level 1	(0 - 127)
	00 6B	0aaa aaaa	TVA Env Level 2	(0 - 127)
	00 6C	0aaa aaaa	TVA Env Level 3	(0 - 127)
	00 6D	0000 aaaa	LFO1 Waveform	(0 - 12) SIN, TRI, SAW-UP, SAW-DW, SQR, RND, BEND-UP, BEND-DW, TRP, S&H, CHS, VSIN, STEP
#	00 6E	0000 aaaa 0000 bbbb	LFO1 Rate	(0 - 149) 0 - 127, MUSICAL-NOTES
	00 70	0000 0aaa	LFO1 Offset	(0 - 4) -100, -50, 0, +50, +100
	00 71	0aaa aaaa	LFO1 Rate Detune	(0 - 127)
	00 72	0aaa aaaa	LFO1 Delay Time	(0 - 127)
	00 73	000a aaaa	LFO1 Delay Time Keyfollow	(54 - 74) -100 - +100
	00 74	0000 00aa	LFO1 Fade Mode	(0 - 3) ON-IN, ON-OUT, OFF-IN, OFF-OUT
	00 75	0aaa aaaa	LFO1 Fade Time	(0 - 127)
	00 76	0000 000a	LFO1 Key Trigger	(0 - 1)

				OFF, ON
	00 77	0aaa aaaa	LFO1 Pitch Depth	(1 - 127) -63 - +63
	00 78	0aaa aaaa	LFO1 TVF Depth	(1 - 127) -63 - +63
	00 79	0aaa aaaa	LFO1 TVA Depth	(1 - 127) -63 - +63
	00 7A	0aaa aaaa	LFO1 Pan Depth	(1 - 127) -63 - +63
	00 7B	0000 aaaa	LFO2 Waveform	(0 - 12) SIN, TRI, SAW-UP, SAW-DW, SQR, RND, BEND-UP, BEND-DW, TRP, S&H, CHS, VSIN, STEP
#	00 7C	0000 aaaa 0000 bbbb	LFO2 Rate	(0 - 149) 0 - 127, MUSICAL-NOTES
	00 7E	0000 0aaa	LFO2 Offset	(0 - 4) -100, -50, 0, +50, +100
	00 7F	0aaa aaaa	LFO2 Rate Detune	(0 - 127)
	01 00	0aaa aaaa	LFO2 Delay Time	(0 - 127)
	01 01	000a aaaa	LFO2 Delay Time Keyfollow	(54 - 74) -100 - +100
	01 02	0000 00aa	LFO2 Fade Mode	(0 - 3) ON-IN, ON-OUT, OFF-IN, OFF-OUT
	01 03	0aaa aaaa	LFO2 Fade Time	(0 - 127)
	01 04	0000 000a	LFO2 Key Trigger	(0 - 1) OFF, ON
	01 05	0aaa aaaa	LFO2 Pitch Depth	(1 - 127) -63 - +63
	01 06	0aaa aaaa	LFO2 TVF Depth	(1 - 127) -63 - +63
	01 07	0aaa aaaa	LFO2 TVA Depth	(1 - 127) -63 - +63
	01 08	0aaa aaaa	LFO2 Pan Depth	(1 - 127) -63 - +63
	01 09	0000 aaaa	LFO Step Type	(0 - 1)
	01 0A	0aaa aaaa	LFO Step1	(28 - 100) -36 - +36
	01 0B	0aaa aaaa	LFO Step2	(28 - 100) -36 - +36
	01 0C	0aaa aaaa	LFO Step3	(28 - 100) -36 - +36
	01 0D	0aaa aaaa	LFO Step4	(28 - 100) -36 - +36
	01 0E	0aaa aaaa	LFO Step5	(28 - 100) -36 - +36
	01 0F	0aaa aaaa	LFO Step6	(28 - 100) -36 - +36
	01 10	0aaa aaaa	LFO Step7	(28 - 100) -36 - +36
	01 11	0aaa aaaa	LFO Step8	(28 - 100) -36 - +36
	01 12	0aaa aaaa	LFO Step9	(28 - 100) -36 - +36
	01 13	0aaa aaaa	LFO Step10	(28 - 100) -36 - +36
	01 14	0aaa aaaa	LFO Step11	(28 - 100) -36 - +36
	01 15	0aaa aaaa	LFO Step12	(28 - 100) -36 - +36
	01 16	0aaa aaaa	LFO Step13	(28 - 100) -36 - +36
	01 17	0aaa aaaa	LFO Step14	(28 - 100) -36 - +36
	01 18	0aaa aaaa	LFO Step15	(28 - 100) -36 - +36
	01 19	0aaa aaaa	LFO Step16	(28 - 100) -36 - +36
00 00 01 1A	Total Size			

* Rhythm Common

Offset Address		Description	
00 00	0aaa aaaa	Rhythm Name 1	(32 - 127) 32 - 127 [ASCII]
00 01	0aaa aaaa	Rhythm Name 2	(32 - 127) 32 - 127 [ASCII]
00 02	0aaa aaaa	Rhythm Name 3	(32 - 127) 32 - 127 [ASCII]
00 03	0aaa aaaa	Rhythm Name 4	(32 - 127) 32 - 127 [ASCII]
00 04	0aaa aaaa	Rhythm Name 5	(32 - 127) 32 - 127 [ASCII]
00 05	0aaa aaaa	Rhythm Name 6	(32 - 127) 32 - 127 [ASCII]
00 06	0aaa aaaa	Rhythm Name 7	(32 - 127) 32 - 127 [ASCII]
00 07	0aaa aaaa	Rhythm Name 8	(32 - 127) 32 - 127 [ASCII]
00 08	0aaa aaaa	Rhythm Name 9	(32 - 127) 32 - 127 [ASCII]
00 09	0aaa aaaa	Rhythm Name 10	(32 - 127) 32 - 127 [ASCII]
00 0A	0aaa aaaa	Rhythm Name 11	(32 - 127) 32 - 127 [ASCII]
00 0B	0aaa aaaa	Rhythm Name 12	(32 - 127) 32 - 127 [ASCII]
00 0C	0aaa aaaa	Rhythm Level	(0 - 127)
00 0D	0000 000a	(reserve)	
# 00 0E	0000 aaaa 0000 bbbb	(reserve)	
00 10	0000 000a	(reserve)	
00 11	0000 aaaa	Rhythm Output Assign	(0 - 13) MFX, A, ---, ---, ---, 1, 2, ---, ---, ---, ---, ---, ---, TONE
00 00 00 12	Total Size		

* Rhythm Common MFX

Offset Address		Description	
00 00	0aaa aaaa	MFX Type	(0 - 78)
00 01	0aaa aaaa	MFX Dry Send Level	(0 - 127)
00 02	0aaa aaaa	MFX Chorus Send Level	(0 - 127)
00 03	0aaa aaaa	MFX Reverb Send Level	(0 - 127)
00 04	0000 00aa	MFX Output Assign <*>	A, ---, ---, ---
00 05	0aaa aaaa	MFX Control 1 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 06	0aaa aaaa	MFX Control 1 Sens	(1 - 127) -63 - +63
00 07	0aaa aaaa	MFX Control 2 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 08	0aaa aaaa	MFX Control 2 Sens	(1 - 127) -63 - +63
00 09	0aaa aaaa	MFX Control 3 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 0A	0aaa aaaa	MFX Control 3 Sens	(1 - 127) -63 - +63
00 0B	0aaa aaaa	MFX Control 4 Source	(0 - 101) OFF, CC01 - CC31, CC33 - CC95, BEND, AFT, SYS1 - SYS4
00 0C	0aaa aaaa	MFX Control 4 Sens	(1 - 127) -63 - +63
00 0D	000a aaaa	MFX Control Assign 1	(0 - 16) OFF, 1 - 16
00 0E	000a aaaa	MFX Control Assign 2	(0 - 16) OFF, 1 - 16
00 0F	000a aaaa	MFX Control Assign 3	(0 - 16) OFF, 1 - 16
00 10	000a aaaa	MFX Control Assign 4	(0 - 16) OFF, 1 - 16
# 00 11	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 1	(12768 - 52768) -20000 - +20000
# 00 15	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 2	(12768 - 52768) -20000 - +20000
# 00 19	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 3	(12768 - 52768) -20000 - +20000
# 00 1D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 4	(12768 - 52768) -20000 - +20000
# 00 21	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 5	(12768 - 52768) -20000 - +20000
# 00 25	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 6	(12768 - 52768) -20000 - +20000
# 00 29	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	MFX Parameter 7	(12768 - 52768) -20000 - +20000
# 00 2D	0000 aaaa		

		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 8	(12768 - 52768) -20000 - +20000
#	00 31	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 9	(12768 - 52768) -20000 - +20000
#	00 35	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 10	(12768 - 52768) -20000 - +20000
#	00 39	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 11	(12768 - 52768) -20000 - +20000
#	00 3D	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 12	(12768 - 52768) -20000 - +20000
#	00 41	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 13	(12768 - 52768) -20000 - +20000
#	00 45	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 14	(12768 - 52768) -20000 - +20000
#	00 49	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 15	(12768 - 52768) -20000 - +20000
#	00 4D	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 16	(12768 - 52768) -20000 - +20000
#	00 51	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 17	(12768 - 52768) -20000 - +20000
#	00 55	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 18	(12768 - 52768) -20000 - +20000
#	00 59	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 19	(12768 - 52768) -20000 - +20000
#	00 5D	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 20	(12768 - 52768) -20000 - +20000
#	00 61	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 21	(12768 - 52768) -20000 - +20000
#	00 65	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 22	(12768 - 52768) -20000 - +20000
#	00 69	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 23	(12768 - 52768) -20000 - +20000
#	00 6D	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 24	(12768 - 52768) -20000 - +20000
#	00 71	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 25	(12768 - 52768) -20000 - +20000
#	00 75	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 26	(12768 - 52768) -20000 - +20000
#	00 79	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 27	(12768 - 52768) -20000 - +20000
#	00 7D	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 28	(12768 - 52768) -20000 - +20000
#	01 01	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 29	(12768 - 52768) -20000 - +20000
#	01 05	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 30	(12768 - 52768) -20000 - +20000
#	01 09	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 31	(12768 - 52768) -20000 - +20000
#	01 0D	0000 aaaa		
		0000 bbbb		
		0000 cccc		
		0000 dddd	MFX Parameter 32	(12768 - 52768) -20000 - +20000
	00 00 01 11	Total Size		

* Rhythm Common Chorus

Offset Address		Description	
	00 00	0000 aaaa	Chorus Type (0 - 3)
	00 01	0aaa aaaa	Chorus Level (0 - 127)
	00 02	0000 00aa	Chorus Output Assign <*> A, ---, ---, ---
	00 03	0000 00aa	Chorus Output Select (0 - 2) MAIN, REV, MAIN+REV
#	00 04	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 1 (12768 - 52768) -20000 - +20000
#	00 08	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 2 (12768 - 52768) -20000 - +20000
#	00 0C	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 3 (12768 - 52768) -20000 - +20000
#	00 10	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 4 (12768 - 52768) -20000 - +20000
#	00 14	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 5 (12768 - 52768) -20000 - +20000
#	00 18	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 6 (12768 - 52768) -20000 - +20000
#	00 1C	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 7 (12768 - 52768) -20000 - +20000
#	00 20	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 8 (12768 - 52768) -20000 - +20000
#	00 24	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 9 (12768 - 52768) -20000 - +20000
#	00 28	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 10 (12768 - 52768) -20000 - +20000
#	00 2C	0000 aaaa	
		0000 bbbb	
		0000 cccc	
		0000 dddd	Chorus Parameter 11 (12768 - 52768) -20000 - +20000
#	00 30	0000 aaaa	

	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 12	(12768 - 52768)	
			-20000 - +20000	
# 00 34	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 13	(12768 - 52768)	
			-20000 - +20000	
# 00 38	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 14	(12768 - 52768)	
			-20000 - +20000	
# 00 3C	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 15	(12768 - 52768)	
			-20000 - +20000	
# 00 40	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 16	(12768 - 52768)	
			-20000 - +20000	
# 00 44	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 17	(12768 - 52768)	
			-20000 - +20000	
# 00 48	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 18	(12768 - 52768)	
			-20000 - +20000	
# 00 4C	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 19	(12768 - 52768)	
			-20000 - +20000	
# 00 50	0000 aaaa			
	0000 bbbb			
	0000 cccc			
	0000 dddd	Chorus Parameter 20	(12768 - 52768)	
			-20000 - +20000	
00 00 00 54	Total Size			

* Rhythm Common Reverb

Offset Address		Description	
00 00	0000 aaaa	Reverb Type	(0 - 5)
00 01	0aaa aaaa	Reverb Level	(0 - 127)
00 02	0000 00aa	Reverb Output Assign <*>	A, ---, ---, ---
# 00 03	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 1	(12768 - 52768)
			-20000 - +20000
# 00 07	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 2	(12768 - 52768)
			-20000 - +20000
# 00 0B	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 3	(12768 - 52768)
			-20000 - +20000
# 00 0F	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 4	(12768 - 52768)
			-20000 - +20000
# 00 13	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 5	(12768 - 52768)
			-20000 - +20000
# 00 17	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 6	(12768 - 52768)
			-20000 - +20000
# 00 1B	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 7	(12768 - 52768)
			-20000 - +20000
# 00 1F	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 8	(12768 - 52768)
			-20000 - +20000
# 00 23	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 9	(12768 - 52768)
			-20000 - +20000
# 00 27	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 10	(12768 - 52768)
			-20000 - +20000
# 00 2B	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 11	(12768 - 52768)
			-20000 - +20000
# 00 2F	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 12	(12768 - 52768)
			-20000 - +20000
# 00 33	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 13	(12768 - 52768)
			-20000 - +20000
# 00 37	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 14	(12768 - 52768)
			-20000 - +20000
# 00 3B	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 15	(12768 - 52768)
			-20000 - +20000
# 00 3F	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 16	(12768 - 52768)
			-20000 - +20000
# 00 43	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 17	(12768 - 52768)
			-20000 - +20000
# 00 47	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 18	(12768 - 52768)
			-20000 - +20000
# 00 4B	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 19	(12768 - 52768)
			-20000 - +20000
# 00 4F	0000 aaaa		
	0000 bbbb		
	0000 cccc		
	0000 dddd	Reverb Parameter 20	(12768 - 52768)
			-20000 - +20000
00 00 00 53	Total Size		

* Rhythm Tone

Offset Address		Description	
00 00	0aaa aaaa	Tone Name 1	(32 - 127)
			32 - 127 [ASCII]
00 01	0aaa aaaa	Tone Name 2	(32 - 127)
			32 - 127 [ASCII]
00 02	0aaa aaaa	Tone Name 3	(32 - 127)
			32 - 127 [ASCII]
00 03	0aaa aaaa	Tone Name 4	(32 - 127)
			32 - 127 [ASCII]
00 04	0aaa aaaa	Tone Name 5	(32 - 127)
			32 - 127 [ASCII]
00 05	0aaa aaaa	Tone Name 6	(32 - 127)
			32 - 127 [ASCII]
00 06	0aaa aaaa	Tone Name 7	(32 - 127)
			32 - 127 [ASCII]
00 07	0aaa aaaa	Tone Name 8	(32 - 127)
			32 - 127 [ASCII]
00 08	0aaa aaaa	Tone Name 9	(32 - 127)
			32 - 127 [ASCII]
00 09	0aaa aaaa	Tone Name 10	(32 - 127)
			32 - 127 [ASCII]
00 0A	0aaa aaaa	Tone Name 11	(32 - 127)
			32 - 127 [ASCII]
00 0B	0aaa aaaa	Tone Name 12	(32 - 127)
			32 - 127 [ASCII]
00 0C	0000 000a	Assign Type	(0 - 1)
			MULTI, SINGLE

	00 0D	000a aaaa	Mute Group (0 - 31) OFF, 1 - 31
	00 0E	0aaa aaaa	Tone Level (0 - 127)
	00 0F	0aaa aaaa	Tone Coarse Tune (0 - 127) C-1 - G9
	00 10	0aaa aaaa	Tone Fine Tune (14 - 114) -50 - +50
	00 11	000a aaaa	Tone Random Pitch Depth (0 - 30) 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200
	00 12	0aaa aaaa	Tone Pan (0 - 127) L64 - 63R
	00 13	00aa aaaa	Tone Random Pan Depth (0 - 63)
	00 14	0aaa aaaa	Tone Alternate Pan Depth (1 - 127) L63 - 63R
	00 15	0000 000a	Tone Env Mode (0 - 1) NO-SUS, SUSTAIN
	00 16	0aaa aaaa	Tone Dry Send Level (0 - 127)
	00 17	0aaa aaaa	Tone Chorus Send Level (0 - 127)
	00 18	0aaa aaaa	Tone Reverb Send Level (0 - 127)
	00 19	0aaa aaaa	Tone Chorus Send Level (non MFX) (0 - 127)
	00 1A	0aaa aaaa	Tone Reverb Send Level (non MFX) (0 - 127)
	00 1B	0000 aaaa	Tone Output Assign (0 - 12) MFX, A, ---, ---, ---, 1, 2, ---, ---, ---, ---, ---, ---
	00 1C	00aa aaaa	Tone Pitch Bend Range (0 - 48)
	00 1D	0000 000a	Tone Receive Expression (0 - 1) OFF, ON
	00 1E	0000 000a	Tone Receive Hold-1 (0 - 1) OFF, ON
	00 1F	0000 000a	Tone Receive Pan Mode (0 - 1) CONTINUOUS, KEY-ON
	00 20	0000 00aa	WMT Velocity Control (0 - 2) OFF, ON, RANDOM
	00 21	0000 000a	WMT1 Wave Switch (0 - 1) OFF, ON
	00 22	0000 00aa	WMT1 Wave Group Type (0 - 1) INT, SRX
#	00 23	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT1 Wave Group ID (0 - 16384) OFF, 1 - 16384
#	00 27	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT1 Wave Number L (Mono) (0 - 16384) OFF, 1 - 16384
#	00 2B	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT1 Wave Number R (0 - 16384) OFF, 1 - 16384
	00 2F	0000 00aa	WMT1 Wave Gain (0 - 3) -6, 0, +6, +12 [dB]
	00 30	0000 000a	WMT1 Wave FXM Switch (0 - 1) OFF, ON
	00 31	0000 00aa	WMT1 Wave FXM Color (0 - 3) 1 - 4
	00 32	000a aaaa	WMT1 Wave FXM Depth (0 - 16)
	00 33	0000 000a	WMT1 Wave Tempo Sync (0 - 1) OFF, ON
	00 34	0aaa aaaa	WMT1 Wave Coarse Tune (16 - 112) -48 - +48
	00 35	0aaa aaaa	WMT1 Wave Fine Tune (14 - 114) -50 - +50
	00 36	0aaa aaaa	WMT1 Wave Pan (0 - 127) L64 - 63R
	00 37	0000 000a	WMT1 Wave Random Pan Switch (0 - 1) OFF, ON
	00 38	0000 00aa	WMT1 Wave Alternate Pan Switch (0 - 2) OFF, ON, REVERSE
	00 39	0aaa aaaa	WMT1 Wave Level (0 - 127)
	00 3A	0aaa aaaa	WMT1 Velocity Range Lower (1 - 127) 1 - UPPER
	00 3B	0aaa aaaa	WMT1 Velocity Range Upper (1 - 127) LOWER - 127
	00 3C	0aaa aaaa	WMT1 Velocity Fade Width Lower (0 - 127)
	00 3D	0aaa aaaa	WMT1 Velocity Fade Width Upper (0 - 127)
	00 3E	0000 000a	WMT2 Wave Switch (0 - 1) OFF, ON
	00 3F	0000 00aa	WMT2 Wave Group Type (0 - 1) INT, SRX
#	00 40	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT2 Wave Group ID (0 - 16384) OFF, 1 - 16384
#	00 44	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT2 Wave Number L (Mono) (0 - 16384) OFF, 1 - 16384
#	00 48	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT2 Wave Number R (0 - 16384) OFF, 1 - 16384
	00 4C	0000 00aa	WMT2 Wave Gain (0 - 3) -6, 0, +6, +12 [dB]
	00 4D	0000 000a	WMT2 Wave FXM Switch (0 - 1) OFF, ON
	00 4E	0000 00aa	WMT2 Wave FXM Color (0 - 3) 1 - 4
	00 4F	000a aaaa	WMT2 Wave FXM Depth (0 - 16)
	00 50	0000 000a	WMT2 Wave Tempo Sync (0 - 1) OFF, ON
	00 51	0aaa aaaa	WMT2 Wave Coarse Tune (16 - 112) -48 - +48
	00 52	0aaa aaaa	WMT2 Wave Fine Tune (14 - 114) -50 - +50
	00 53	0aaa aaaa	WMT2 Wave Pan (0 - 127) L64 - 63R
	00 54	0000 000a	WMT2 Wave Random Pan Switch (0 - 1) OFF, ON
	00 55	0000 00aa	WMT2 Wave Alternate Pan Switch (0 - 2) OFF, ON, REVERSE
	00 56	0aaa aaaa	WMT2 Wave Level (0 - 127)
	00 57	0aaa aaaa	WMT2 Velocity Range Lower (1 - 127) 1 - UPPER
	00 58	0aaa aaaa	WMT2 Velocity Range Upper (1 - 127) LOWER - 127
	00 59	0aaa aaaa	WMT2 Velocity Fade Width Lower (0 - 127)
	00 5A	0aaa aaaa	WMT2 Velocity Fade Width Upper (0 - 127)
	00 5B	0000 000a	WMT3 Wave Switch (0 - 1) OFF, ON
	00 5C	0000 00aa	WMT3 Wave Group Type (0 - 1) INT, SRX
#	00 5D	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT3 Wave Group ID (0 - 16384) OFF, 1 - 16384
#	00 61	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT3 Wave Number L (Mono) (0 - 16384) OFF, 1 - 16384
#	00 65	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT3 Wave Number R (0 - 16384) OFF, 1 - 16384
	00 69	0000 00aa	WMT3 Wave Gain (0 - 3) -6, 0, +6, +12 [dB]
	00 6A	0000 000a	WMT3 Wave FXM Switch (0 - 1) OFF, ON
	00 6B	0000 00aa	WMT3 Wave FXM Color (0 - 3) 1 - 4
	00 6C	000a aaaa	WMT3 Wave FXM Depth (0 - 16)
	00 6D	0000 000a	WMT3 Wave Tempo Sync (0 - 1) OFF, ON
	00 6E	0aaa aaaa	WMT3 Wave Coarse Tune (16 - 112) -48 - +48
	00 6F	0aaa aaaa	WMT3 Wave Fine Tune (14 - 114) -50 - +50
	00 70	0aaa aaaa	WMT3 Wave Pan (0 - 127) L64 - 63R
	00 71	0000 000a	WMT3 Wave Random Pan Switch (0 - 1) OFF, ON
	00 72	0000 00aa	WMT3 Wave Alternate Pan Switch (0 - 2) OFF, ON, REVERSE
	00 73	0aaa aaaa	WMT3 Wave Level (0 - 127)
	00 74	0aaa aaaa	WMT3 Velocity Range Lower (1 - 127) 1 - UPPER
	00 75	0aaa aaaa	WMT3 Velocity Range Upper (1 - 127) LOWER - 127
	00 76	0aaa aaaa	WMT3 Velocity Fade Width Lower (0 - 127)
	00 77	0aaa aaaa	WMT3 Velocity Fade Width Upper (0 - 127)
	00 78	0000 000a	WMT4 Wave Switch (0 - 1) OFF, ON
	00 79	0000 00aa	WMT4 Wave Group Type (0 - 1) INT, SRX
#	00 7A	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT4 Wave Group ID (0 - 16384) OFF, 1 - 16384
#	00 7E	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT4 Wave Number L (Mono) (0 - 16384) OFF, 1 - 16384
#	01 02	0000 aaaa 0000 bbbb 0000 cccc 0000 dddd	WMT4 Wave Number R (0 - 16384) OFF, 1 - 16384
	01 06	0000 00aa	WMT4 Wave Gain (0 - 3) -6, 0, +6, +12 [dB]

01 07	0000 000a	WMT4 Wave FXM Switch	(0 - 1) OFF, ON
01 08	0000 00aa	WMT4 Wave FXM Color	(0 - 3) 1 - 4
01 09	000a aaaa	WMT4 Wave FXM Depth	(0 - 16)
01 0A	0000 000a	WMT4 Wave Tempo Sync	(0 - 1) OFF, ON
01 0B	0aaa aaaa	WMT4 Wave Coarse Tune	(16 - 112) -48 - +48
01 0C	0aaa aaaa	WMT4 Wave Fine Tune	(14 - 114) -50 - +50
01 0D	0aaa aaaa	WMT4 Wave Pan	(0 - 127) L64 - 63R
01 0E	0000 000a	WMT4 Wave Random Pan Switch	(0 - 1) OFF, ON
01 0F	0000 00aa	WMT4 Wave Alternate Pan Switch	(0 - 2) OFF, ON, REVERSE
01 10	0aaa aaaa	WMT4 Wave Level	(0 - 127)
01 11	0aaa aaaa	WMT4 Velocity Range Lower	(1 - 127) 1 - UPPER
01 12	0aaa aaaa	WMT4 Velocity Range Upper	(1 - 127) LOWER - 127
01 13	0aaa aaaa	WMT4 Velocity Fade Width Lower	(0 - 127)
01 14	0aaa aaaa	WMT4 Velocity Fade Width Upper	(0 - 127)
01 15	000a aaaa	Pitch Env Depth	(52 - 76) -12 - +12
01 16	0aaa aaaa	Pitch Env Velocity Sens	(1 - 127) -63 - +63
01 17	0aaa aaaa	Pitch Env Time 1 Velocity Sens	(1 - 127) -63 - +63
01 18	0aaa aaaa	Pitch Env Time 4 Velocity Sens	(1 - 127) -63 - +63
01 19	0aaa aaaa	Pitch Env Time 1	(0 - 127)
01 1A	0aaa aaaa	Pitch Env Time 2	(0 - 127)
01 1B	0aaa aaaa	Pitch Env Time 3	(0 - 127)
01 1C	0aaa aaaa	Pitch Env Time 4	(0 - 127)
01 1D	0aaa aaaa	Pitch Env Level 0	(1 - 127) -63 - +63
01 1E	0aaa aaaa	Pitch Env Level 1	(1 - 127) -63 - +63
01 1F	0aaa aaaa	Pitch Env Level 2	(1 - 127) -63 - +63
01 20	0aaa aaaa	Pitch Env Level 3	(1 - 127) -63 - +63
01 21	0aaa aaaa	Pitch Env Level 4	(1 - 127) -63 - +63
01 22	0000 0aaa	TVF Filter Type	(0 - 6) OFF, LPF, BPF, HPF, PKG, LPF2, LPF3
01 23	0aaa aaaa	TVF Cutoff Frequency	(0 - 127)
01 24	0000 0aaa	TVF Cutoff Velocity Curve	(0 - 7) FIXED, 1 - 7
01 25	0aaa aaaa	TVF Cutoff Velocity Sens	(1 - 127) -63 - +63
01 26	0aaa aaaa	TVF Resonance	(0 - 127)
01 27	0aaa aaaa	TVF Resonance Velocity Sens	(1 - 127) -63 - +63
01 28	0aaa aaaa	TVF Env Depth	(1 - 127) -63 - +63
01 29	0000 0aaa	TVF Env Velocity Curve Type	(0 - 7) FIXED, 1 - 7
01 2A	0aaa aaaa	TVF Env Velocity Sens	(1 - 127) -63 - +63
01 2B	0aaa aaaa	TVF Env Time 1 Velocity Sens	(1 - 127) -63 - +63
01 2C	0aaa aaaa	TVF Env Time 4 Velocity Sens	(1 - 127) -63 - +63
01 2D	0aaa aaaa	TVF Env Time 1	(0 - 127)
01 2E	0aaa aaaa	TVF Env Time 2	(0 - 127)
01 2F	0aaa aaaa	TVF Env Time 3	(0 - 127)
01 30	0aaa aaaa	TVF Env Time 4	(0 - 127)
01 31	0aaa aaaa	TVF Env Level 0	(0 - 127)
01 32	0aaa aaaa	TVF Env Level 1	(0 - 127)
01 33	0aaa aaaa	TVF Env Level 2	(0 - 127)
01 34	0aaa aaaa	TVF Env Level 3	(0 - 127)
01 35	0aaa aaaa	TVF Env Level 4	(0 - 127)
01 36	0000 0aaa	TVA Level Velocity Curve	(0 - 7) FIXED, 1 - 7
01 37	0aaa aaaa	TVA Level Velocity Sens	(1 - 127) -63 - +63
01 38	0aaa aaaa	TVA Env Time 1 Velocity Sens	(1 - 127) -63 - +63
01 39	0aaa aaaa	TVA Env Time 4 Velocity Sens	(1 - 127) -63 - +63
01 3A	0aaa aaaa	TVA Env Time 1	(0 - 127)
01 3B	0aaa aaaa	TVA Env Time 2	(0 - 127)
01 3C	0aaa aaaa	TVA Env Time 3	(0 - 127)
01 3D	0aaa aaaa	TVA Env Time 4	(0 - 127)
01 3E	0aaa aaaa	TVA Env Level 1	(0 - 127)
01 3F	0aaa aaaa	TVA Env Level 2	(0 - 127)
01 40	0aaa aaaa	TVA Env Level 3	(0 - 127)
01 41	0000 000a	One Shot Mode	(0 - 1) OFF, ON
01 42	0aaa aaaa	Relative Level	(0 - 127) -64 - +63

00 00 01 43	Total Size

2. GS (Model ID = 42H)

* System Parameter

Start Address		Description	
40 00 7F	0aaa aaaa	Mode Set	(0, 127) GS-RESET, GS-EXIT

* Part Parameter

Start Address		Description	
40 1x 40	0aaa aaaa	Scale Tuning C	(0 - 127) -64 - +63 [cent]
40 1x 41	0aaa aaaa	Scale Tuning C#	(0 - 127) -64 - +63 [cent]
40 1x 42	0aaa aaaa	Scale Tuning D	(0 - 127) -64 - +63 [cent]
40 1x 43	0aaa aaaa	Scale Tuning D#	(0 - 127) -64 - +63 [cent]
40 1x 44	0aaa aaaa	Scale Tuning E	(0 - 127) -64 - +63 [cent]
40 1x 45	0aaa aaaa	Scale Tuning F	(0 - 127) -64 - +63 [cent]
40 1x 46	0aaa aaaa	Scale Tuning F#	(0 - 127) -64 - +63 [cent]
40 1x 47	0aaa aaaa	Scale Tuning G	(0 - 127) -64 - +63 [cent]
40 1x 48	0aaa aaaa	Scale Tuning G#	(0 - 127) -64 - +63 [cent]
40 1x 49	0aaa aaaa	Scale Tuning A	(0 - 127) -64 - +63 [cent]
40 1x 4A	0aaa aaaa	Scale Tuning A#	(0 - 127) -64 - +63 [cent]
40 1x 4B	0aaa aaaa	Scale Tuning B	(0 - 127) -64 - +63 [cent]

x: BLOCK NUMBER (0-F)
Part 1 (MIDI ch = 1) x = 1
Part 2 (MIDI ch = 2) x = 2
: : :
Part 9 (MIDI ch = 9) x = 9
Part10 (MIDI ch = 10) x = 0
Part11 (MIDI ch = 11) x = A
Part12 (MIDI ch = 12) x = B
: : :
Part16 (MIDI ch = 16) x = F

4. Supplementary Material

■Decimal and Hexadecimal Table

(An "H" is appended to the end of numbers in hexadecimal notation.)
In MIDI documentation, data values and addresses/sizes of Exclusive messages, etc. are expressed as hexadecimal values for each 7 bits.
The following table shows how these correspond to decimal numbers.

D	H	D	H	D	H	D	H
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

D: decimal
H: hexadecimal

* Decimal values such as MIDI channel, bank select, and program change are listed as one greater than the values given in the above table.
* A 7-bit byte can express data in the range of 128 steps. For data where greater precision is required, we must use two or more bytes. For example, two hexadecimal numbers aa bbH expressing two 7-bit bytes would indicate a value of aa x 128+bb.
* In the case of values which have a +/- sign, 00H = -64, 40H = +/-0, and 7FH = +63, so that the decimal expression would be 64 less than the value given in the above chart. In the case of two types, 00 00H = -8192, 40 00H = +/-0, and 7F 7FH = +8191. For example, if aa bbH were expressed as decimal, this would be aa bbH - 40 00H = aa x 128+bb - 64 x 128.
* Data marked “Use nibbled data” is expressed in hexadecimal in 4-bit units. A value expressed as a 2-byte nibble 0a 0bH has the value of a x 16+b.

<Example 1> What is the decimal expression of 5AH?
From the preceding table, 5AH = 90

<Example 2> What is the decimal expression of the value 12 34H given as hexadecimal for each 7 bits?
From the preceding table, since 12H = 18 and 34H = 52
18 x 128+52 = 2356

<Example 3> What is the decimal expression of the nibbled value 0A 03 09 0D?
From the preceding table, since 0AH = 10, 03H = 3, 09H = 9, 0DH = 13
((10 x 16+3) x 16+9) x 16+13 = 41885

<Example 4> What is the nibbled expression of the decimal value 1258?

```
16 ) 1258
16 )   78 ...10
16 )    4 ...14
        0 ... 4
```

Since from the preceding table, 0 = 00H, 4 = 04H, 14 = 0EH, 10 = 0AH, the result is: 00 04 0E 0AH.

■Examples of Actual MIDI Messages

<Example 1> 92 3E 5F
9n is the Note-on status, and n is the MIDI channel number. Since 2H = 2, 3EH = 62, and 5FH = 95, this is a Note-on message with MIDI CH = 3, note number 62 (note name is D4), and velocity 95.

<Example 2> CE 49
CnH is the Program Change status, and n is the MIDI channel number. Since EH = 14 and 49H = 73, this is a Program Change message with MIDI CH = 15, program number 74.

<Example 3> EA 00 28
EnH is the Pitch Bend Change status, and n is the MIDI channel number. The 2nd byte (00H = 0) is the LSB and the 3rd byte (28H = 40) is the MSB, but Pitch Bend Value is a signed number in which 40 00H (= 64 x 12+80 = 8192) is 0, so this Pitch Bend Value is
28 00H - 40 00H = 40 x 12+80 - (64 x 12+80) = 5120 - 8192 = -3072

If the Pitch Bend Sensitivity is set to 2 semitones, -8192 (00 00H) will cause the pitch to change -200 cents, so in this case -200 x (-3072) ÷ (-8192) = -75 cents of Pitch Bend is being applied to MIDI channel 11.

<Example 4> B3 64 00 65 00 06 0C 26 00 64 7F 65 7F
BnH is the Control Change status, and n is the MIDI channel number. For Control Changes, the 2nd byte is the control number, and the 3rd byte is the value. In a case in which two or more messages consecutive messages have the same status, MIDI has a provision called “running status” which allows the status byte of the second and following messages to be omitted. Thus, the above messages have the following meaning.

B3	64 00	MIDI ch.4, lower byte of RPN parameter number:	00H
(B3)	65 00	(MIDI ch.4) upper byte of RPN parameter number:	00H
(B3)	06 0C	(MIDI ch.4) upper byte of parameter value:	0CH
(B3)	26 00	(MIDI ch.4) lower byte of parameter value:	00H
(B3)	64 7F	(MIDI ch.4) lower byte of RPN parameter number:	7FH
(B3)	65 7F	(MIDI ch.4) upper byte of RPN parameter number:	7FH

In other words, the above messages specify a value of 0C 00H for RPN parameter number 00 00H on MIDI channel 4, and then set the RPN parameter number to 7F 7FH.

RPN parameter number 00 00H is Pitch Bend Sensitivity, and the MSB of the value indicates semitone units, so a value of 0CH = 12 sets the maximum pitch bend range to +/-12 semitones (1 octave). (On GS sound generators the LSB of Pitch Bend Sensitivity is ignored, but the LSB should be transmitted anyway (with a value of 0) so that operation will be correct on any device.)

Once the parameter number has been specified for RPN or NRPN, all Data Entry messages transmitted on that same channel will be valid, so after the desired value has been transmitted, it is a good idea to set the parameter number to 7F 7FH to prevent accidents. This is the reason for the (B3) 64 7F (B3) 65 7F at the end.

It is not desirable for performance data (such as Standard MIDI File data) to contain many events with running status as given in <Example 4>. This is because if playback is halted during the song and then rewound or fast-forwarded, the sequencer may not be able to transmit the correct status, and the sound generator will then misinterpret the data. Take care to give each event its own status.

It is also necessary that the RPN or NRPN parameter number setting and the value setting be done in the proper order. On some sequencers, events occurring in the same (or consecutive) clock may be transmitted in an order different than the order in which they were received. For this reason it is a good idea to slightly skew the time of each event (about 1 tick for TPQN = 96, and about 5 ticks for TPQN = 480).

* TPQN: Ticks Per Quarter Note

■Example of an Exclusive Message and Calculating a Checksum

Roland Exclusive messages (RQ1, DT1) are transmitted with a checksum at the end (before F7) to make sure that the message was correctly received. The value of the checksum is determined by the address and data (or size) of the transmitted Exclusive message.

●How to calculate the checksum

(hexadecimal numbers are indicated by "H")
The checksum is a value derived by adding the address, size, and checksum itself and inverting the lower 7 bits.
Here's an example of how the checksum is calculated. We will assume that in the Exclusive message we are transmitting, the address is aa bb cc ddH and the data or size is ee ffH.

aa + bb + cc + dd + ee + ff = sum
sum ÷ 128 = quotient ... remainder
128 - remainder = checksum

<Example> Setting CHORUS TYPE of PERFORMANCE COMMON to DELAY (DT1)
According to the "Parameter Address Map" (p. 257), the start address of Temporary Performance is 10 00 00 00H, the offset address of CHORUS at PERFORMANCE COMMON is 04 00H, and the address of CHORUS TYPE is 00 00H. Therefore the address of CHORUS TYPE of PERFORMANCE COMMON is;

```
   10 00 00 00H
         04 00H
+)       00 00H
   10 00 04 00H
```

DELAY has the value of 02H.
So the system exclusive message should be sent is;

F0	41	10	00 00 25	12	10 00 04 00	02	??	F7
(1)	(2)	(3)	(4)	(5)	address	data	checksum	(6)

(1) Exclusive Status (2) ID (Roland) (3) Device ID (17)
(4) Model ID (SonicCell) (5) Command ID (DT1) (6) End of Exclusive

Then calculate the checksum.

10H + 00H + 04H + 00H + 02H = 16 + 0 + 4 + 0 + 2 = 22 (sum)
22 (sum) ÷ 128 = 0 (quotient) ... 22 (remainder)
checksum = 128 - 22 (remainder) = 106 = 6AH

This means that F0 41 10 00 00 25 12 10 00 04 00 02 6A F7 is the message should be sent.

■The Scale Tune Feature (address: 40 1x 40)

The scale Tune feature allows you to finely adjust the individual pitch of the notes from C through B. Though the settings are made while working with one octave, the fine adjustments will affect all octaves. By making the appropriate Scale Tune settings, you can obtain a complete variety of tuning methods other than equal temperament. As examples, three possible types of scale setting are explained below.

❍Equal Temperament

This method of tuning divides the octave into 12 equal parts. It is currently the most widely used form of tuning, especially in occidental music. On the SonicCell, the default settings for the Scale Tune feature produce equal temperament.

❍Just Temperament (Tonic of C)

The principal triads resound much more beautifully than with equal temperament, but this benefit can only be obtained in one key. If transposed, the chords tend to become ambiguous. The example given involves settings for a key in which C is the keynote.

❍Arabian Scale

By altering the setting for Scale Tune, you can obtain a variety of other tunings suited for ethnic music. For example, the settings introduced below will set the unit to use the Arabian Scale.

Example Settings

Note name	Equal	Just Temperament	Arabian Scale
		Temperament(Key-tone C)	
C	0	0	-6
C#	0	-8	+45
D	0	+4	-2
Eb	0	+16	-12
E	0	-14	-51
F	0	-2	-8
F#	0	-10	+43
G	0	+2	-4
G#	0	+14	+47
A	0	-16	0
Bb	0	+14	-10
B	0	-12	-49

The values in the table are given in cents. Convert these values to hexadecimal, and transmit them as Exclusive data.
For example, to set the tune (C-B) of the Part 1 Arabian Scale, send the following data:

F0 41 10 42 12 40 11 40 3A 6D 3E 34 0D 38 6B 3C 6F 40 36 0F 76 F7

■ASCII Code Table

Patch Name and Performance Name, etc., of MIDI data are described the ASCII code in the table below.

D	H	Char	D	H	Char	D	H	Char
32	20H	SP	64	40H	@	96	60H	`
33	21H	!	65	41H	A	97	61H	a
34	22H	"	66	42H	B	98	62H	b
35	23H	#	67	43H	C	99	63H	c
36	24H	$	68	44H	D	100	64H	d
37	25H	%	69	45H	E	101	65H	e
38	26H	&	70	46H	F	102	66H	f
39	27H	`	71	47H	G	103	67H	g
40	28H	(	72	48H	H	104	68H	h
41	29H	)	73	49H	I	105	69H	i
42	2AH	*	74	4AH	J	106	6AH	j
43	2BH	+	75	4BH	K	107	6BH	k
44	2CH	,	76	4CH	L	108	6CH	l
45	2DH	-	77	4DH	M	109	6DH	m
46	2EH	.	78	4EH	N	110	6EH	n
47	2FH	/	79	4FH	O	111	6FH	o
48	30H	0	80	50H	P	112	70H	p
49	31H	1	81	51H	Q	113	71H	q
50	32H	2	82	52H	R	114	72H	r
51	33H	3	83	53H	S	115	73H	s
52	34H	4	84	54H	T	116	74H	t
53	35H	5	85	55H	U	117	75H	u
54	36H	6	86	56H	V	118	76H	v
55	37H	7	87	57H	W	119	77H	w
56	38H	8	88	58H	X	120	78H	x
57	39H	9	89	59H	Y	121	79H	y
58	3AH	:	90	5AH	Z	122	7AH	z
59	3BH	;	91	5BH	[	123	7BH	{
60	3CH	<	92	5CH	\	124	7CH	|
61	3DH	=	93	5DH	]	125	7DH	}
62	3EH	>	94	5EH	^			
63	3FH	?	95	5FH	_			

D: decimal
H: hexadecimal

* "SP" is space.

Model: SonicCell

MIDI Implementation Chart

Date : June. 15, 2007
Version : 1.00

Function...		Transmitted		Recognized		Remarks
Basic Channel	Default	1–16		1–16		
	Changed	X		1–16		
Mode	Default	X		Mode 3		
	Messages	X		Mode 3, 4 (M = 1)		* 2
	Altered	**********				
Note Number :		0–127		0–127		
	True Voice	**********		0–127		
Velocity	Note ON	O	*4	O		
	Note OFF	O	*4	O		
Aftertouch	Key's	O	*4	O	*1	
	Channel's	O	*4	O	*1	
Pitch Bend		O	*4	O	*1	
Control Change	0, 32	O	*4	O	*1	Bank select
	1	O	*4	O	*1	Modulation
	2	O	*4	O		Breath type
	4	O	*4	O		Foot type
	5	O	*4	O		Portamento time
	6, 38	O	*4	O		Data entry
	7	O	*4	O	*1	Volume
	8	O	*4	X		Balance
	10	O	*4	O	*1	Panpot
	11	O	*4	O	*1	Expression
	16	O	*4	X		General purpose controller 1
	17	O	*4	X		General purpose controller 2
	18	O	*4	X		General purpose controller 3
	19	O	*4	X		General purpose controller 4
	64	O	*4	O	*1	Hold1
	65	O	*4	O		Portamento
	66	O	*4	O		Sostenuto
	67	O	*4	O		Soft
	68	O	*4	O		Legato foot switch
	69	O	*4	O		Hold2
	70	O	*4	X		Sound variation
	71	O	*4	O		Resonance
	72	O	*4	O		Release time
	73	O	*4	O		Attack time
	74	O	*4	O		Cutoff
	75	O	*4	O		Decay time
	76	O	*4	O		Vibrato rate
	77	O	*4	O		Vibrato depth
	78	O	*4	O		Vibrato delay
	80	O	*4	O	(Tone 1 Level)	General purpose controller 5
	81	O	*4	O	(Tone 2 Level)	General purpose controller 6
	82	O	*4	O	(Tone 3 Level)	General purpose controller 7
	83	O	*4	O	(Tone 4 Level)	General purpose controller 8
	84	O	*4	X		Portamento control
	91	O	*4	O	(Reverb)	General purpose effects 1
	92	O	*4	X		Tremoro
	93	O	*4	O	(Chorus)	General purpose effects 3
	94	O	*4	X		Celeste
	95	O	*4	X		Phaser
	1–31, 33–95	O	*4	O		General purpose controller
	96, 97	O	*4	X		Increment, Decrement
	98, 99	O	*4	X		NRPN LSB,MSB
	100, 101	O	*4	O		RPN LSB,MSB
	102–119	O	*4	X		
Program Change		O	*4	O	*1	
	: True Number	**********		0–127		Program Number 1–128
System Exclusive		O	*3 *4	O	*1	
System Common	: Song Position	X		X		
	: Song Select	X		X		
	: Tune	X		X		
System Realtime	: Clock	X		O		
	: Command	X		X		
Aux Messages	: All Sound Off	O	*4	O		
	: Reset All Controllers	O	*4	O		
	: Local ON/OFF	X		X		
	: All Note Off	O	*4	O	(123–127)	
	: Active Sensing	O		O		
	: System Reset	X		X		
Notes		* 1 O X is selectable. * 2 Recognized as M=1 even if M≠1. * 3 Transmitted when Tx Edit Data is ON, or when RQ1 is received. * 4 Transmitted from SMF Player.				

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

Specifications

SonicCell: 128 Voices Sound Module with Audio Interface (Conforms to General MIDI 2 System)

■ Sound Generator Section

Parts
16 parts

Maximum Polyphony
128 voices

Wave Memory
128 M bytes (16-bit linear equivalent)

Expansion Slots
Expansion of waveforms and patchs for the internal sound generator SRX expansion boards: 2 slots

Preset Memory
Patches: 896 + 256 (GM2)
Rhythm Sets: 32 + 9 (GM2)
Performances: 64

User Memory
Patches: 256
Rhythm Sets: 32
Performances: 64

External Memory
USB Memory

Effects
Multi-Effects: 3 systems, 78 types
Chorus: 3 types
Reverb: 5 types
Input Effect: 6 types
Mastering Effect: 3 bands Compressor

■ Audio Interface Section

Number of Audio Input/Output Channels
Input: 1 pair of stereo (MIC, GUITAR: Monaural/LINE: Stereo)
Output: 1 pair of stereo

Signal Processing
PC interface: 24 bits
AD/DA Conversion: 24 bits

Sampling Frequency
AD/DA Conversion: 44.1/48/96 kHz

Nominal Input Level
Input jack (MIC/GUITAR/LINE (L))
Mic: -50 – -30 dBu
Guitar: -30 – -10 dBu
Line: -30 – -10 dBu
Input jack (LINE (R))
Line: -30 – -10 dBu

Nominal Output Level
Output jacks: -10 dBu

■ SMF/Audio File Player Section

File Format
Standard MIDI File: format-0/1
Audio File: WAV, AIFF, MP3

■ Others

Display
128 x 64 dots organic EL graphic display

Connectors
Output jacks (L/MONO, R)
Headphone jack
Input jacks (MIC/GUITAR/LINE (L), LINE (R))
MIC: 1/4 inch phone type or XLR type (phantom power)
GUITAR: 1/4 inch phones type (always Hi-Z)
Line (L): 1/4 inch phone type
LINE (R): 1/4 inch phone type
MIDI Connectors (IN, OUT)
USB Connectors
COMPUTER (supports USB Hi-Speed USB MIDI, and USB Audio)
MEMORY (supports USB 2.0 Hi-Speed Flash Memory)

Power Supply
DC 9 V (AC Adaptor)

* This product does not support USB bus power.

Current Draw
800 mA

Dimensions
294 (W) x 175 (D) x 55 (H) mm
11-5/8 (W) x 6-15/16 (D) x 2-3/16 (H) inches

Weight
1.2 kg / 2 lbs 11 oz (excluding AC Adaptor)

Accessories
Startup Guide
Manual
CD-ROM (Sound Editor, Librarian, Playlist Editor, USB Driver)
CD-ROM (SONAR LE)
Wrench
AC Adaptor (PSB-1U)
Power Cord
USB Cable

Options
Wave Expansion Board: SRX Series
USB Memory: M-UF128
SonicCell stand and PDS-10 bracket: BKT-S
Pad Stand: PDS-10

(0 dBu = 0.775 V rms)

* In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

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N

P

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S

T

U

V

W

For EU Countries

UK This symbol indicates that in EU countries, this product must be collected separately from household waste, as defined in each region. Products bearing this symbol must not be discarded together with household waste.

DE Dieses Symbol bedeutet, dass dieses Produkt in EU-Ländern getrennt vom Hausmüll gesammelt werden muss gemäß den regionalen Bestimmungen. Mit diesem Symbol gekennzeichnete Produkte dürfen nicht zusammen mit den Hausmüll entsorgt werden.

FR Ce symbole indique que dans les pays de l'Union européenne, ce produit doit être collecté séparément des ordures ménagères selon les directives en vigueur dans chacun de ces pays. Les produits portant ce symbole ne doivent pas être mis au rebut avec les ordures ménagères.

IT Questo simbolo indica che nei paesi della Comunità europea questo prodotto deve essere smaltito separatamente dai normali rifiuti domestici, secondo la legislazione in vigore in ciascun paese. I prodotti che riportano questo simbolo non devono essere smaltiti insieme ai rifiuti domestici. Ai sensi dell'art. 13 del D.Lgs. 25 luglio 2005 n. 151.

ES Este símbolo indica que en los países de la Unión Europea este producto debe recogerse aparte de los residuos domésticos, tal como esté regulado en cada zona. Los productos con este símbolo no se deben depositar con los residuos domésticos.

PT Este símbolo indica que nos países da UE, a recolha deste produto deverá ser feita separadamente do lixo doméstico, de acordo com os regulamentos de cada região. Os produtos que apresentem este símbolo não deverão ser eliminados juntamente com o lixo doméstico.

NL Dit symbool geeft aan dat in landen van de EU dit product gescheiden van huishoudelijk afval moet worden aangeboden, zoals bepaald per gemeente of regio. Producten die van dit symbool zijn voorzien, mogen niet samen met huishoudelijk afval worden verwijderd.

DK Dette symbol angiver, at i EU-lande skal dette produkt opsamles adskilt fra husholdningsaffald, som defineret i hver enkelt region. Produkter med dette symbol må ikke smides ud sammen med husholdningsaffald.

NO Dette symbolet indikerer at produktet må behandles som spesialavfall i EU-land, iht. til retningslinjer for den enkelte regionen, og ikke kastes sammen med vanlig husholdningsavfall. Produkter som er merket med dette symbolet, må ikke kastes sammen med vanlig husholdningsavfall.

SE Symbolen anger att i EU-länder måste den här produkten kasseras separat från hushållsavfall, i enlighet med varje regions bestämmelser. Produkter med den här symbolen får inte kasseras tillsammans med hushållsavfall.

FI Tämä merkintä ilmaisee, että tuote on EU-maissa kerättävä erillään kotitalousjätteistä kunkin alueen voimassa olevien määräysten mukaisesti. Tällä merkinnällä varustettuja tuotteita ei saa hävittää kotitalousjätteiden mukana.

HU Ez a szimbólum azt jelenti, hogy az Európai Unióban ezt a terméket a háztartási hulladéktól elkülönítve, az adott régióban érvényes szabályozás szerint kell gyűjteni. Az ezzel a szimbólummal ellátott termékeket nem szabad a háztartási hulladék közé dobni.

PL Symbol oznacza, że zgodnie z regulacjami w odpowiednim regionie, w krajach UE produktu nie należy wyrzucać z odpadami domowymi. Produktów opatrzonych tym symbolem nie można utylizować razem z odpadami domowymi.

CZ Tento symbol udává, že v zemích EU musí být tento výrobek sbírán odděleně od domácího odpadu, jak je určeno pro každý region. Výrobky nesoucí tento symbol se nesmí vyhazovat spolu s domácím odpadem.

SK Tento symbol vyjadruje, že v krajinách EÚ sa musí zber tohto produktu vykonávať oddelene od domového odpadu, podľa nariadení platných v konkrétnej krajine. Produkty s týmto symbolom sa nesmú vyhadzovať spolu s domovým odpadom.

EE See sümbol näitab, et EL-i maades tuleb see toode olemprügist eraldi koguda, nii nagu on igas piirkonnas määratletud. Selle sümboliga märgitud tooteid ei tohi ära visata koos olmeprügiga.

LT Šis simbolis rodo, kad ES šalyse šis produktas turi būti surenkamas atskirai nuo buitinių atliekų, kaip nustatyta kiekviename regione. Šiuo simboliu paženklinti produktai neturi būti išmetami kartu su buitinėmis atliekomis.

LV Šis simbols norāda, ka ES valstīs šo produktu jāievāc atsevišķi no mājsaimniecības atkritumiem, kā noteikts katrā reģionā. Produktus ar šo simbolu nedrīkst izmest kopā ar mājsaimniecības atkritumiem.

SI Ta simbol označuje, da je treba proizvod v državah EU zbirati ločeno od gospodinjskih odpadkov, tako kot je določeno v vsaki regiji. Proizvoda s tem znakom ni dovoljeno odlagati skupaj z gospodinjskimi odpadki.

GR Το σύμβολο αυτό υποδηλώνει ότι στις χώρες της Ε.Ε. το συγκεκριμένο προϊόν πρέπει να συλλέγεται χωριστά από τα υπόλοιπα οικιακά απορρίμματα, σύμφωνα με όσα προβλέπονται σε κάθε περιοχή. Τα προϊόντα που φέρουν το συγκεκριμένο σύμβολο δεν πρέπει να απορρίπτονται μαζί με τα οικιακά απορρίμματα.

For China

有关产品中所含有害物质的说明

本资料就本公司产品中所含的特定有害物质及其安全性予以说明。

本资料适用于 2007 年 3 月 1 日以后本公司所制造的产品。

环保使用期限

此标志适用于在中国国内销售的电子信息产品，表示环保使用期限的年数。所谓环保使用期限是指在自制造日起的规定期限内，产品中所含的有害物质不致引起环境污染，不会对人身、财产造成严重的不良影响。

环保使用期限仅在遵照产品使用说明书，正确使用产品的条件下才有效。

不当的使用，将会导致有害物质泄漏的危险。

产品中有毒有害物质或元素的名称及含量

部件名称	有毒有害物质或元素					
	铅(Pb)	汞(Hg)	镉(Cd)	六价铬(Cr(VI))	多溴联苯(PBB)	多溴二苯醚(PBDE)
外壳（壳体）	×	○	○	○	○	○
电子部件（印刷电路板等）	×	○	×	○	○	○
附件（电源线、交流适配器等）	×	○	○	○	○	○

○：表示该有毒有害物质在该部件所有均质材料中的含量均在 SJ/T11363-2006 标准规定的限量要求以下。

×：表示该有毒有害物质至少在该部件的某一均质材料中的含量超出 SJ/T11363-2006 标准规定的限量要求。

因根据现有的技术水平，还没有什么物质能够代替它。

For EU Countries

This product complies with the requirements of European Directive 89/336/EEC.

For the USA

FEDERAL COMMUNICATIONS COMMISSION
RADIO FREQUENCY INTERFERENCE STATEMENT

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

– Reorient or relocate the receiving antenna.
– Increase the separation between the equipment and receiver.
– Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
– Consult the dealer or an experienced radio/TV technician for help.

This device complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions:
(1) This device may not cause harmful interference, and
(2) This device must accept any interference received, including interference that may cause undesired operation.

Unauthorized changes or modification to this system can void the users authority to operate this equipment.
This equipment requires shielded interface cables in order to meet FCC class B Limit.

For Canada

NOTICE

This Class B digital apparatus meets all requirements of the Canadian Interference-Causing Equipment Regulations.

AVIS

Cet appareil numérique de la classe B respecte toutes les exigences du Règlement sur le matériel brouilleur du Canada.

For the USA

DECLARATION OF CONFORMITY
Compliance Information Statement

Model Name :	SonicCell
Type of Equipment :	Sound Module with Audio Interface
Responsible Party :	Roland Corporation U.S.
Address :	5100 S. Eastern Avenue, Los Angeles, CA 90040-2938
Telephone :	(323) 890-3700

Information

When you need repair service, call your nearest Roland Service Center or authorized Roland distributor in your country as shown below.

AFRICA

EGYPT
Al Fanny Trading Office
9, EBN Hagar Al Askalany Street,
ARD E1 Golf, Heliopolis,
Cairo 11341, EGYPT
TEL: 20-2-417-1828

REUNION
Maison FO - YAM Marcel
25 Rue Jules Hermann,
Chaudron - BP79 97 491
Ste Clotilde Cedex,
REUNION ISLAND
TEL: (0262) 218-429

SOUTH AFRICA
T.O.M.S. Sound & Music (Pty)Ltd.
2 ASTRON ROAD DENIVER
JOHANNESBURG ZA 2195,
SOUTH AFRICA
TEL: (011)417 3400

Paul Bothner(PTY)Ltd.
Royal Cape Park, Unit 24
Londonderry Road, Ottery 7800
Cape Town, SOUTH AFRICA
TEL: (021) 799 4900

ASIA

CHINA
Roland Shanghai Electronics Co.,Ltd.
5F. No.1500 Pingliang Road
Shanghai 200090, CHINA
TEL: (021) 5580-0800

Roland Shanghai Electronics Co.,Ltd.
(BEIJING OFFICE)
10F. No.18 3 Section Anhuaxili
Chaoyang District Beijing
100011 CHINA
TEL: (010) 6426-5050

HONG KONG
Tom Lee Music Co., Ltd.
Service Division
22-32 Pun Shan Street, Tsuen Wan, New Territories,
HONG KONG
TEL: 2415 0911

Parsons Music Ltd.
8th Floor, Railway Plaza, 39 Chatham Road South, T.S.T,
Kowloon, HONG KONG
TEL: 2333 1863

INDIA
Rivera Digitec (India) Pvt. Ltd.
411, Nirman Kendra
Mahalaxmi Flats Compound
Off. Dr. Edwin Moses Road,
Mumbai-400011, INDIA
TEL: (022) 2493 9051

INDONESIA
PT Citra IntiRama
Jl. Cideng Timur No. 15J-15O
Jakarta Pusat
INDONESIA
TEL: (021) 6324170

KOREA
Cosmos Corporation
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