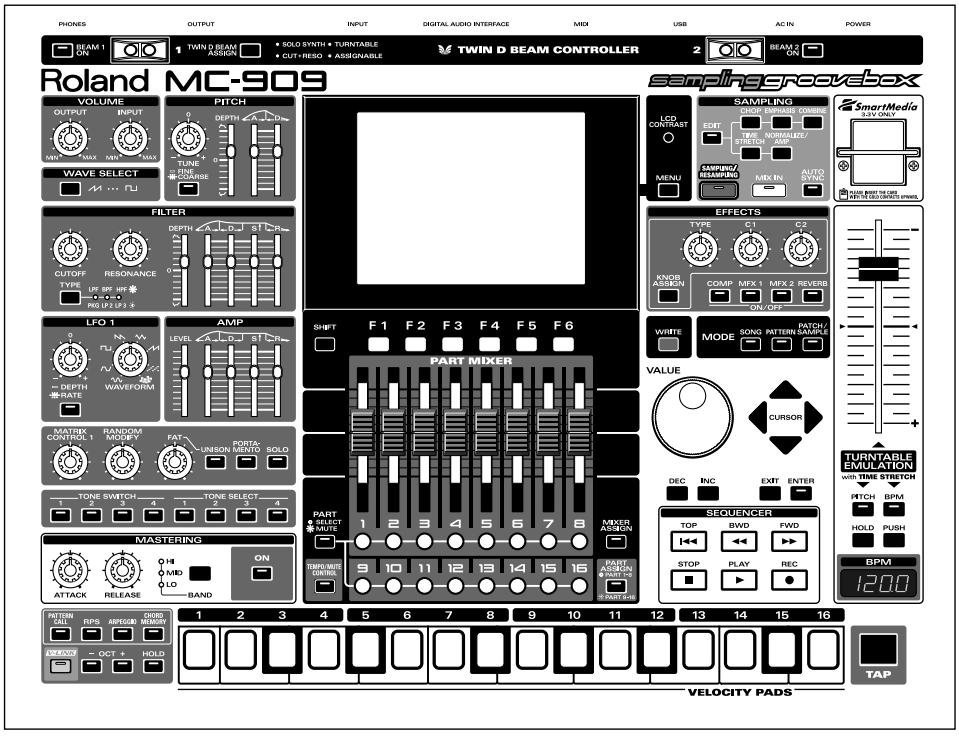
Roland®

# sampling groovebox MC-909

# Owner's Manual

Thank you, and congratulations on your choice of the Roland MC-909 Sampling Groovebox.

**Before using this unit, carefully read the sections entitled: "IMPORTANT SAFETY INSTRUCTIONS" (Owner's Manual p. 2), "USING THE UNIT SAFELY" (Owner's Manual pp. 3–4), and "IMPORTANT NOTES" (Owner's Manual p. 5). These sections provide important information concerning the proper operation of the unit. Additionally, in order to feel assured that you have gained a good grasp of every feature provided by your new unit, Quick Start and Owner's Manual should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.**

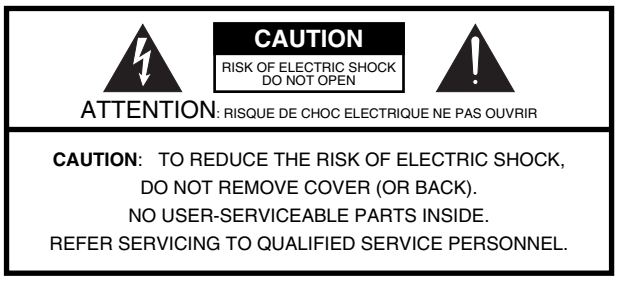



## Convention Used in This Manual

- Words enclosed in square brackets indicate buttons or a dial or a knob or a slider on the panel.
- (p. **) indicates a reference page.

* The explanations in this manual include illustrations that depict what should typically be shown by the display. Note, however, that your unit may incorporate a newer, enhanced version of the system (e.g., includes newer sounds), so what you actually see in the display may not always match what appears in the manual.

**WARNING:** To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.




The lightning flash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated "dangerous voltage" within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock to persons.

The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the product.

INSTRUCTIONS PERTAINING TO A RISK OF FIRE, ELECTRIC SHOCK, OR INJURY TO PERSONS.

# IMPORTANT SAFETY INSTRUCTIONS
# SAVE THESE INSTRUCTIONS

**WARNING** - When using electric products, basic precautions should always be followed, including the following:

1. Read these instructions.
2. Keep these instructions.
3. Heed all warnings.
4. Follow all instructions.
5. Do not use this apparatus near water.
6. Clean only with a dry cloth.
7. Do not block any of the ventilation openings. Install in accordance with the manufacturers instructions.
8. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat.
9. Do not defeat the safety purpose of the polarized or grounding-type plug. A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.
10. Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.
11. Only use attachments/accessories specified by the manufacturer.
12. Unplug this apparatus during lightning storms or when unused for long periods of time.
13. Refer all servicing to qualified service personnel. Servicing is required when the apparatus has been damaged in any way, such as power-supply cord or plug is damaged, liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture, does not operate normally, or has been dropped.

**For the U.K.**

**IMPORTANT:** THE WIRES IN THIS MAINS LEAD ARE COLOURED IN ACCORDANCE WITH THE FOLLOWING CODE.

BLUE: NEUTRAL
BROWN: LIVE

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug, proceed as follows:
The wire which is coloured BLUE must be connected to the terminal which is marked with the letter N or coloured BLACK.
The wire which is coloured BROWN must be connected to the terminal which is marked with the letter L or coloured RED.
Under no circumstances must either of the above wires be connected to the earth terminal of a three pin plug.

# 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.<br>* 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. (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. 142, p. 144, p. 146, and p. 148.)

- 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.

- Make sure you always have the unit placed so it is level and sure to remain stable. Never place it on stands that could wobble, or on inclined surfaces.

- The unit should be connected to a power source only of the type described in the operating instructions, or as marked on the bottom of the unit.

### ⚠WARNING

- Use only the attached power-supply cord.

- 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.

- Immediately turn the power off, remove the power cord 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 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.

## ⚠WARNING

- 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 power cord before attempting installation of the circuit board (SRX series/DIMM; p. 16).

- Do not put anything that contains water (e.g., flower vases) on this unit. Also, avoid the use of insecticides, perfumes, alcohol, nail polish, spray cans, etc., near the unit. Swiftly wipe away any liquid that spills on the unit using a dry, soft cloth.

## ⚠ CAUTION

- The unit should be located so that its location or position does not interfere with its proper ventilation.

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

- At regular intervals, you should unplug the power plug 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 power cord or its plugs with wet hands when plugging into, or unplugging from, an outlet or this unit.

- Before moving the unit, disconnect the power plug from the outlet, and pull out all cords from external devices.

- Before cleaning the unit, turn off the power and unplug the power cord from the outlet (p. 16).

- Whenever you suspect the possibility of lightning in your area, pull the plug on the power cord out of the outlet.

- Install only the specified circuit board (SRX series). Remove only the specified screws (p. 142, p. 144, p. 146, and p. 148).

- Should you remove screws, make sure to put them in a safe place out of children's reach, so there is no chance of them being swallowed accidentally.

# IMPORTANT NOTES

**In addition to the items listed under "IMPORTANT SAFETY INSTRUCTIONS" and "USING THE UNIT SAFELY" on pages 2 and 3, please read and observe the following:**

## Power Supply

- Do not use this unit on the same power circuit with any device that will generate line noise (such as an electric motor or variable lighting system).
- 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.
- Although the LCD and LEDs are switched off when the POWER switch is switched off, this does not mean that the unit has been completely disconnected from the source of power. If you need to turn off the power completely, first turn off the POWER switch, then unplug the power cord from the power outlet. For this reason, the outlet into which you choose to connect the power cord's plug should be one that is within easy reach and readily accessible.

## 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.
- To avoid possible breakdown, do not use the unit in a wet area, such as an area exposed to rain or other moisture.

## 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.

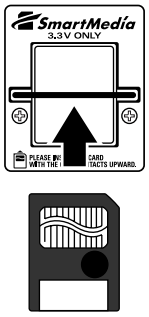
## Additional Precautions

- 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 a memory card, or in another MIDI device (e.g., a sequencer).
- Unfortunately, it may be impossible to restore the contents of data that was stored in the unit's memory, a memory card, or another MIDI device (e.g., a sequencer) 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.
- 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.
- A small amount of heat will radiate from the unit during normal operation.
- 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.
- Use a cable from Roland to make the connection. If using some other make of connection cable, please note the following precautions.
  - 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.

# Before Using Memory Cards

## Using Memory Cards

- Carefully insert the Memory card all the way in—until it is firmly in place.

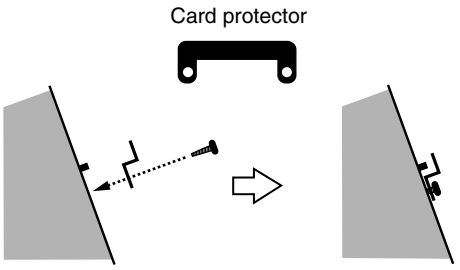



- Never touch the terminals of the Memory card. Also, avoid getting the terminals dirty.

### Installing the card protector

The MC-909 provides a card protector to prevent theft of the memory card. To install the card protector, use the following procedure.

1. Use a screwdriver to remove both screws that are at either side of the memory card slot.
2. Insert the memory card into the memory card slot.
3. Use the screws to fasten the card protector as shown below.




Side view

# Copyright

- Unauthorized recording, distribution, sale, lending, public performance, broadcasting, or the like, in whole or in part, of a work (musical composition, video, broadcast, public performance, or the like) whose copyright is held by a third party is prohibited by law.
- When exchanging audio signals through a digital connection with an external instrument, this unit can perform recording without being subjected to some of the restrictions of the Serial Copy Management System (SCMS). This is because the unit is intended solely for musical production, and is designed not to be subject to restrictions as long as it is used to record works (such as your own compositions) that do not infringe on the copyrights of others. (SCMS is a feature that prohibits second-generation and later copying through a digital connection. It is built into MD recorders and other consumer digital-audio equipment as a copyright-protection feature.)
- 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.

* Microsoft and Windows are registered trademarks of 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 Computer, Inc.

* SmartMedia is a trademark of Toshiba Corp.

# Contents

# Menu ..... 125

# Appendices ..... 141

# Features of the MC-909



## Cutting-edge groovebox that unifies MIDI and sampling

In a single unit, the MC-909 delivers the power of a conventional groovebox (an all-in-one synthesizer and sequencer) plus a full-fledged sampler. It's a new generation of workstation that gives you everything you need to perfect your music.

## Built-in mastering functionality

A three-band compressor is built-in, letting you apply the mastering operations that are the indispensable final step in music production. The output of the MC-909 can be recorded directly to CD or MD.

## Sample synthesis

Waveforms sampled by the MC-909 or loaded from an external source can be freely manipulated using the filter, LFO, and effects in the same way as the internal preset waveforms.

## Full-fledged sampler

The high-performance 44.1 kHz sampler provides five sampling modes for various situations. You can sample external analog or digital input sources, or resample the internal sounds. The full range of editing functions includes Time Stretch and Chop.

Memory can be expanded to a maximum of 256 MB by adding DIMM modules. When added to the internal 16 MB of RAM (approximately 3 minutes of monaural sampling), this gives you up to 272 MB (approximately 51 minutes of monaural sampling).

## High-performance synthesizer sound generator

Features Roland's latest high-performance synthesizer sound generator, with 800 patches and 64 rhythm sets that are based on new waveforms created especially for the MC-909.

You can also install one wave expansion board (SRX series) to increase the waveforms available to you when the need arises. In particular, installing the SRX-05 "Supreme Dance" board will let you use special patches and rhythm sets created specifically for the MC-909.

## The latest patterns for creative use and immediate performance

For immediate playing or for use in your own compositions, the MC-909 provides 215 preset patterns and 440 different RPS patterns, covering a broad range of current dance styles, including techno, trance, house, hiphop, and R&B.

## Plenty of external interfaces

The MC-909 provides a USB connector for file transfer with your computer. Waveform data files in .WAV or .AIFF formats and SMF-format sequence data can be imported or exported between the MC-909 and your computer with the click of a mouse, as easily as if you were using an external drive.

## Highly evolved turntable emulation, and dual D Beam controllers

By automatically time-stretching a sample according to the sequencer playback tempo, you can maintain playback synchronization between the sequencer and samples. This lets you use the turntable emulation slider to control the sequencer and sample BPM in real time. You can also specify the variable range of the slider.

In addition, the MC-909 features dual D Beam controllers, located at the left and right of the panel. This gives you the capability for special effects that have never been possible until now.

## Easy creation of original patterns

With a large LCD, knobs and a mixer section that can be operated at any time to modify the sound directly, and newly developed velocity pads, the MC-909 is an ideal recording environment. You can use realtime, TR-REC, and step recording methods, and manipulate your music with editing functionality that goes well beyond previous grooveboxes.

The sequencer has also been upgraded, letting you create 16-part patterns that are up to 998 measures long. SMF Convert Load/Save functions ensure easy data exchange with other sequencers.

## Two multi-effects, a compressor, and reverb

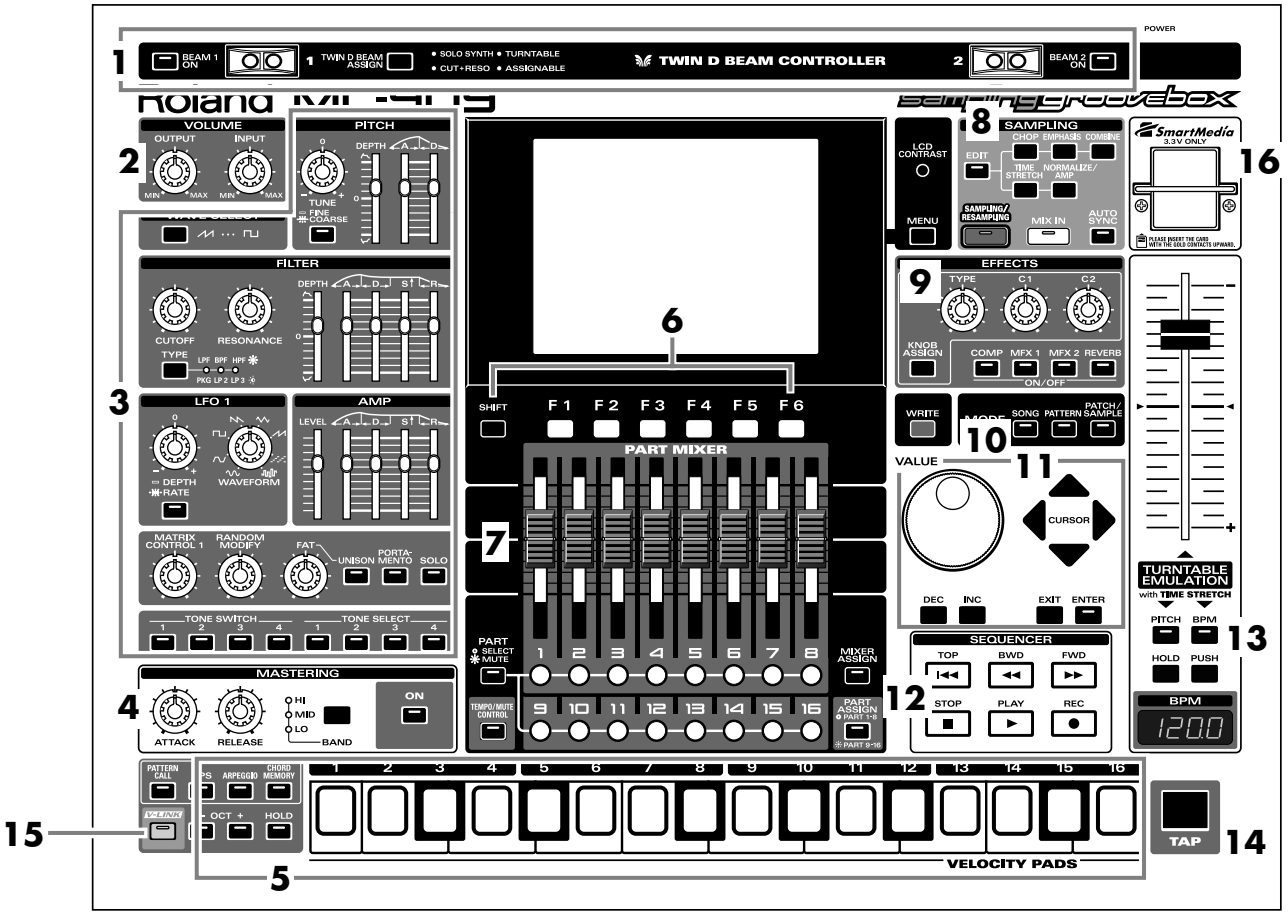
The two independent MFX units (multi-effects: MFX1 provides 38 types, MFX2 provides 47 types) provide a complete array of effects that are ready to go whenever you need them. In particular, MFX2 can produce long delays of up to four seconds. The two-band compressor is a great way to power-up rhythm instruments such kick drum. The acclaimed reverb from the XV series is also provided.

## V-LINK function

V-LINK ( V-LINK ) is a function that provides for the play of music and visual material. By using V-LINK-compatible video equipment, visual effects can be easily linked to, and made part of the expressive elements of a performance. By connecting the MC-909 to the Edirol DV-7PR, you can switch images in synchronization with music, or use the MC-909's knobs to control the brightness, color, or playback speed of the images.

# Panel Descriptions

## Top Panel




### 1. D Beam Controllers

You can modify the patterns or sounds by passing your hand over these (p. 35).

### 2. Volume Section

Adjusts the output volume of the entire MC-909, and the input volume to the MC-909.

### 3. Realtime Modify Section

Modifies the tone (p. 33).

### 4. Mastering Section

Applies a mastering effect (compressor) (p. 108).

### 5. Velocity Pads

Used as a keyboard to play sounds or trigger phrases (p. 27).

### 6. Function Buttons

Access the screens for the functions shown in the bottom line of the screen.

### 7. Part Mixer Section

Adjusts the volume and pan for each part in the pattern (p. 33).

### 8. Sampling Section

Records external sounds into the MC-909 as waveforms, and processes them (p. 109).

### 9. Effect Section

Applies special effects to the sound (p. 88).

### 10. Mode Section

Selects Song mode (p. 79), Pattern mode (p. 21), or Patch/Sample mode (p. 51).

The button of the currently selected mode will light.

### 11. Cursor/Value Section

Used to select patterns or patches, and to input values (p. 18).

### 12. Sequencer Section

Used to play/record patterns or songs (p. 24, p. 82).

### 13. Turntable Emulation

Simulates the effect of changing the rotational speed of a turntable (p. 36).

### 14. TAP Button

Adjusts the BPM (tempo) according to the timing at which you tap this button (p. 25).

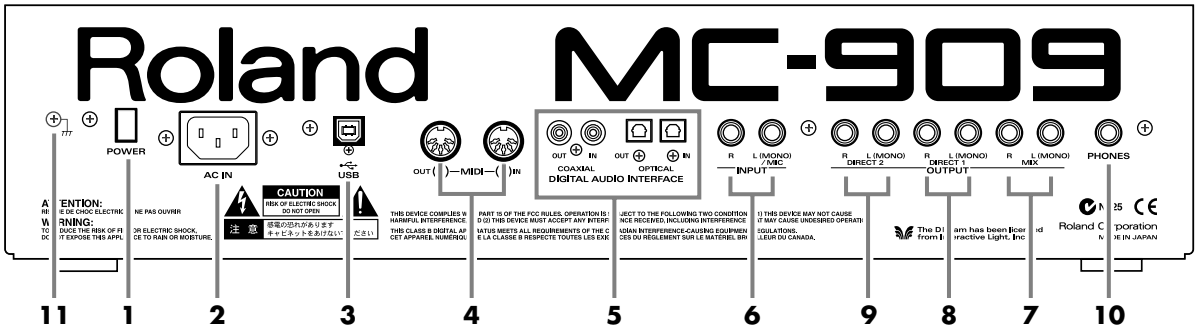
### 15. V-LINK Button

Switches V-LINK (p. 137) on/off.

### 16. SmartMedia card slot

Insert a SmartMedia card (3.3V, maximum 128 MB) here.

# Rear Panel




### 1. POWER Switch

Turns the MC-909's power on and off (p. 16).

### 2. AC Inlet

Connect the included power cable here (p. 16).

The unit should be connected to a power source only of the type marked on the bottom of the unit.

### 3. USB Connector

This connector lets you use a USB cable to connect your computer to the MC-909 (p. 135).

### 4. MIDI Connectors (IN, OUT)

These connectors connect the MC-909 with other MIDI devices, enabling the sending and receiving of MIDI messages (p. 16).

- **IN:** This connector receives messages from another MIDI device.
- **OUT:** This connector transmits messages to another MIDI device.

### 5. Digital Audio Interface

These are optical-type and coaxial-type S/P DIF format digital in/out connectors.

**S/P DIF:** A digital interface format used in consumer digital audio devices.

The digital output connectors output the same audio signal as is output from the MIX OUTPUT jacks.

### 6. INPUT Jack

Accept input of audio signals in stereo (L/R) from external devices. If you want to use mono input, connect to the L jack.

**MEMO**

When recording from a mic, connect it to the L jack, and set Input Select (p. 34) to "MICROPHONE."

### 7. MIX OUTPUT Jacks

These jacks output stereo (L/R) audio signals to your amp or mixer. If you want to use mono output, connect to the L jack.

### 8. DIRECT 1 OUTPUT Jacks

The sound of the part/patch/rhythm set/tone/rhythm tone whose Output Assign (p. 88, p. 89, and p. 90) you set to "DIR1" is output in stereo (L/R) from these jacks to your amp or mixer. If you want to use mono output, connect to the L jack.

### 9. DIRECT 2 OUTPUT Jacks

The sound of the part/patch/rhythm set/tone/rhythm tone whose Output Assign (p. 88, p. 89, and p. 90) you set to "DIR2" is output in stereo (L/R) from these jacks to your amp or mixer. If you want to use mono output, connect to the L jack.

### 10. PHONES Jack

Headphones are plugged in here (p. 16).

### 11. Ground Terminal

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

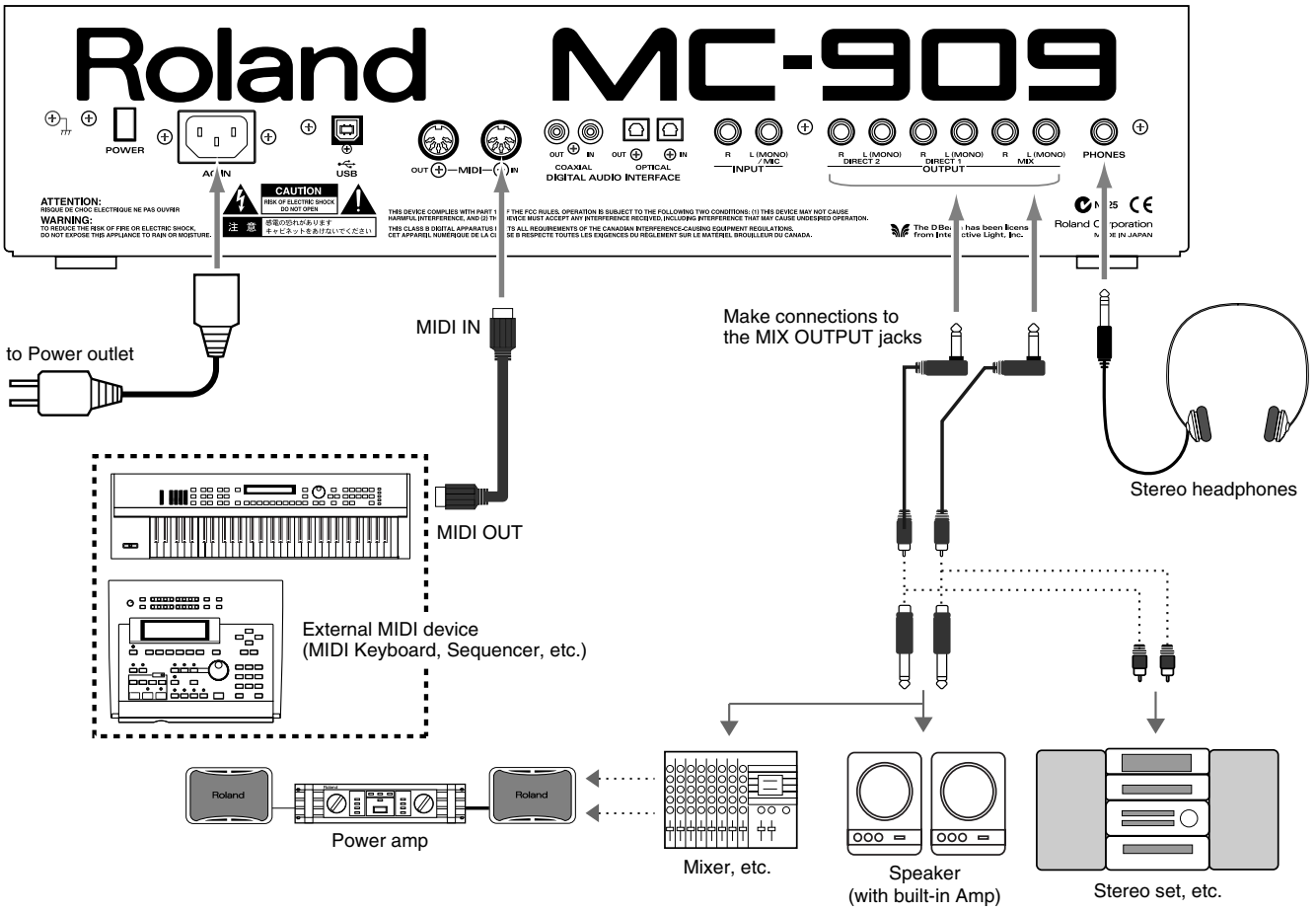
- Water pipes (may result in shock or electrocution)
- Gas pipes (may result in fire or explosion)
- Telephone-line ground or lightning rod (may be dangerous in the event of lightning)

# Getting Ready

## Making Connections

The MC-909 is not equipped with an internal amp or speakers. To hear sound, you will need to connect it to a keyboard amp or audio system, or connect headphones. Refer to the following figure when connecting the MC-909 with external devices.

* *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.*




**1.** Before making any connections, confirm that power to all devices has been turned off.

**2.** Connect the AC power cord included with the MC-909 to the unit, then plug the other end into a power outlet.

**3.** Connect audio and MIDI cables as shown in the diagram. If connecting headphones, plug the headphones into the PHONES jack.

## Turning On/Off the Power

* *Once the connections have been completed (p. 16), 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.** Make sure that all volume controls on the MC-909 and connected devices are set to "0."

**2.** Turn on the device connected to the INPUT Jacks.

**3.** Turn on the MC-909's POWER switch.

**4.** Turn on the devices connected to the OUTPUT Jacks.

**5.** Adjust the volume levels for the devices.

* *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.*

### Turning Off the Power

Before switching off the power, lower the volume on each of the devices in your system and then TURN OFF the devices in the reverse order to which they were switched on.

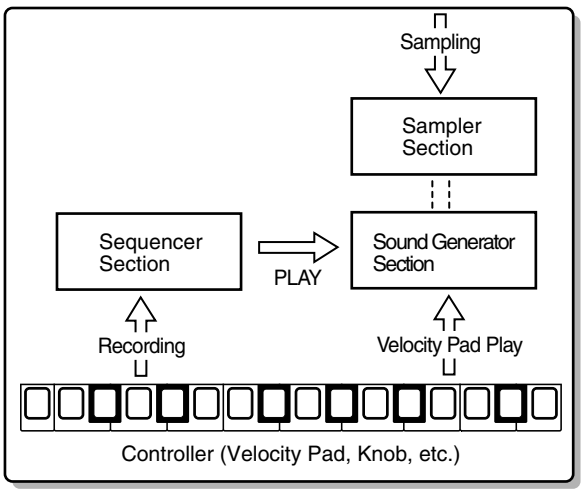
* *If you need to turn off the power completely, first turn off the POWER switch, then unplug the power cord from the power outlet. Refer to* ***Power Supply*** *(p. 5).*

# An Overview of the MC-909



## Basic structure of the MC-909

This section provides an overview of the sequencer section, sound generator section, controller section, and sampler section, which make up the main parts of the MC-909.




## The sound generator section

This is the section that actually generates the sound. It produces sounds in response to data received from the MC-909's Controller or Sequencer sections. You can also play the sound generator by sending it performance data from an external MIDI device.

Since the sound generator section of the MC-909 is able to play up to 64 notes simultaneously, it can easily handle multiple parts.

### Song

Two or more patterns connected in the order of playback are called a song.

In one song, you can register up to 50 patterns in the desired order of playback.

### Pattern

A pattern is 1–998 measures of performance data consisting of sounds (patches or rhythm sets) for up to 16 parts.

The MC-909 provides 215 different preset patterns.

### Part

A part corresponds to a single musician in a band or orchestra. Since the MC-909 has sixteen parts, you can use sixteen different patches or rhythm sets to play as many as sixteen performances simultaneously.

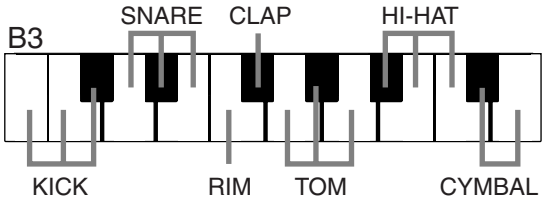
### Patch

A patch corresponds to a single instrument such as a piano or guitar. A patch consists of up to four "tones." The MC-909 provides 800 different patches, and you can enjoy an enormous variety of sounds simply by choosing from these patches.

### Rhythm set

A rhythm set assigns a separate instrumental sound to each note of the keyboard. These instrumental sounds are not played as a scale. The MC-909 provides 64 preset rhythm sets.

(Example)




### Tones

Tones are the raw materials of sound that are combined to create a patch. The MC-909 provides 693 different waveforms, and two waveforms can be assigned to each tone. (Waveforms can be assigned in stereo; one for L and one for R.)

You can install separately sold wave expansion boards (SRX series) to add more waveforms, and sounds that you sample can also be used as waveforms.

### Effects

Effects let you apply a variety of special effects to patches or rhythm sets. You can use four effects simultaneously: compressor (an effect that makes the sound more consistent), reverb (which adds reverberation), and two multi-effects (each selectable from 47 types such as equalizer, overdrive, and delay).

## The sequencer section

A **sequencer** is a device that records musical performance data, and can play back the performance data that was recorded.

The MC-909 is a sequencer that plays back patterns and adds changes to the playback method. This type of sequencer is referred to as a **pattern sequencer**.

### Recording/playing a performance

The MC-909 comes with 215 previously prepared patterns (**preset patterns**). These preset patterns can be played back easily.

You can also create your own original patterns, either by modifying preset patterns or by creating a pattern from scratch.

### Simultaneous playback of multiple parts

The MC-909 is able to play multiple sounds (patches) simultaneously. For example, with the following part configuration, you can simultaneously play drums, bass, piano and guitar; and the resulting performance will sound like a band.

| | |
|---|---|
| **Part 1** | Guitar |
| **Part 2** | Bass |
| **Part 3** | Piano |
| **Part 10** | Rhythm (Drum) Set |

### Editing performance data

Unlike a cassette tape or MD, a sequencer records a performance as musical data (not as sound). It's easy to edit the performance data to create your own original patterns.

## The controller section

The "controllers" of the MC-909 are its velocity pads, D Beam controllers, and the panel knobs and sliders. By operating these controllers you can modify the performance and sound in various ways.

### Velocity pads

These pads function just like a music keyboard. They are also used to trigger RPS (p. 28) and the arpeggiator (p. 30). Normally, pad number 2 will be C4. The force with which you strike a pad will control the velocity (dynamics) of the note.

### D Beam controllers

By passing your hand over these controllers you can play or modify sounds (p. 35).

### Turntable emulation

These buttons and slider allow realtime synchronized performance with sound sources such as a turntable, assisting you with DJ performance (p. 36).

### Realtime modify knobs

These knobs and sliders give you realtime control over sound parameters such as filter cutoff frequency and resonance or LFO speed.

## The sampler section

A sampler is a device that captures sounds from a wave file or an external source such as a CD.
On the MC-909, a sampled sound can be handled just like an internal waveform of the sound generation section; you can change the pitch of the sampled sound, apply a filter to it, or modify its envelope.

# Adjusting the display contrast

Use the [LCD CONTRAST] knob located at the right of the display to adjust the contrast.
Turn the knob toward the right to darken the screen, or toward the left to lighten it.

# Editing a value

Use the [VALUE] dial to make large changes in a value, or use the [INC]/[DEC] buttons to change a value in steps of one. Your changes will affect the value that is displayed in white characters within a black frame in the screen. This location is called the "cursor." If a screen contains more than one value that can be edited, use the [CURSOR] buttons to move the cursor to the value you want to edit.

## Quickly changing a value

- If you hold down [SHIFT] while you turn the [VALUE] dial, the value will change more rapidly.

### Key Repeat function

- The value will continue changing if you press and hold [INC] or [DEC].
- The cursor will continue moving if you press and hold a [CURSOR] key.

### Turbo Repeat function

- The value will increase rapidly if you hold down [INC], then press and hold [DEC].
- The value will decrease rapidly if you hold down [DEC], then press and hold [INC].
- The cursor will move rapidly if you hold down a [CURSOR] button and then press the opposite [CURSOR] button.

# Saving your data

After editing settings or recording a performance, you must save your data if you want to keep the results. If you turn off the power without saving, your settings or recorded performance will be lost.
For details on saving your data, refer to the following pages.

- **Saving a pattern** (p. 50)
- **Saving a Patch/Rhythm Set** (p. 77)
- **Saving a song** (p. 85)
- **Saving a sample** (p. 123)
- **Saving a Pattern Set** (p. 27)
- **Saving an RPS set** (p. 30)
- **Saving an arpeggio style** (p. 32)
- **Saving a chord form** (p. 33)

**NOTE**

Saving takes several seconds. Do not turn off the power until saving is completed. Doing so may cause the MC-909 to malfunction.

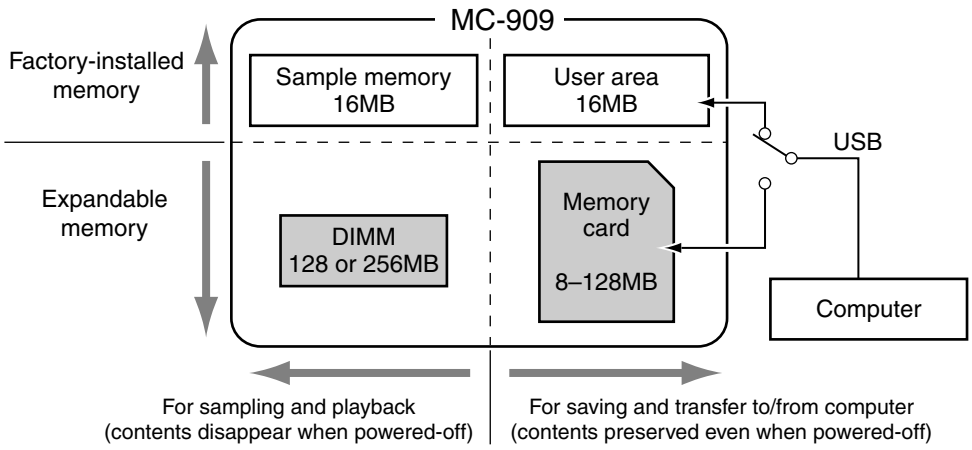
# Regarding the locations where samples are stored

The MC-909 can use two types of memory; sample memory and DIMM whose contents are lost when you turn off the power, and user area and memory card whose contents are preserved even when the power is off.

When shipped from the factory, the MC-909 has 16 MB of sample memory and 16 MB of user area. By adding a DIMM module you can expand the sample memory to a maximum of 272 MB (if a 256 MB DIMM is used).
The user area can hold up to 16 MB, but by using a memory card you can store a maximum of 128 MB in addition to the user area.

**When you record a sample on the MC-909 or play a patch that uses a sample, the sample is loaded into sample memory (including the DIMM). However when you turn off the power, the contents of the sample memory and DIMM will be lost. This means that if you want to keep the sample, you must use the Write operation to save it in the user area or on a memory card.**

When managing data from your computer or from the MC-909's Utility menu, you can manage only the data located in the user area or the memory card. You cannot manage data that is located in sample memory or DIMM.




Be aware that because of this, the MC-909 can play samples larger than 128 MB, but **cannot save samples larger than 128 MB**.

# Restoring the factory settings (Factory Reset)

Here's how to restore the settings of the MC-909 to their factory-set state.

**NOTE**

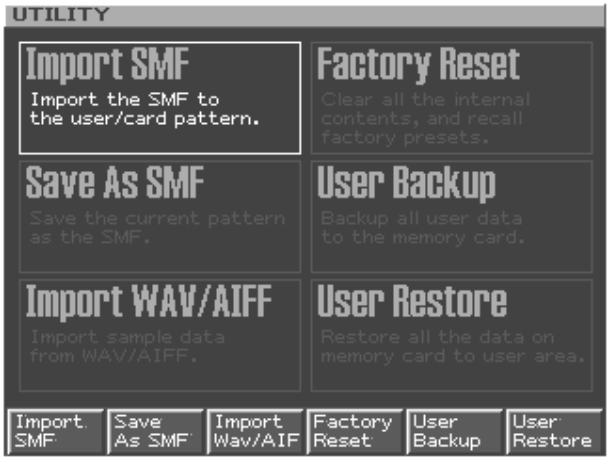
When you execute Factory Preset, **the data of the internal user memory will be lost**. If the internal memory of the MC-909 contains data that you want to keep, you must save it on SmartMedia or via USB to your computer.

**NOTE**

**Never turn off the power** while Factory Reset is being executed. Doing so may destroy the contents of memory.

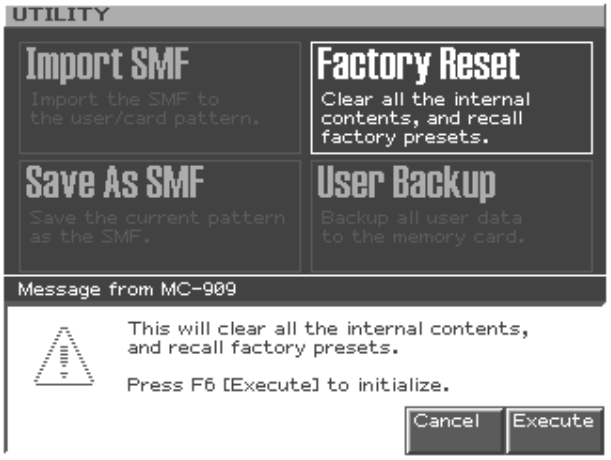
1. Press [MENU].
2. Use [CURSOR] to select "Utility."


3. Press [ENTER] to access the Utility menu.




4. Press [F4 (Factory Reset)].

   A warning message will appear.




5. To execute a Factory Reset, press [F6 (Execute)].

   The Factory Reset will be carried out.

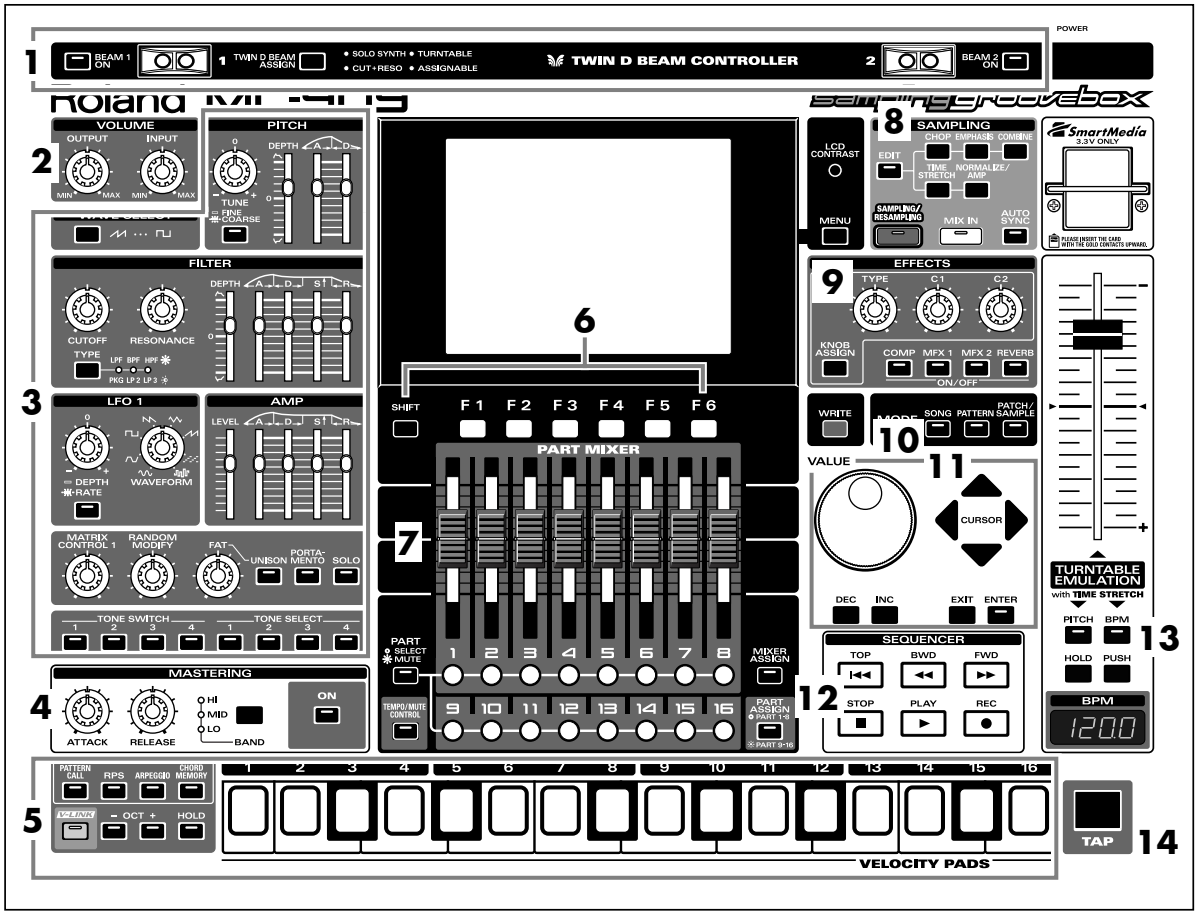
* *If you decide not to proceed with the reset, press [F5 (Cancel)].*

When the screen indicates "Please Power Off," turn the power off, then on again.

# Pattern Mode

**In this mode you can play, record, and edit patterns.**

# How Things Work (in Pattern mode)




When you press the Mode section **[PATTERN] button**, the button's indicator will light and the MC-909 will be in Pattern mode.
In Pattern mode, the various parts of the panel will perform the following functions.

## 1. D Beam controllers

Pass your hand over these to modify the pattern (p. 35).

| | |
|---|---|
| [BEAM 1 ON] | Turns the left D Beam controller (BEAM 1) on/off. |
| [BEAM 2 ON] | Turns the right D Beam controller (BEAM 2) on/off. |
| [TWIN D BEAM ASSIGN] | Selects the function of the D Beam controller. |

## 2. Volume section

| | |
|---|---|
| [OUTPUT] | Adjusts the output volume of the MIX OUT jacks and the headphone. |
| [INPUT] | Adjusts the input volume from the INPUT jacks. |

## 3. Realtime Modify section

These controls modify the sound (p. 33).

## 4. Mastering section

| | |
|---|---|
| [ON] | Switches the mastering effect (compressor) on/off. |
| [BAND] | Selects the frequency band to adjust. |
| [ATTACK] | Specify the time from when the volume goes up the threshold level until the compressor effect applies. |
| [RELEASE] | Specify the time from when the volume falls below the threshold level until the compressor effect no longer applies. |

## 5. Velocity pads

Use these pads as a keyboard to play sounds or trigger phrases (p. 27).

## 6. Function buttons

These buttons access the function screens indicated in the bottom line of the display.

## 7. Part Mixer section

Here you can adjust the volume, pan, etc., of each part (p. 33).

| | |
|---|---|
| [PART] (SELECT/MUTE) | Selects the function of the Part buttons [1]–[16].<br>The buttons work as Part Select buttons when the indicator is not lighted, and as Mute buttons when the indicator is lit. |
| [TEMPO/MUTE CONTROL] | Switches on/off the Tempo/Mute part (a part that records tempo changes and mute operations, p. 42). |
| [MIXER ASSIGN] | When you press this button so its indicator lights, the Mixer screen will appear. |
| [PART ASSIGN] | Selects the parts that are controlled by the sliders.<br>The sliders will control parts 1–8 if this indicator is not lighted, or parts 9–16 if the indicator is lit. |

## 8. Sampling section

| | |
|---|---|
| [EDIT] | Displays the Sample Edit screen (p. 114). |
| [SAMPLING/RESAMPLING] | Displays the Sampling menu screen (p. 112). |
| [MIX IN] | Mixes the sound from the INPUT jack into the output (p. 34). |
| [AUTO SYNC] | Synchronizes a sample to the pattern (p. 36). |

## 9. Effect section

Applies special effects to the sound (p. 88).

| | |
|---|---|
| [COMP]–[REVERB] | Switch each effect on/off (p. 88). |
| [KNOB ASSIGN] | Selects the effect to be controlled in real time (p. 91). |
| [TYPE] | Selects the type of effect. |
| [C1], [C2] | Modifies the assigned function in real time. |

## 10. Mode section

Press the [PATTERN] button to enter Pattern mode.
Pressing one of the other two buttons will switch you to the corresponding mode.

## 11. Cursor/Value section

Use these buttons and dial to select patterns or input values (p. 18).

## 12. Sequencer section

| | |
|---|---|
| [PLAY] | Plays a pattern (p. 24). |
| [STOP] | Stops playback/recording. |
| [FWD] | Advances to the next measure. |
| [BWD] | Returns to the previous measure. |
| [TOP] | Moves to the beginning of the pattern. |
| [REC] | Used when recording (p. 37). |

## 13. Turntable emulation

Applies an effect that simulates increasing/decreasing the rotational speed of a turntable (p. 36).

## 14. TAP button

Lets you set the BPM (tempo) by pressing the button at the desired timing (p. 25).

# Playing a pattern

## Basics of pattern play

### The top screen of Pattern mode


**1. Current pattern**

The pattern that is now playing

**2. Next pattern**

The pattern that will play next

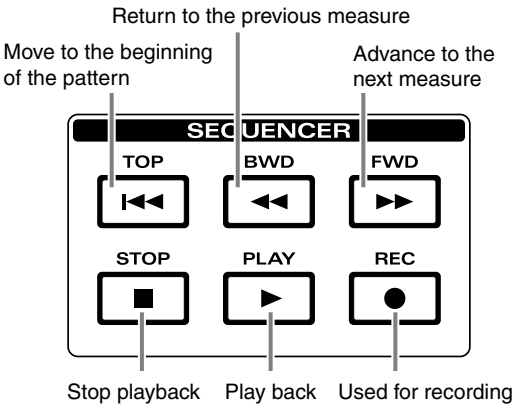
* *"Len" is the number of measures (Length) of the pattern.*

### Function buttons

| | |
|---|---|
| [F1 (List)] (Pattern List) | Select a pattern from a list (p. 25). |
| [F2 (Edit)] (Pattern Edit) | Edit the settings of a pattern (p. 43). |
| [F3 (Mixer)] (Part Mixer) | Specify the volume, pan, etc., of each part (p. 33). |
| [F4 (Effects)] | Apply special effects to the sound (p. 88). |
| [F5 (Mastering)] | Make settings for the Mastering effect (p. 108). |
| [F6 (BPM/Click)] | Set the tempo, and turn the metronome on/off (p. 25). |
| [SHIFT] + [F1 (Arp)] (Arpeggiator) | Make arpeggiator settings (p. 30). |
| [SHIFT] + [F2 (Chord Memory)] | Register chords (p. 32). |
| [SHIFT] + [F3 (Pattern Call)] | Select a pattern set (p. 27). |
| [SHIFT] + [F4 (RPS)] | Make RPS settings (p. 29). |
| [SHIFT] + [F5 (System)] (System Edit) | Make settings that apply to the entire MC-909 (p. 126). |
| [SHIFT] + [F6 (Utility)] (Utility Menu) | Open the Utility menu (p. 131). |

## Basic playback operation

Use the following buttons to control the playback.




* *The [FWD], [BWD], and [TOP] buttons can also be used during playback.*

* ** Press [STOP] twice to return to the beginning of the pattern.*

## Selecting a pattern to play back

There are two ways to select a pattern for playback; **directly**, or **from a list**.

### Selecting a pattern directly

#### Selecting the current pattern

While the pattern is stopped, use [VALUE] or [INC/DEC] to select a pattern.

#### Selecting the next pattern

While the pattern is playing, use [VALUE] or [INC/DEC] to select a pattern.

When the current pattern finishes playing, the selected pattern will start playing.

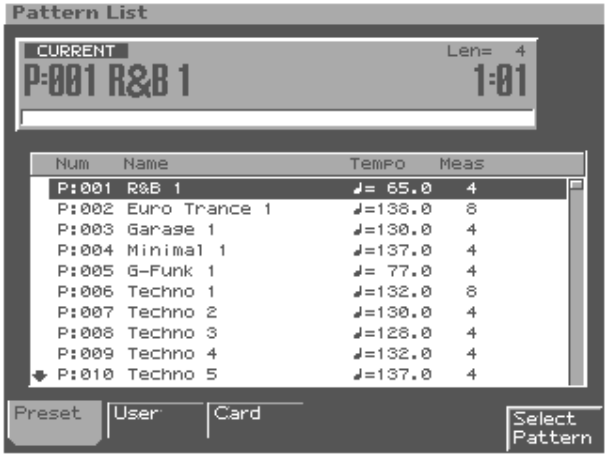
* *Shortly before the current pattern finishes playing, the word "LOCKED" will appear above the name of the next pattern. You will not be able to change the next pattern while this is displayed, since preparations are being made to move to that pattern.*

MEMO

If you press [CURSOR (left/right)] while a pattern is playing, the pattern will change immediately, and will start playing from the beginning of the pattern.

## Selecting a pattern from the list

1. **Press [F1 (List)].**




2. **Press [F1 (Preset)], [F2 (User)], or [F3 (Card)] to choose the group that contains the desired pattern.**

3. **Use [VALUE], [INC/DEC] or [CURSOR (up/down)] to select a pattern.**

   If you hold down [SHIFT] while using the above controls, the pattern number will change in steps of ten.

4. **Press [F6 (Select Pattern)] to finalize your selection.**

| | |
|---|---|
| [F1 (Preset)] | Choose preset patterns. |
| [F2 (User)] | Choose user patterns. |
| [F3 (Card)] | Choose patterns stored on a memory card. |
| [F6 (Select Pattern)] | Finalize the selected pattern. |

## BPM (tempo) when playing patterns successively

Each pattern has its own specified tempo (BPM). If you play back patterns successively, the tempo will also change when the pattern changes.

MEMO

If desired, you can maintain the tempo of the first-played pattern even while switching patterns (BPM Lock ->p. 128).

# Changing the BPM (Tempo)

## Using the [VALUE] dial

1. **Press [F6 (BPM/Click)] to access the BPM window.**


2. **Use [VALUE] or [INC/DEC] to set the BPM.**

3. **Press [F6 (Close)] to close the BPM window.**

MEMO

You can access the BPM window during TR-REC by pressing [SHIFT]+[F6], or during sampling by pressing [F4].

## Using the TAP button

Press [TAP] **three or more times** at **quarter-note intervals** of the desired BPM.

* *If desired, you can set the BPM by pressing [TAP] at eighth-note/sixteenth-note intervals (Tap Resolution ->p. 127).*

# Turning the metronome (click) on/off

1. **Press [F6 (BPM/Click)] to access the BPM window.**

2. **Press [F5 (Click)] to select on or off.**
   When on, the "✔" will be displayed.

3. **Press [F6 (Close)] to close the BPM window.**

* *The metronome volume adjustment is a System setting (Metronome Level -> p. 117)*

## Selecting the metronome output destination

1. **Press [F6 (BPM/Click)] to access the BPM window.**

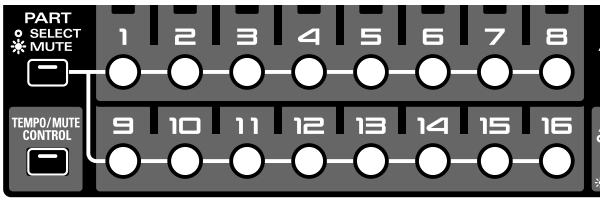
2. **Press [CURSOR (up/down)] to move the cursor to "Output Asgn."**

3. **Use [VALUE] or [INC/DEC] to select the output destination.**

| | |
|---|---|
| **MIX** | Output from the MIX OUT jacks and the headphones. |
| **DIR1** | Output from the DIRECT 1 OUTPUT jacks. |
| **DIR2** | Output from the DIRECT 2 OUTPUT jacks. |

# Muting (silencing) a part

A pattern contains sixteen parts. You can mute (silence) each part in real time.




1. **In the Part Mixer section, press [PART] (SELECT/MUTE) so the indicator is lighted.**
   Part buttons [1]–[16] now control part muting.
2. **Press the button of the part that you want to mute, making it blink.**
   That part will be muted.
3. **To cancel muting, press the button of the muted part once again, making it light.**

The indicators of the part buttons show the muted state of the parts as follows:

- **Lit:** The part can be played.
- **Blinking:** The part is muted.
- **Not lit:** No performance has been recorded in the part. (The indicator will light when you record data.)

## Mute Remain

This function maintains the mute status of each part while the next pattern plays. For example, this lets you play the next pattern without sounding the rhythm part.

1. **During pattern playback, press [PLAY].**
   The screen will indicate "MUTE REMAIN."
2. **Select the next pattern.**
   After a time, the selected pattern will play, with the mute settings of each part remaining as they were.
   When the pattern changes, the Mute Remain function will automatically be cancelled.

* *Mute Remain will be cancelled if you press [PLAY] once again before the pattern changes.*

## Solo

This function assigns play-ready status to one specified part, muting the others.

1. **Hold down [SHIFT] and press the part button [1]–[16] of the part you want to play.**
   All parts other than the selected part will be muted.

## All Parts Mute

This function mutes all parts at once.

1. **Hold down [SHIFT] and press [PART ASSIGN].**
   The sound of all parts will be muted.

## All Parts On

This function un-mutes all parts at once.

1. **Hold down [SHIFT] and press [MIXER ASSIGN].**
   Muting will be cancelled for all parts, so they are all allowed to play.

## Mute Reverse

This function inverts the currently muted and currently playing parts.

1. **Hold down [SHIFT] and press [TEMPO/MUTE CONTROL].**
   The status of parts that are currently muted changes, so they are allowed to play, while the parts that are currently playing will be muted.

## Default Mute

This function restores the part mute settings to the state stored in the pattern.

1. **Hold down [SHIFT] and press [PART] (SELECT/MUTE).**
   The part mute settings will return to the state stored in the pattern.

## About the setup parameters

On the MC-909, the following parameters allow their settings to be individually stored for each pattern. These parameters are collectively called the "setup parameters."

- BPM (Tempo) (p. 25)
- Patch/Rhythm set * (p. 55)
- Part Level * (p. 33)
- Part Pan * (p. 33)
- Part Key Shift * (p. 33)
- Part Reverb Level * (p. 33)
- Part Output Assign * (p. 55)
- Sequencer Output Assign * (p. 55)
- Reverb settings (p. 90)
- Compressor settings (p. 89)
- Multi-effect settings (p. 90, p. 92)
- Part mute status * (p. 26)
- Auto Sync on/off * (p. 36)

* *The asterisk indicates parameters that can be set for each part.*

# Velocity pads

These pads work just like a keyboard. They can also be used to play RPS and the arpeggiator. Normally, pad number 2 will be C4. The force with which you strike the pads will vary the dynamics (velocity) of the sound.

MEMO

You can also set velocity to a fixed value (Pad Velocity ->p. 127).

| | |
|---|---|
| [HOLD] | If you press this button so its indicator lights, the sound will still be heard even after you take your finger off the velocity pad. The sound will stop when you press [HOLD] once again, extinguishing the indicator. |
| [OCT -]/[OCT +] | These buttons shift the range of the velocity pads in steps of one octave (maximum +/-4 octaves).<br>If you press both buttons simultaneously, the octave shift will be reset to 0. |

## Various ways to use the velocity pads

| | |
|---|---|
| [PATTERN CALL] | The pads will recall patterns (Pattern Call, p. 27). |
| [RPS] | The pads will trigger phrases (RPS, p. 28). |
| [ARPEGGIO] | The pads will play arpeggios (Arpeggiator, p. 30). |
| [CHORD MEMORY] | Produce chords by pressing a single pad (Chord Memory, p. 32). |

# Pattern Call

You can use the sixteen velocity pads as buttons to select patterns. The patterns that are registered to each of the sixteen velocity pads are handled as one "pattern set." You are free to edit the contents of a pattern set, and can store 50 different sets. You can also switch between pattern sets during pattern playback.

MEMO

You can use this method to select either the current pattern or the next pattern.

* *Pattern Call cannot be used in Song mode.*

## Using Pattern Call

**1. Press [PATTERN CALL] so its indicator is lighted.**

**2. Press one of the velocity pads [1]–[16].**

The pattern that is registered to the pad you pressed will be selected.

* *[HOLD] and [OCT +/-] will have no effect.*

* *Pattern Call cannot be used simultaneously with RPS, arpeggiator, or chord memory.*

## Selecting a pattern set

**1. Hold down [PATTERN CALL] and use [VALUE] or [INC/DEC] to select a set.**

## Registering a pattern in a Pattern Set

**1. Select the pattern you want to register, so it is the current pattern.**

**2. Select the pattern set into which you want to register that pattern.**

**3. Hold down [PATTERN CALL], and press the velocity pad to which you want to register the pattern.**

That pattern will be registered to the pad you pressed.

## Saving a Pattern Set

Pattern Set settings that you have edited will be lost when you turn off the power. If you want to keep your changes, you must save them as follows.

**1. Hold down [PATTERN CALL] and press [F6 (PtnCall Setting)].**

Alternatively, hold down [SHIFT] and press [F3 (Pattern Call)].
The Pattern Call editing screen will appear.

**2. Use [VALUE] or [INC/DEC] to select the pattern set that you want to save.**

**3. Press [WRITE].**

The Write menu screen will appear.
Make sure that "Pattern Set" is highlighted.

**4. Press [ENTER] or [F4 (PCL)].**

**5. Assign a name to the pattern set.**

For details on how to assign a name, refer to "Saving a pattern" (p. 43).

**6. When you finish inputting the name, press [F6 (Write)].**

A message will ask you for confirmation.

**7. To save the pattern set, press [F6 (Execute)].**

* *To cancel without saving, press [F5 (Cancel)].*

MEMO

Patterns that are registered in a pattern set allow you to specify setup parameters that are different than in conventional pattern mode.

# RPS

Any phrase that's been assigned to one of the sixteen velocity pads will continue playing as long as you hold down its pad.
The phrases that are registered to the sixteen velocity pads are handled as one "RPS set." You are free to edit the contents of an RPS set, and can store 50 different sets. You can also switch between RPS sets during pattern playback.

## Using RPS

1. **Press [RPS] so its indicator is lighted.**
2. **Press one of the velocity pads [1]–[16].**
   The phrase that is registered to the pad you pressed will continue playing.

* *[OCT +/-] will have no effect.*

* *RPS cannot be used simultaneously with pattern call, arpeggiator, or chord memory.*

## RPS Hold

You can make a phrase continue playing even after you release your finger from the velocity pad.

- **To hold all phrases**

1. **Press [HOLD] so the indicator is lit.**
2. **Press a velocity pad to play a phrase.**
   You can stop that phrase by pressing the same pad once again.

- **To hold individual phrases**

1. **Hold down [HOLD] and press a velocity pad to play a phrase.**
   [HOLD] will blink, and that phrase will continue playing until you press the same pad once again.
2. **To play a phrase that you want to hold, hold down [HOLD] and press the appropriate pad, as described in step 1.**
   The phrases will play together.
3. **To play a phrase that you do not want to hold, press only the appropriate pad.**
   When you release your finger from the pad, that phrase will stop playing.

* *In steps 1 and 2, you can also press [HOLD] while pressing the velocity pad to play the phrase, as an alternative to holding down [HOLD] and then pressing the pad.*

MEMO

To stop all phrases, press [HOLD] so the indicator goes out.

## Selecting an RPS set

1. **Hold down [RPS] and use [VALUE] or [INC/DEC] to select a set.**

## Registering a phrase in an RPS set

1. **Select the pattern that contains the phrase you want to register, so it is the current pattern.**
2. **Mute all parts other than the single part you want to register in RPS.**
   Refer to p. 26 for details on muting.

HINT

You may find it convenient to use the Solo function (p. 26).

3. **Select the RPS set in which you want to register that phrase.**
4. **Hold down [RPS], and press the velocity pad to which you want to register the phrase.**
   That phrase will be registered to the pad you pressed.

### <Note when assigning RPS>

* *It is not possible for multi-part phrases to be assigned to each of the velocity pads. You must mute all parts other than the part that contains the phrase you wish to assign. If you attempt to assign a phrase in which two or more parts are un-muted, the display will indicate "Cannot Assign Phrase!".*

* *If you have assigned a phrase from a user pattern to RPS, and modify the performance data of the pattern that contains that phrase after it has been assigned, be aware that the phrase played by RPS will be affected by these modifications. For example if you delete the performance data of a pattern that contains an assigned phrase, no sound will be heard when you use RPS to play that phrase.*

* *If you assign a phrase from a part that uses MFX, the MFX settings during RPS playback will be determined by the MFX settings of the currently selected pattern. This means that the RPS playback may sound different than the original phrase.*

MEMO

Patterns that are registered in an RPS set allow you to specify setup parameters that are different than in conventional pattern mode.

## RPS Settings

1. **Hold down [RPS] and press [F6 (RPS Setting)].**
   Alternatively, hold down [SHIFT] and press [F4 (RPS)].
   The RPS setting screen will appear.
2. **Use [CURSOR (up/down)] to select a parameter.**
3. **Use [VALUE] or [INC/DEC] to edit the parameter.**

| Parameter | Range | Explanation |
|---|---|---|
| RPS Set | 01–50 | RPS set to edit |
| RPS Part | Part 1–16 | RPS part to edit |
| RPS Part Patch Bank | — | Patch assigned to RPS part |
| RPS Part Patch Number | — | |
| RPS Part Output Select | DRY, MFX1, MFX2, COMP, DIR1, DIR2, RHY | How the original sound of each part will be output<br>**DRY:** Output to MIX OUTPUT jacks without passing through effects<br>**MFX1 (2):** Output through multi-effects 1 (or 2)<br>**COMP:** Output through the compressor<br>**DIR1 (2):** Output to the DIRECT 1 (or DIRECT 2) jacks without passing through effects<br>**RHY:** Output according to the settings of the rhythm set assigned to the part |
| Remote Keyboard Switch | OFF, ON | Refer to p. 128. |

### <RPS Trigger Quantize>

When using RPS during pattern playback, patterns and phrases may not play back in precise alignment, depending on the timing at which you press the velocity pads. On the MC-909 you can specify the playback timing of the phrase, so it will play back in precise synchronization with the pattern. (RPS Trigger Quantize ->p. 128)

- **REAL:**
  The phrase will play back immediately, at the timing at which you pressed velocity pads.
- **16TH, 8TH, QUARTER:**
  The pattern will be divided into selected note units, and when you press the velocity pads, the phrase will begin playing at the beginning of the next note unit.
- **MEASURE:**
  The pattern will be divided into one-measure units, and when you press the velocity pads, the phrase will begin playing at the beginning of the next measure.

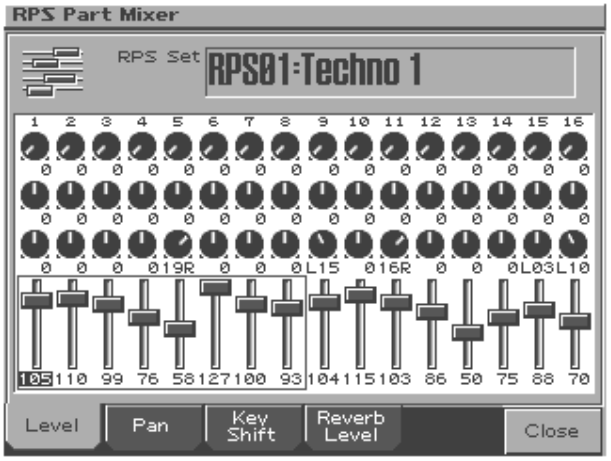
* *Except when this parameter is set to "REAL," pressing on the velocity pads slightly before the actual desired timing will help you synchronize the phrase to the pattern.*

* *If the pattern is stopped, the phrase will play back immediately, regardless of the setting that is selected in the above procedure.*

## Adjusting the settings of the RPS parts

RPS playback uses dedicated RPS parts that are separate from conventional pattern playback. The patterns that are assigned to velocity pads [1]–[16] will play RPS parts 1–16.
Here's how to adjust the settings of these RPS parts.

1. **Hold down [RPS] and press [F6 (RPS Setting)].**
   Alternatively, hold down [SHIFT] and press [F4 (RPS)].
   The RPS setting screen will appear.
2. **Press [F3 (RPS Mixer)].**
   The RPS Mixer screen will appear.




3. **Use the part mixer section to adjust the volume, pan, etc. of RPS parts 1–16.**

| | |
|---|---|
| [PART ASSIGN] | Selects the RPS parts that will be controlled by the sliders.<br>If this indicator is not lighted, parts 1–8 will be controlled. If lit, parts 9–16 will be controlled. |
| Sliders | Adjust the volume, pan, key, and reverb level of parts 1–8 or parts 9–16. |

Use [F1]--[F4] to select a parameter, and use the sliders to adjust the values.

| Function button | Parameter adjusted by the sliders |
|---|---|
| [F1 (Level)] | Volume of the RPS part |
| [F2 (Pan)] | Left/right position of the RPS part |
| [F3 (Key Shift)] | Transposition of the RPS part<br>The pitch will change in semitone steps over a range of +/-4 octaves. |
| [F4 (Reverb Level)] | Reverb level of the RPS part |

* *You can also use [CURSOR] to select a part and parameter, and then use [VALUE] or [DEC/INC] to adjust the value.*

4. **Press [F6 (Close)] to close the RPS Mixer screen.**

## RPS realtime modify

You can use the panel knobs and sliders to modify the sound of the phrase being played by RPS.

1. **Press [RPS] to make the indicator light.**
2. **Press a velocity pad to play back a phrase.**
3. **While holding down a pad, you can operate the following knobs and sliders to modify the sound of the phrase.**

   PITCH: FINE/COARSE TUNE, ENV DEPTH/A/D
   FILTER: CUTOFF, RESONANCE, ENV DEPTH/A/D/S/R
   AMP: LEVEL, ENV DEPTH/A/D/S/R
   LFO1: PITCH DEPTH, FILTER DEPTH, AMP DEPTH, PAN DEPTH, RATE, WAVEFORM

* *Your changes will affect the sound of the phrase assigned to the pad you pressed last.*

* *If you take your finger off the pads, the changes you make will apply to the sound of the current part. The same is true even if you are playing back a phrase with [HOLD] turned on.*

* *Operating MATRIX CONTROL 1, RANDOM MODIFY, or FAT will always affect the sound of the current part.*

## Saving an RPS set

The edited settings of an RPS set will be lost when you turn off the power. If you want to keep the settings you edited, save the RPS set as follows.

1. **Hold down [RPS] and press [F6 (RPS Setting)].**
   Alternatively, hold down [SHIFT] and press [F4 (RPS)]. The RPS setting screen will appear.
2. **Use [VALUE] or [INC/DEC] to select the RPS set that you want to save.**
3. **Press [WRITE].**
   The Write menu screen will appear.
   Make sure that "RPS Set" is highlighted.
4. **Press [ENTER] or [F3 (RPS)].**
5. **Assign a name to the RPS set.**
   For details on how to assign a name, refer to "Saving a pattern" (p. 50).
6. **When you finish inputting the name, press [F6 (Write)].**
   A message will ask you for confirmation.
7. **To save, press [F6 (Execute)].**

* *To cancel without saving, press [F5 (Cancel)].*

# Arpeggiator

The MC-909's Arpeggiator function lets you perform arpeggios (chords in which notes are played in succession, one note at a time) just by playing the chords, using the notes in the chords you play. Not only can you use the factory-set arpeggio styles, which determine the way the arpeggio is played, but you can also freely rewrite styles.

## Using the arpeggiator

1. **Press [ARPEGGIO] so its indicator is lighted.**
2. **Press a chord using the velocity pads.**
   An arpeggio will play according to the specified arpeggio style.

* *Arpeggiator cannot be used simultaneously with Pattern Call or RPS.*

## Selecting an arpeggio style

1. **Hold down [ARPEGGIO] and use [VALUE] or [INC/DEC] to select a style.**

## Making arpeggiator settings

Here's how to change the way that the arpeggio is sounded.

1. **Hold down [ARPEGGIO] and press [F6 (Arp Setting)].**
   Alternatively, hold down [SHIFT] and press [F1 (Arp)].
   The arpeggiator setting screen will appear.
2. **Use [CURSOR (up/down)] to select a parameter.**
3. **Use [VALUE] or [INC/DEC] to edit the parameter.**

### Using in Combination with the Chord Memory Function

When performing with the Arpeggiator, you can also use it along with the Chord Memory (p. 32). After first storing complex Chord Forms in memory, you can then call them up when Arpeggiator is on, and you can easily create complex arpeggio sounds just by pressing a single pad.

| Parameter | Explanation |
|---|---|
| Arpeggio Grid (Grid Type) | Sets the particular note division and resolution in a "single grid" used in creating the arpeggio in an Arpeggio Style, and how much of a "shuffle" syncopation is to be to applied (none/weak/strong) to it.<br>**1/4:** Quarter note<br>**1/8:** Eighth note<br>**1/8L:** Eighth note shuffle Light<br>**1/8H:** Eighth note shuffle Heavy<br>**1/12:** Eighth note triplet<br>**1/16:** Sixteenth note<br>**1/16L:** Sixteenth note shuffle Light<br>**1/16H:** Sixteenth note shuffle Heavy<br>**1/24:** Sixteenth note triplet |

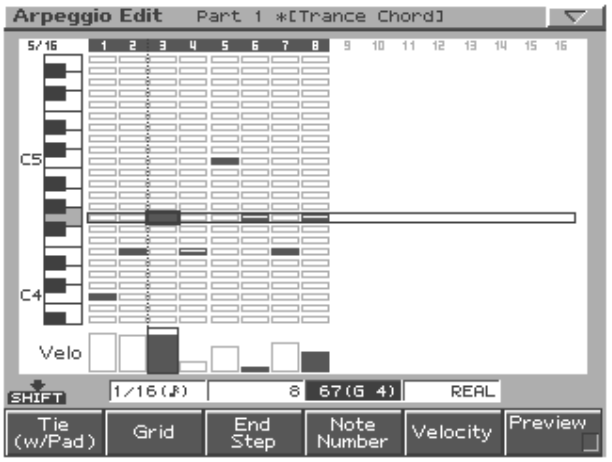
| Parameter | Explanation |
|---|---|
| Arpeggio Motif | Selects the method used to play sounds when you have a greater number of notes than programmed for the Arpeggio Style.<br>**UP(L ):** Only the lowest of the pads pressed is sounded each time, and the notes play in order from the lowest of the pressed pads.<br>**UP(L&H):** Notes from both the lowest and highest pressed pads are sounded each time, and the notes play in order from the lowest of the pressed pads.<br>**UP(_ ):** The notes play in order from the lowest of the pressed pads. No one note is played every time.<br>**DOWN(L ):** Only the lowest of the pads pressed is sounded each time, and the notes play in order from the highest of the pressed pads.<br>**DOWN(L&H):** Notes from both the lowest and highest pressed pads are sounded each time, and the notes play in order from the highest of the pressed pads.<br>**DOWN(_ ):** The notes play in order from the highest of the pressed pads. No note is played every time.<br>**UP&DOWN(L ):** Only the lowest of the pads pressed is sounded each time, and the notes in the arpeggio are played in order from the lowest of the pressed pads and then back again in the reverse order.<br>**UP&DOWN(L&H):** Notes from both the lowest and highest pressed pads are sounded each time, and the notes play in order from the lowest of the pressed pads and then back again in the reverse order.<br>**UP&DOWN(_ ):** The notes play in order from the lowest of the pressed pads, and then back again in the reverse order. No note is played every time.<br>**RANDOM(L ):** While only the lowest of the pads pressed is sounded each time, the notes in the arpeggio are played in random order. |
| Arpeggio Duration | Determines whether the sounds are played staccato (short and clipped), or tenuto (fully drawn out).<br>**30–120%:** For example, when set to "30," the length of the note in a grid (or when a series of grids is connected with ties, the final grid) is 30% of the full length of the note set in the grid type.<br>**FULL:** Even if the linked grid is not connected with a tie, the same note continues to sound until the point at which the next new sound is specified. |
| Arpeggio Octave Range | Adds an effect that shifts arpeggios one cycle at a time in octave units. You can set the shift range upwards or downwards (up to three octaves up or down). |
| Remote Keyboard Switch | Refer to p. 128. |

## Creating an arpeggio style

**1. Hold down [ARPEGGIO] and press [F6 (Arp Setting)].**
Alternatively, hold down [SHIFT] and press [F1 (Arp)].
The arpeggiator setting screen will appear.

**2. Press [F4 (Arp Edit)].**
The arpeggio style input screen will appear.

**3. Use the function buttons and [VALUE] or [INC/DEC] to specify the note that you want to input.**
You can also use **[CURSOR (up/down)]** to select the note number.




**4. To input data, press a pad that corresponds to the timing at which you want to input a note, so the pad's indicator lights.**
**To delete a note you've input, press the corresponding pad so its indicator goes out.**

* *You cannot edit the velocity of a note message once you input it. If you want to change the velocity, you must delete the note and re-input it.*

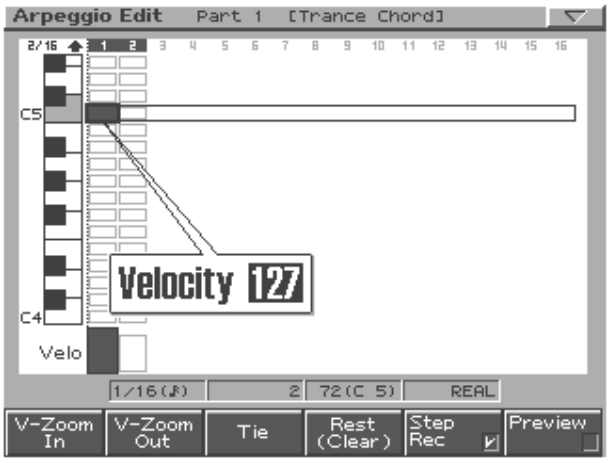
* *A maximum of sixteen notes (specified pitches) can be used in one style.*

| | |
|---|---|
| [F1 (Tie)] | By holding down [F1 (Tie)] and pressing a pad, you can extend the length of the previously input note by the current setting. |
| [F2 (Grid)] | Sets the particular note division and resolution in a "single grid" used in creating the arpeggio in an Arpeggio Style, and how much of a "shuffle" syncopation is to be to applied (none/weak/strong) to it.<br>**1/4:** Quarter note<br>**1/8:** Eighth note<br>**1/8L:** Eighth note shuffle Light<br>**1/8H:** Eighth note shuffle Heavy<br>**1/12:** Eighth note triplet<br>**1/16:** Sixteenth note<br>**1/16L:** Sixteenth note shuffle Light<br>**1/16H:** Sixteenth note shuffle Heavy<br>**1/24:** Sixteenth note triplet |
| [F3 (End Step)] | Specifies the style length<br>**Range:** 1–32 |
| [F4 (Note Number)] | Specifies the pitch of the note to be input.<br>**Range:** 0 (C-1)–127 (G9) |
| [F5 (Velocity)] | Specify the velocity (volume) of the note messages you will input.<br>**Range:** REAL, 1–127<br>* If this is set to REAL, your playing strength on the pads will vary the dynamics. |
| [F6 (Preview)] | Audition arpeggio currently being input. (The operation is the same when [SHIFT] is held.) |
| [SHIFT] + [F1 (V-Zoom In)] | Zoom-in the arpeggio style input screen. |
| [SHIFT] + [F2 (V-Zoom Out)] | Zoom-out the arpeggio style input screen. |
| [SHIFT] + [F3 (Tie)] | Input a tie at the cursor location, and advance to the next step. |
| [SHIFT] + [F4 (Rest (Clear))] | Delete all data at the step where the cursor is located. |
| [SHIFT] + [F5 (Step Rec)] | If you press this to add a check mark, you will be able to input data for individual notes (p. 32). |

**5. When you finish inputting the arpeggio style, press [EXIT].**

## Step-recording an arpeggio style

You can create an arpeggio style by inputting and editing individual notes.




1. **In the arpeggio style input screen, hold down [SHIFT] and press [F5 (Step Rec)] to apply a check mark.**
   [SHIFT] will be locked.
2. **Use [CURSOR (up/down)] to select the note number, and [CURSOR (left/right)] to select the step.**
3. **Use [VALUE] or [INC/DEC] to edit the data at the cursor (velocity: OFF, 1–127, Tie).**

* *You can also strike a velocity pad to input a note for the corresponding note number.*

| | |
|---|---|
| [F1 (V-Zoom In)] | Zoom-in the arpeggio style input screen. |
| [F2 (V-Zoom Out)] | Zoom-out the arpeggio style input screen. |
| [F3 (Tie)] | Input a tie at the cursor location, and advance to the next step. |
| [F4 (Rest (Clear))] | Delete all data at the step where the cursor is located. |
| [F6 (Preview)] | Audition arpeggio currently being input. (The operation is the same when [SHIFT] is held.) |

* *If you press [F5 (Step Rec)] and clear the check mark, you are returned to the normal input screen.*

## Saving an arpeggio style

A arpeggio style you create will be lost when you turn off the power. If you want to keep your settings, save them as follows.

1. **Hold down [ARPEGGIO] and press [F6 (Arp Setting)].**
   Alternatively, hold down [SHIFT] and press [F1 (Arp)].
   The arpeggiator setting screen will appear.
2. **Press [F6 (Arp Write)].**
   A screen will appear in which you can select the user arpeggio style to which your settings are to be written.
3. **Use [VALUE] or [INC/DEC] to select the arpeggio style that you want to save.**
4. **Press [F6 (Write)].**
   A message will ask you for confirmation.
5. **To write the data, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# Chord Memory

You can play a previously registered chord form simply by pressing a single pad. You can use the factory-set chord forms, and are also free to rewrite them as desired.

## Using chord memory

1. **Press [CHORD MEMORY] so its indicator is lighted.**
2. **Press one of the velocity pads.**
   The pre-specified chord form will sound.

MEMO

When you press velocity pad [2] (C4), the chord form will sound at the pitch that was specified. Other pads will sound parallel chords at pitches relative to pad [2] (C4).

* *Chord Memory cannot be used simultaneously with Pattern Call or RPS.*

## Selecting a chord form

1. **Hold down [CHORD MEMORY] and use [VALUE] or [INC/DEC] to select a chord form.**

## Inputting a chord form

1. **Hold down [CHORD MEMORY] and press [F6 (Chord Setting)].**
   Alternatively, hold down [SHIFT] and press [F2 (Chord Memory)].
   The chord memory setting screen will appear.
2. **Press [F4 (Chord Edit)].**
   The chord form input screen will appear.
3. **Use the velocity pads to input the chord you want to sound.**
   Input the notes that you want to sound when velocity pad [2] (C4) is pressed.
   The pads will light to indicate the notes that will sound.
   If you press a pad once again, it will go dark and will not sound.
4. **When you finish inputting the chord form, press [EXIT].**

MEMO

While inputting the chord form, you can press [F6 (Preview)] to play the chord that you have input.

## Saving a chord form

A chord form you create will be lost when you turn off the power. If you want to keep your settings, save them as follows.

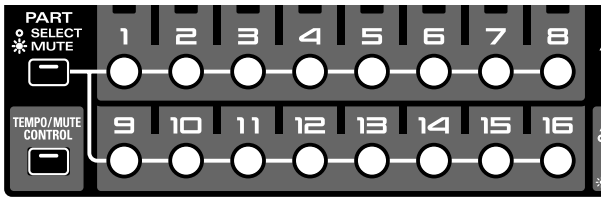
1. **Hold down [CHORD MEMORY] and press [F6 (Chord Setting)].**
   Alternatively, hold down [SHIFT] and press [F2 (Chord Memory)].
   The chord memory setting screen will appear.
2. **Press [F6 (Chord Write)].**
   A screen will appear in which you can select the user chord form to which your settings are to be written.
3. **Use [VALUE] or [INC/DEC] to select the chord form that you want to save.**
4. **Press [F6 (Write)].**
   A message will ask you for confirmation.
5. **To write the data, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# Realtime Modify section

You can use the knobs and sliders of this section to modify the sound while it plays.
For details on the function of each knob and slider, refer to Patch mode (p. 51).

## Selecting the part whose sound you want to modify




1. **In the Part Mixer section, press [PART] (SELECT/MUTE) so the indicator is not lighted.**
   Part buttons [1]–[16] will select parts.
2. **Press the button for the part whose sound you want to modify. The button will light.**
   That part is now selected.

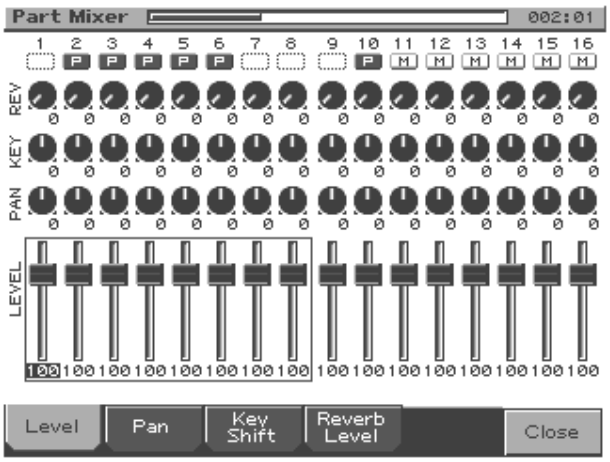
**NOTE**

If you select a part to which a rhythm set is assigned, the FILTER section "TYPE" indicator will go out.
This is because a rhythm set lets you select a different filter type for each rhythm tone (percussion instrument).

# Part Mixer

Here you can adjust the volume, pan, etc., of each part.

| | |
|---|---|
| [PART] (SELECT/MUTE) | Selects the function of part buttons [1]–[16]. If this indicator is not lighted, the part buttons will select parts. If lit, the part buttons will mute parts. |
| [TEMPO/MUTE CONTROL] | Switches the Tempo/Mute part (a part that records tempo changes and mute operations, p. 42) on/off. |
| [MIXER ASSIGN] | The Mixer screen will appear when you press this button and get it to light. |
| [PART ASSIGN] | Selects the parts that will be controlled by the sliders. If this indicator is not lighted, parts 1–8 will be controlled. If lit, parts 9–16 will be controlled. |
| Sliders | Adjust the volume of parts 1–8 or parts 9–16. By accessing the Mixer screen, you can also adjust the pan, key, and reverb depth of each part (see illustration below). |




Use [F1]–[F4] to select a parameter, and use the sliders to adjust the values.

| Function button | Parameter adjusted by the sliders |
|---|---|
| [F1 (Level)] | Volume of the part |
| [F2 (Pan)] | Left/right position of the part |
| [F3 (Key Shift)] | Transposition of the part<br>The pitch will change in semitone steps over a range of +/-4 octaves. |
| [F4 (Reverb Level)] | Reverb level of the part |
| [F6 (Close)] | Returns to the previous screen. |

* *You can also use [CURSOR] to select a part and parameter, and then use [VALUE] or [DEC/INC] to adjust the value.*

The letter displayed below the part number at the top of the Mixer screen indicates the status of each part, as follows:

- **P:** playable
- **M:** muted
- **Blank:** No performance has been recorded

# Mix In

The sound of a device connected to the INPUT jacks or the digital in connector can be mixed into the output.

You can also use the velocity pads to play different pitches using the input sound.

## Directly outputting the sound of an external device

1. **In the sampling section, press [MIX IN] so its indicator is lighted.**

   The sound of the external device will be mixed into the output.

2. **To cancel the Mix In function, press [MIX IN] once again so its indicator goes out.**

## Playing various pitches using the sound of an external device

1. **Press and hold [MIX IN].**

   The Mix In select sub window will appear.


2. **Continuing to hold down [MIX IN], press [F6 (Velo Pads)] or turn [VALUE] to select "VELOCITY PADS."**

   The indicator will blink, and now you can use the velocity pads to change the pitch of the input sound.

3. **Play the velocity pads.**

   You can control the pitch and duration just as on a conventional keyboard.

   When you press pad 2 (C4), the input sound will be heard at its original pitch.

   You can play the input sound in a range of 14 semitones higher (pad [16]) through 25 semitones lower (pad [1] with [OCT -] pressed twice) than the original pitch.

* *You cannot play chords.*

4. **To cancel the Mix In function, press [MIX IN] once again so its indicator goes out.**

## Selecting the input source device

1. **Press and hold [MIX IN].**

   The Mix In select sub window will appear.

2. **Press [F5 (Input Setting)].**

   The input setting screen will appear.

3. **Press [CURSOR (up/down)] to move the cursor to the item that you want to set.**

4. **Use [VALUE] or [INC/DEC] to make the desired setting.**

| Parameter | Range | Explanation |
|---|---|---|
| Input Select | LINE IN L/R, LINE IN L, DIGITAL(OPT), DIGITAL(CO-AX), MICROPHONE | Input source of the external input sound<br>**LINE IN L/R:** INPUT jacks L/R (stereo)<br>**LINE IN L:** INPUT jack L (mono)<br>**DIGITAL(OPT):** Digital Input (Optical)<br>**DIGITAL(CO-AX):** Digital Input (Coaxial)<br>**MICROPHONE:** INPUT jack (mono, mic level) |
| Mix-In | OFF, ON, VELOCITY PADS | Switches Mix In on/off<br>**OFF:** External input sound will not be used.<br>**ON:** External input sound will be mixed into the output.<br>**VELOCITY PADS:** The velocity pads can be used to play scales using the external input sound. |
| Ext Output Asgn (External Output Assign) | DRY, MFX1, MFX2, COMP | Output destination of the external input sound that is mixed in<br>**DRY:** Output to MIX OUTPUT jacks without passing through effects<br>**MFX1 (2):** Output through multi-effects 1 (or 2)<br>**COMP:** Output through the compressor |
| Ext Level L | 0–127 | Volume level of the external input sound (left channel) |
| Ext Level R | 0–127 | Volume level of the external input sound (right channel) |
| Ext Reverb Send Level | 0–127 | Depth of reverb applied to the external input sound<br>Set this to 0 if you don't want to apply reverb. |

## Adjusting the volume of the external device

You can use the volume section's [INPUT] knob to adjust the volume of the external device.

* *[INPUT] cannot adjust the volume of a device connected to the digital in connector. You will need to adjust the volume on the connected external device.*

# D Beam Controller

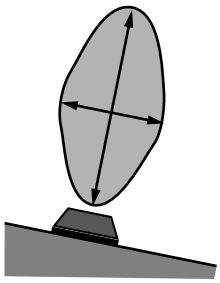
The D Beam controllers let you perform control operations simply by passing your hand over the controller. Three different uses (such as solo synth and turntable) for this controller are offered as presets, but by editing the settings you can use these controllers to apply a wide range of other effects.

| | |
|---|---|
| [BEAM 1 ON] | Turns the left D Beam controller (BEAM 1) on/off. |
| [BEAM 2 ON] | Turns the right D Beam controller (BEAM 2) on/off. |
| [TWIN D BEAM ASSIGN] | Selects the function of the D Beam controller. Press to cycle through the available choices, which are: SOLO SYNTH, CUT+RESO, TURNTABLE, and ASSIGNABLE. |

### The effective range of the D Beam controller

The following diagram shows the effective range of the D Beam controller. Movements of your hand that occur outside of this range will not produce any effect.

* *The effective range of the D Beam controller will be greatly reduced when it is used in strong, direct sunlight. Please be aware of this when using the D Beam controllers outdoors.*



## SOLO SYNTH

This is a monophonic synthesizer for which your left hand (beam 1) controls volume, and your right hand (beam 2) controls the pitch.

1. **Press [D BEAM ASSIGN] so the "SOLO SYNTH" indicator is lighted.**
2. **Press [BEAM 1 ON] and [BEAM 2 ON] so both indicators are lighted.**
3. **When you move your hand near beam 1, sound will be heard.**
   - After the sound begins, moving your hand closer to beam 1 will make the volume softer, and moving your hand away will make the volume louder.
   - Moving your hand closer to beam 2 will raise the pitch, and moving your hand away will lower the pitch.

* *If the hand that is near beam 1 leaves the effective range of the D Beam controller, the volume will gradually diminish and finally the sound will disappear. This prevents the sound from remaining "stuck on."*

* *You can change the pitch range (p. 130).*

## CUT + RESO (Cutoff + Resonance)

Your left hand (beam 1) controls the cutoff frequency of the filter (p. 59), and your right hand (beam 2) controls the resonance.

1. **Press [D BEAM ASSIGN] so the "CUT+RESO" indicator is lighted.**
2. **Press [BEAM 1 ON] and [BEAM 2 ON] so both indicators are lighted.**
3. **In the FILTER block, press [TYPE] to select Filter Type (p. 59).**
4. **Pass your hands over beams 1/2 to control the sound of the current part.**
   - Moving your hand closer to beam 1 will raise the cutoff frequency, and moving your hand away will lower it.
   - Moving your hand closer to beam 2 will increase the resonance, and moving your hand away will decrease it.

NOTE

If the Filter Type has been set to LPF2 or LPF3, the resonance setting will have no effect, so moving your hand over beam 2 will not affect the sound.

MEMO

You can adjust the variable range of the parameters (p. 130).

## TURNTABLE

Your left hand (beam 1) controls the tempo (BPM), and your right hand (beam 2) controls the pitch.

1. **Press [D BEAM ASSIGN] so the "TURNTABLE" indicator is lighted.**
2. **Press [BEAM 1 ON] and [BEAM 2 ON] so both indicators are lighted.**
3. **Pass your hands over beams 1/2 to control the BPM and pitch of all parts.**
   - Moving your hand closer to beam 1 will slow down the tempo.
   - Moving your hand closer to beam 2 will lower the pitch.

* *If your hand leaves the effective range of the D Beam controller, the sound will return to the original BPM and pitch.*

MEMO

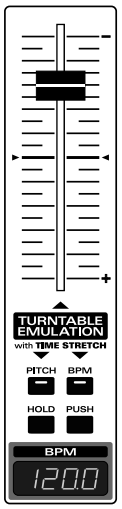
You can also set it so moving your hand closer to the D Beam controller will increase the tempo and raise the pitch (p. 130).

## ASSIGNABLE (Other applications)

Refer to the D Beam controller-related parameters (p. 130) in the System settings.

# Turntable emulation

You can use this slider and the [PUSH]/[HOLD] buttons to synchronize your performance with a turntable or other audio source.




| | | |
|---|---|---|
| Slider | The BPM will slow down as you move the slider upward (toward "-"), and speed up as you move it downward (toward "+").<br>The BPM will be the original value when the slider is at the detent in the center of its range.<br>* You can also adjust the variable range of the slider (p. 127). | |
| [PITCH], [BPM] | These buttons select whether the slider and [HOLD]/[PUSH] buttons will control the pitch or the BPM. | |
| | PITCH BPM<br>Both lit | The pitch and BPM will both change.<br>This produces the same result as a turntable. |
| | PITCH BPM<br>Only [PITCH] lit | Only the pitch will change. |
| | PITCH BPM<br>Only [BPM] lit | Only the BPM will change. |
| | PITCH BPM<br>Both not lighted | Operating the slider or [HOLD]/[PUSH] buttons will not change the pitch or BPM.<br>Use this setting if you want to prevent the pitch and BPM from changing when the slider is touched accidentally. |
| [HOLD] | Slows the performance to the minimum tempo of the slider range in order to match your performance with the turntable. | |
| [PUSH] | Speeds up the performance to the maximum tempo of the slider range in order to match your performance with the turntable. | |

MEMO

You can also assign other functions to the slider, such as pitch bend (p. 127).

NOTE

When playing a patch/rhythm set from a wave expansion board that uses waveforms with an indicated tempo (BPM), it will not be possible to control pitch and BPM independently.

# Auto Sync

The playback tempo of a sample (waveform) you sampled or loaded from your computer can be automatically synchronized to the playback tempo of the pattern.

NOTE

In order to use Auto Sync, you must first set the BPM (p. 116) sample parameter.

1. **As the current part, select the part to which is assigned the patch that uses the sample that you want to auto-sync.**
2. **Press [AUTO SYNC] so its indicator is lighted.**

   The playback tempo of the sample will automatically synchronize to the BPM of the pattern.

MEMO

Auto Sync can be turned on/off independently for each part.

NOTE

Auto Sync requires double the usual polyphony. This means that if you turn Auto Sync on, the polyphony of the entire MC-909 will decrease.

# Effects

See p. 88.

# Mastering

See p. 108.

# Recording a pattern

1. **Use [VALUE] or [INC/DEC] to select the number of the pattern you want to record.**
2. **Press [REC].**


3. **Press [F1]–[F4] to select a recording method.**

| Function button | Recording method |
|---|---|
| [F1 (Realtime)] | **Realtime Recording** (p. 37)<br>Data from the velocity pads, knobs, and external MIDI devices will be recorded in real time. |
| [F2 (TR-Rec)] | **TR-REC** (p. 39)<br>The sixteen velocity pads represent notes, allowing you to input note data by switching each pad on or off. |
| [F3 (Step)] | **Step Recording** (p. 41)<br>Successively record each note one after the other in a non-realtime fashion. |
| [F4 (Tempo/Mute)] | **Tempo/Mute Recording** (p. 42)<br>Record tempo changes or mute on/off events in real time. |

The corresponding recording standby screen will appear.

4. **Specify the time signature and length of the pattern, and then record.**

For details, refer to the section on each recording method.

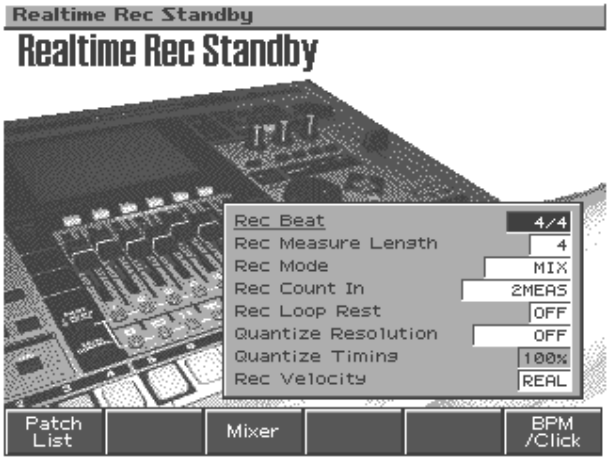
MEMO

The maximum number of notes per pattern is **approximately 30,000 notes**.

## Realtime recording

This method lets you record your performance on the MC-909's velocity pads and D Beam controllers or an external MIDI keyboard. Knob and slider movements can also be recorded.

### Standby screen




| Parameter | Range | Explanation |
|---|---|---|
| Rec Beat | 2/4–7/4, 5/8–7/8, 9/8, 12/8, 9/16, 11/16, 13/16, 15/16, 17/16, 19/16 | Pattern time signature<br>* Can be specified only for an empty pattern. |
| Rec Measure Length | 1–998 | Pattern length<br>* An already-recorded pattern can be made longer, but not shorter. To shorten it, use the pattern edit Delete Measure (p. 45) to delete one or more measures. |
| Rec Mode | MIX, REPLACE | Whether the recorded data will be added to, or replace, the existing data<br>**MIX:** Newly recorded data will be added to the previously-recorded data.<br>**REPLACE:** Previously-recorded data will be replaced by the newly-recorded data. |
| Rec Count In | OFF, 1 MEAS, 2 MEAS, WAIT NOTE | Length of the count before recording begins<br>If this is set to Wait Note, recording will start when you press a velocity pad or the [PLAY] button. |
| Rec Loop Rest | OFF, ON | Insert a blank measure before you return to the beginning of the pattern<br>If this is ON, one blank measure will be inserted before you turn to the first measure of the pattern.<br>* This provides a convenient way to keep the end of the last measure from being recorded into the first measure. |

| Parameter | Range | Explanation |
|---|---|---|
| Quantize Resolution | OFF, 32nd note–quarter note | Note value to which timing is to be corrected<br>If this is set to OFF, timing will not be corrected. |
| Quantize Timing | 0–100% | Degree to which timing will be adjusted.<br>Settings near 0% will produce essentially no effect, while a setting of 100% will adjust the note timings all the way to the note locations specified in the Input Quantize Resolution. |
| Rec Velocity | REAL, 1–127 | Volume (velocity) of the notes that you input from the velocity pads.<br>If this is set to REAL, your playing strength on the pads will determine the velocity that is input. |

### Function buttons

| | |
|---|---|
| [F1 (Patch List)] | Choose a patch/rhythm set from a list (p. 55). |
| [F3 (Mixer)] (Part Mixer) | Display the Mixer screen (p. 33). |
| [F6 (BPM/Click)] | Set the tempo, and turn the metronome on/off (p. 25). |

## Recording procedure

1. **Select realtime recording (p. 37).**
2. **Press [PLAY], and start recording.**


Perform using the velocity pads, D Beam controllers, or your external MIDI keyboard.

When you come to the last measure, recording will repeat from the first measure. You will also hear what's been recorded so far. Your performance during each pass of the recording will be added to the previously recorded data.

3. **Press [STOP] to stop recording.**

### Controllers that can be recorded

- Velocity pads
- D Beam controllers
- Realtime modify knobs
- Turntable Emulation Slider *

*: Can be recorded only if assigned as pitch bender or modulation.

### Selecting the part to record

1. **In the Part Mixer section, press [PART] (SELECT/MUTE) so the indicator is not lighted.**

Part buttons [1]–[16] will select parts.

2. **Press the button for the part that you want to record.**

MEMO

You can select the part for recording even while you are recording.

## Rehearsal

You can temporarily cease recording without actually halting the realtime recording operation. This lets you alternate between trying out ideas and actually recording, without having to actually perform "record" and "stop" operations each time.

1. **During realtime recording, press [F4 (Rehearsal)] or [REC].**

[REC] will blink, and you will be in rehearsal mode. No performance data will be recorded.

In this state you can try playing phrases before actually recording them.

2. **Press [F4 (Rehearsal)] or [REC] once again, and you will resume recording.**

## Realtime Erase

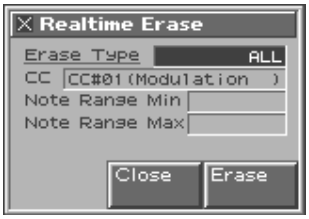
During realtime recording, you can use the velocity pads or the realtime modify knobs to erase data.

**1. Select the part from which you want to erase data.**

Select a part in the same way as described in "Selecting the part to record" (p. 38).

**2. During recording, press [F2 (Erase)].**

The realtime erase window will appear.




**3. In the Erase Type field, choose the type of data that you want to erase.**

| | |
|---|---|
| **ALL** | All data |
| **NOTE** | Note messages |
| **P-AFT** | Polyphonic aftertouch |
| **C-AFT** | Channel aftertouch |
| **CC** | Control change |
| **PC** | Program change |
| **BEND** | Bend data |
| **SYSEX** | System exclusive data |
| **BPM** | Tempo change data |
| **MUTE** | Mute on/off |
| **EXCEPT NOTE** | All data other than note messages |

* *If you want to erase knob data, operate the corresponding knob of the panel to specify that data.*

**4. Erase the data.**

- When "NOTE" has been selected, hold down two notes on the velocity pads or on an external MIDI keyboard, and all note messages within the region defined by those two notes will be erased while you continue holding down the notes.
- For other types of data, the data selected by Erase Type will be erased while you continue holding down [F5 (Erase)].

**5. To return to recording mode, press [F5 (Close)] or [EXIT].**

## Recording Cancel

Here's how you can cancel the entire content of a recording, and return to the recording-standby state.

**1. During recording, press [F5 (Rec Cancel)].**

A message will ask for confirmation.

**2. To carry out Recording Cancel, press [F6 (Execute)].**

All the data that has been recorded from the time you pressed [PLAY] to start recording until you pressed [F5 (Rec Cancel)] will be discarded.

* *To cancel, press [F5 (Cancel)].*

## TR-REC

This is a recording method in which the velocity pads of the MC-909 are used as timing scale buttons to enter note messages.

You can input/delete notes by pressing the velocity pads to switch them between lit/extinguished. This is an easy way to specify the timing at which notes are to be placed.

* *This method cannot be used to record data other than note messages (e.g., control changes produced by operating the realtime modify knobs).*

### Standby screen


| Parameter | Range | Explanation |
|---|---|---|
| Rec Beat | 2/4–7/4, 5/8–7/8, 9/8, 12/8, 9/16, 11/16, 13/16, 15/16, 17/16, 19/16 | Pattern time signature<br>* Can be specified only for an empty pattern. |
| Rec Measure Length | 1–998 | Pattern length<br>* An already-recorded pattern can be made longer, but not shorter. To shorten it, use the pattern edit Delete Measure (p. 45) to delete one or more measures. |
| Rec Velocity | REAL, 1–127 | Volume (velocity) of the notes that you input from the velocity pads.<br>If this is set to REAL, your playing strength on the pads will determine the velocity that is input. |

### Function buttons

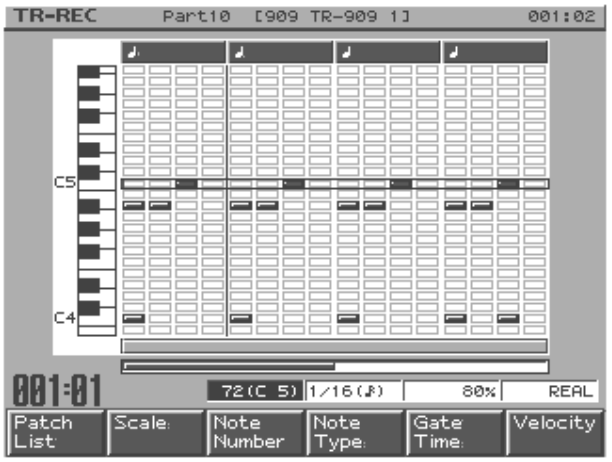
| | |
|---|---|
| [F1 (Patch List)] | Choose a patch/rhythm set from a list (p. 55). |
| [F3 (Mixer)] (Part Mixer) | Display the Mixer screen (p. 33). |
| [F6 (BPM/Click)] | Set the tempo, and turn the metronome on/off (p. 25). |

# Recording procedure

1. **Select TR-REC (p. 37).**

2. **Press [PLAY] to begin recording.**

   You will enter recording mode, and will hear the notes you enter played as a loop.




3. **Use the function buttons and [VALUE] or [INC/DEC] to specify the note messages to enter.**

   You can also use **[CURSOR (up/down)]** to select the note number.

| | |
|---|---|
| [F1 (Patch List)] | Choose the patch/rhythm set from a list (p. 55). |
| [F2 (Scale)] | The timing scale (see the explanatory box on this page) of the velocity pads will change each time you press this. |
| [F3 (Note Number)] | Choose the pitch of the note to be input. For a rhythm set, this selects the rhythm tone to be input.<br>**Range:** 0 (C-1)–127 (G9) |
| [F4 (Note Type)] | Choose the note value to be input.<br>**Range:** 1/32–1/1 |
| [F5 (Gate Time)] | Specify the gate time (the duration that the note will be held) for the note data to be input, as a proportion of the value you chose for Note Type.<br>**Range:** 5–200% |
| [F6 (Velocity)] | Specify the velocity (volume) of the note data to be input.<br>**Range:** REAL, 1–127<br>* If you set this to REAL, the force with which you strike the pad will be input as the velocity value. |
| [SHIFT] + [F1 (V-Zoom In)] | Narrow the region of keys shown in the display.<br>You can use this when you want to view an expanded display for specific notes. |
| [SHIFT] + [F2 (V-Zoom Out)] | Broaden the region of keys shown in the display.<br>You can use this when you want to see which notes have been input. |
| [SHIFT] + [F6 (BPM/Click)] | Set the tempo, and turn the metronome on/off (p. 25). |

**MEMO**

By holding down [SHIFT] and pressing [TOP] [BWD] [FWD], you can move the pattern playback location in the same way as during playback.

4. **Use [CURSOR (left/right)] or [BWD/FWD] to move the note message input region**

**HINT**

The bottom of the screen will always show two bars to indicate the input region shown in the screen and the current playback position of the pattern.

**MEMO**

If you press [TOP], the pattern playback location will return to the beginning of the input region shown in the screen.

5. **To input data, press a pad that corresponds to the timing at which you want to input a note, so the pad's indicator lights.**
   **To delete a note you've input, press the corresponding pad so its indicator goes out.**

**NOTE**

You cannot edit the note type, gate time, or velocity of a note message once you input it. If you want to change these parameters, you must delete the note and re-input it.

6. **Press [STOP] to stop recording.**

## Selecting the part to record

1. **In the Part Mixer section, press [PART] (SELECT/MUTE) so the indicator is not lighted.**

   Part buttons [1]–[16] will select parts.

2. **Press the button for the part that you want to record.**

**MEMO**

You can select the part for recording even while you are recording.

## About the timing scale

Each time you press [F2 (Scale)], the scale will alternate in the following order.

- 16th notes
  Velocity pads [1]–[16] will correspond to a recording input region of one measure, and you will be able to input notes at 16th note intervals.
- 32nd notes
  Velocity pads [1]–[16] will correspond to a recording input region of two beats, and you will be able to input notes at 32nd note intervals.
- 8th note triplets
  Velocity pads [1]–[12] will correspond to a recording input region of one measure, and you will be able to input notes at 8th note triplet intervals.
- 16th note triplets
  Velocity pads [1]–[12] will correspond to a recording input region of two beats, and you will be able to input notes at 16th note triplet intervals.

# Step recording

This is a recording method in which you input note messages one by one.

* *This method cannot be used to record data other than note messages (e.g., control changes produced by operating the realtime modify knobs).*

## Standby screen


| Parameter | Range | Explanation |
|---|---|---|
| Rec Beat | 2/4–7/4, 5/8–7/8, 9/8, 12/8, 9/16, 11/16, 13/16, 15/16, 17/16, 19/16 | Pattern time signature<br>* Can be specified only for an empty pattern. |
| Rec Measure Length | 1–998 | Pattern length<br>* An already-recorded pattern can be made longer, but not shorter. To shorten it, use the pattern edit Delete Measure (p. 45) to delete one or more measures. |
| Rec Velocity | REAL, 1–127 | Volume (velocity) of the notes that you input from the velocity pads.<br>If this is set to REAL, your playing strength on the pads will determine the velocity that is input. |

## Function buttons

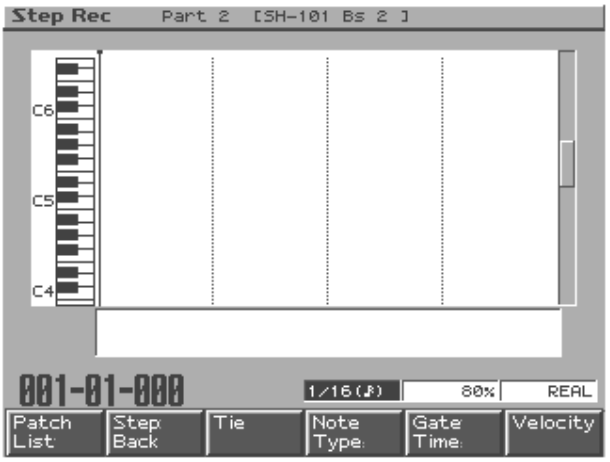
| | |
|---|---|
| [F1 (Patch List)] | Choose a patch/rhythm set from a list (p. 55). |
| [F3 (Mixer)] (Part Mixer) | Display the Mixer screen (p. 33). |

# Recording procedure

**1. Select step recording (p. 37).**

**2. Press [PLAY] to begin recording.**

You are now ready to record.




**3. Use function buttons [F4]–[F6], and [VALUE] and [INC/DEC] to specify the length and velocity of the notes to input.**

| | |
|---|---|
| [F1 (Patch List)] | From a list, select the patch/rhythm set that you want to use (p. 55). |
| [F2 (Step Back)] | Cancel the previously input note. |
| [F3 (Tie)] | Extend the length of the previously input note by the current setting. |
| [F4 (Note Type)] | Select the type of note value that you want to input.<br>**Range:** 1/32–1/1 |
| [F5 (Gate Time)] | Specify the gate time (duration) of the note messages you will input, as a proportion of the note value you selected as the Note Type.<br>**Range:** 5–200% |
| [F6 (Velocity)] | Specify the velocity (volume) of the note messages you will input.<br>**Range:** REAL, 1–127<br>* If this is set to REAL, your playing strength on the pads will vary the dynamics. |
| [SHIFT] + [F1 (V-Zoom In)] | Narrow the range of keys shown in the display.<br>Use this when you want to view certain notes at greater magnification. |
| [SHIFT] + [F2 (V-Zoom Out)] | Expand the range of notes shown in the display.<br>Use this when you want to see which notes have been input. |

**4. Use the velocity pads to input note messages.**

The note number is selected by the pad you press. You can also input chords.

When you input a note message, the input position will advance by the value of the Note Type you specified.

**5. Repeat steps 2 and 3 to input note messages.**

**6. When you are finished recording, press [STOP].**

## Selecting the part to record

1. **In the Part Mixer section, press [PART] (SELECT/MUTE) so the indicator is not lighted.**
   Part buttons [1]–[16] will select parts.
2. **Press the button for the part that you want to record.**

MEMO
You can select the part for recording even while you are recording.

## Moving the input location

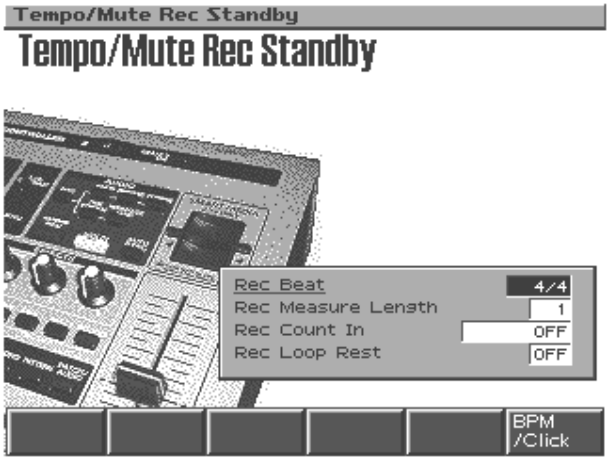
- Pressing [CURSOR (right)] will move the input location forward by the current Note Type value.
- Pressing [CURSOR (left)] will move the input location backward by the current Note Type value.
- Pressing [FWD] will advance the input location by one measure.
- Pressing [BWD] will return the input location by one measure.

NOTE
You cannot move back to a position at which notes have already been input.

## Moving the display region

- Pressing [CURSOR (up/down)] will move the displayed region of notes upward or downward.
- Holding down [SHIFT] and pressing [FWD] will move the displayed region one measure forward.
- Holding down [SHIFT] and pressing [BWD] will move the displayed region one measure backward.

# Tempo/mute recording




Tempo changes and mute operations can be recorded on the dedicated tempo/mute part.

The recording procedure is essentially the same as for realtime recording.

| Parameter | Range | Explanation |
|---|---|---|
| Rec Beat | 2/4–7/4, 5/8–7/8, 9/8, 12/8, 9/16, 11/16, 13/16, 15/16, 17/16, 19/16 | Pattern time signature<br>* Can be specified only for an empty pattern. |
| Rec Measure Length | 1–998 | Pattern length |
| Rec Count In | OFF, 1 MEAS, 2 MEAS | Length of the count before recording begins |
| Rec Loop Rest | OFF, ON | Insert a blank measure before you return to the beginning of the pattern<br>If this is ON, one blank measure will be inserted before you turn to the first measure of the pattern.<br>* This provides a convenient way to keep the end of the last measure from being recorded into the first measure. |

1. **Select tempo/mute recording (p. 37).**
2. **Press [PLAY] to start recording.**
   Only changes in BPM (tempo) and changes in the part mute status will be recorded. No operations of the velocity pads, D Beam controllers, knobs, or sliders will be recorded.
   - You can adjust BPM (tempo) by using [VALUE], [INC/DEC], or turntable emulation.
   - For details on muting parts, refer to p. 26.
3. **Press [STOP] to stop recording.**

# Pattern editing

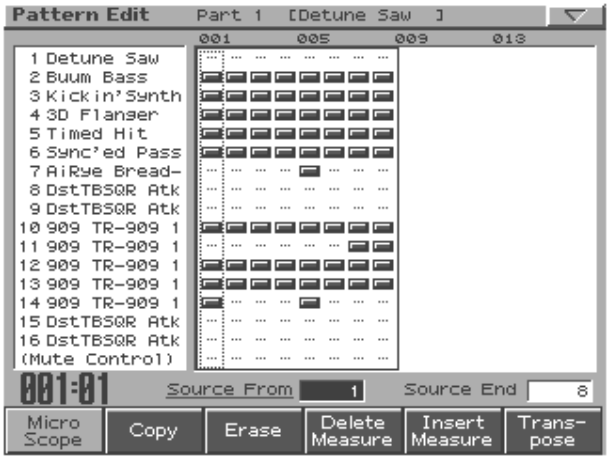
Here's how you can edit the performance data of a pattern in units of measures. You can create completely new patterns by editing the performance data of a pattern, or by combining various patterns.

* *You must stop the pattern before you can edit it.*

## Basic procedure for pattern editing

**1. Select the pattern that you want to edit.**

**2. Press [F2 (Edit)] to access the Pattern Edit Menu screen.**

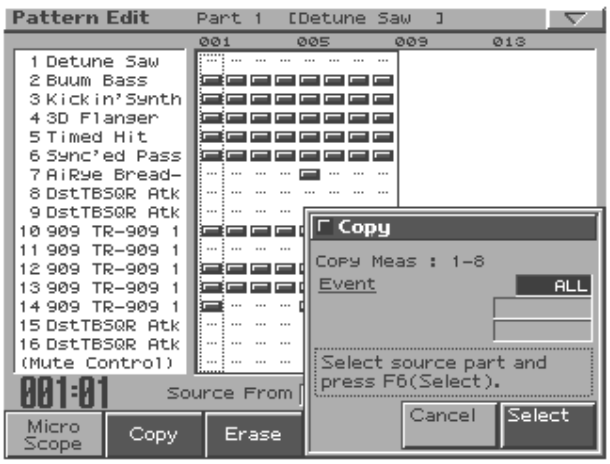



**3. Select the region of measures that you want to edit.**

- **Source From:** first measure of the region
  If you set this to "SETUP," the setup parameters (p. 18) will be included.
- **Source End:** last measure of the region
  If you set this to "SETUP," only the setup parameters will be selected, and no measures will be included.

**4. Use the function buttons to select the type of editing that you want to carry out.**

The corresponding editing sub-window will appear.




| | |
|---|---|
| [F1 (Micro Scope)] | Edit individual items of performance data within a pattern. (p. 48) |
| [F2 (Copy)] | Copy a pattern. (p. 44) |
| [F3 (Erase)] | Erase unwanted data. (p. 45) |
| [F4 (Delete Measure)] | Delete unwanted measures. (p. 45) |
| [F5 (Insert Measure)] | Insert blank measures. (p. 45) |
| [F6 (Transpose)] | Transpose the pitch. (p. 45) |
| [SHIFT] + [F1 (Extract Rhythm)] | Split the rhythm set. (p. 44) |
| [SHIFT] + [F2 (Velocity Duration)] (Change Velocity/ Change Duration) | Modify the strength/length of the notes. (p. 45) |
| [SHIFT] + [F3 (Shift Clock)] | Slightly shift the timing. (p. 45) |
| [SHIFT] + [F4 (Data Thin)] | Thin out unnecessary data. (p. 46) |
| [SHIFT] + [F5 (Edit Quantize)] | Apply quantization. (p. 46) |
| [SHIFT] + [F6 (Reclock)] | Convert the note values. (p. 47) |

**5. Press the part button [1]–[16] and [TEMPO/MUTE] of the part(s) whose data you want to edit, illuminating the relevant indicator(s).**

**6. Set the parameters, and press [F6 (Execute)].**

* *To cancel the procedure, press [F5 (Cancel)].*

**The procedures for Extract a Rhythm Instrument and Pattern Copy are explained on the next page.**

HINT

When you are specifying the Note (Minimum/Maximum) in Pattern Edit, you can specify the Minimum and Maximum by pressing two velocity pads. First press Minimum, then press Maximum.
If you press one velocity pad twice, the Minimum and Maximum will be the same.

## Extract a Rhythm Instrument

This operation extracts data of a specific note number from the specified part, and moves it to a different part. You can use this to divide a rhythm set into separate parts for each instrument.

1. **In step 5 on the preceding page, press a part button [1]–[16] to select the move-source part; the button will light.**
2. **Select the note number that you want to move.**
3. **Press [F6 (Select)].**
4. **Press a part button [1]–[16] to select the move-destination part; the button will light.**
5. **Press [F6 (Execute)].**

* *To cancel the procedure, press [F5 (Cancel)].*

| Parameter | Range | Explanation |
|---|---|---|
| Src Part | 1–16 | Move-source part |
| Extract Note | 0 (C-1)–127 (G9) | Note number to be moved |
| Dest Part | 1–16 | Move-destination part |

* *If the move-source part does not contain any data of the note number specified by Extract Note, a message of "Cannot Extract!" will appear.*

* *If the move-destination part contains no performance data, the setup parameters (p. 26) of the move-source part will be copied.*

* *If the move-destination part does contain performance data, only the note data will be moved. This means that the note data will be played using the sound of the patch selected for the move-destination part.*

## Pattern Copy

This operation copies data from the current pattern to another pattern.

1. **In step 5 on the preceding page, press a part button [1]–[16] or [TEMPO/MUTE CONTROL] to select the move-source part; the button will light.**
2. **Select the data that you want to copy.**
3. **Press [F6 (Select)].**
4. **Press a part button [1]–[16] or [TEMPO/MUTE CONTROL] to select the move-source part; the button will light.**
5. **Press [F6 (Execute)].**

* *To cancel the procedure, press [F5 (Cancel)].*

| Parameter | Range | Explanation |
|---|---|---|
| Event | ALL, NOTE, PROG, CC, BEND, PAFT, CAFT, SYS-EX, BPM, MUTE | Data to be copied |
| Note Minimum<br>Note Maximum | 0 (C-1)–127 (G9) | Note region to be copied<br>* This can be specified only if Event is set to "NOTE." |
| Min<br>Max | CC#0–CC#127 | Control change message to be copied<br>Messages in the specified range will be copied<br>* This can be specified only if Event is set to "CC." |
| Dest Pattern | Preset, User, Card | Bank of the copy-destination pattern |
| | 1–650 (Preset)<br>1–200 (User)<br>1–999 (Card) | Copy-destination pattern number |
| Dest Meas | 1–(last measure + 1) | First measure of the copy-destination |
| Dest Part | 1–16 | Copy-destination part |
| Copy Mode | REPLACE, MIX | How the copy will occur<br>**REPLACE:** The copy-destination data will be replaced by the copy-source data.<br>**MIX:** The copy-destination data will be combined with the copy-source data. |
| Copy Times | 1–998 (Max) | Number of times the data is to be copied |

* *You can specify a copy-destination part (Dest Part) only if there is just one copy-source part. If there are two or more copy-source parts, they will be copied to the same parts of the copy-destination.*

* *When copying data from one part to another part within the same pattern, you can select only one part at a time.*

## Erase

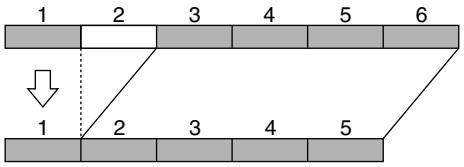
This operation erases all or part of the data from a pattern.

| Parameter | Range | Explanation |
|---|---|---|
| Event | ALL, NOTE, PROG, CC, BEND, PAFT, CAFT, SYS-EX, BPM, MUTE | Data to be erased |
| Note Minimum<br>Note Maximum | 0 (C-1)–127 (G9) | Note region to be erased<br>* This can be specified only if Event is set to "NOTE." |
| Min<br>Max | CC#0–CC#127 | Control change message to be erased<br>Messages in the specified range will be erased<br>* This can be specified only if Event is set to "CC." |

## Delete Measure

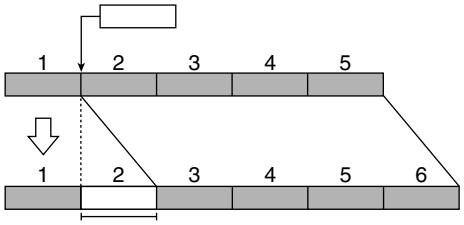
This operation deletes unwanted measures from a pattern, and joins the remaining measures together.

If a part contains data following the deleted region, the performance data of that part will be shortened by the corresponding length. If you specify all parts as the object of the delete operation, the pattern itself will be shortened.




## Insert Measure

This operation inserts blank measures between the specified measure of a pattern and the following measure. If you want to add more playing in the middle of a existing performance, use this operation to insert one or more blank measures, and then record the additional performance. The inserted measures will have the same time signature as the time signature preceding the insert location.




| Parameter | Range | Explanation |
|---|---|---|
| Insert Meas | 1–998 (Max) | Number of measures to insert<br>* You cannot specify a number that would cause the pattern to exceed 998 measures. |

## Transpose

This operation shifts the note numbers (pitch) of one or more parts in the pattern. You can transpose the notes in a range of +/-2 octaves.

| Parameter | Range | Explanation |
|---|---|---|
| Value | -24– +24 | Amount of transposition |
| Note Minimum<br>Note Maximum | 0 (C-1)–127 (G9) | Range of notes to be transposed |

## Change Velocity/ Change Duration

This operation modifies the velocity (strength) or duration (the length that the note is held) of the notes recorded in the pattern. You can use Change Duration to give the overall performance a staccato feel or tenuto feel.

| Parameter | Range | Explanation |
|---|---|---|
| Type | VELOCITY, DURATION | Data to be modified<br>**VELOCITY:**<br>Strength of the notes<br>**DURATION:**<br>Length of the notes |
| **When Type is "VELOCITY"** | | |
| Value | -99– +99 | Amount by which the velocity is to be changed |
| Note Minimum<br>Note Maximum | 0 (C-1)–127 (G9) | Range of notes whose velocity is to be changed |
| **When Type is "DURATION"** | | |
| Value | -960– +960 | Amount by which the duration is to be changed |
| Note Minimum<br>Note Maximum | 0 (C-1)–127 (G9) | Range of notes whose duration is to be changed |

MEMO

If this operation would result in a velocity greater than 127 (or less than 1), the resulting velocity data will be limited to 127 (or 1).

## Shift Clock

This operation shifts the timing of the performance data recorded in the pattern backward or forward in units of one clock (1/96th of a beat). Use this when you want to slightly shift the overall performance.

| Parameter | Range | Explanation |
|---|---|---|
| Value | -960– +960 | Amount of clock shift |
| Event | ALL, NOTE, PROG, CC, BEND, PAFT, CAFT, SYS-EX, BPM, MUTE | Type of data whose timing is to be adjusted |
| Note Minimum<br>Note Maximum | 0 (C-1)–127 (G9) | Range of notes for which the timing is to be adjusted |

## Data Thin

Since data such as pitch bend or control change varies the value continuously, it can occupy an unexpectedly large amount of memory. The Data Thin operation thins out such data to reduce the amount of memory it occupies without audibly affecting the resulting playback. This lets you use the internal memory more efficiently.

| Parameter | Range | Explanation |
|---|---|---|
| Value | 0–99 | Amount by which data is to be thinned |
| Thin Event | ALL, CC, BEND, PAFT, CAFT | Type of data to be thinned |

## Edit Quantize

This operation corrects the timing of performance data recorded in the pattern, according to the timing criteria you specify.

Conventional quantization adjusts only the timing of the notes in the pattern as they are played back, without affecting the actual content of the data. However, the Edit Quantize operation lets you quantize the actual data itself.

| Parameter | Range | Explanation |
|---|---|---|
| QTZ Type | GRID, SHUFFLE, GROOVE | Type of quantization |
| **When Type is "GRID"** | | |
| QTZ Template | 1/32, 1/24, 1/16, 1/12, 1/8, 1/6, 1/4 | Note value toward which notes are to be moved |
| QTZ Timing | 0–100 | Strength of quantization<br>Higher settings of this parameter will cause the note timings to be moved closer toward their exact value. |
| **When Type is "SHUFFLE"** | | |
| QTZ Template | 1/16, 1/8 | Note value toward which notes are to be moved |
| QTZ Timing | 0–100 | Amount of "shuffle" for backbeats<br>A setting of "50" will produce a "straight" rhythm with no shuffle. Settings in a range of 60–66 will usually produce a pleasant shuffle feel. |
| **When Type is "GROOVE"** | | |
| QTZ Template | Refer to "Groove Template List" (p. 46) | Template to use |
| QTZ Timing | 0–100 | Strength of timing adjustment<br>Higher settings of this parameter will cause the note timings to be moved closer toward the timings of the template. |
| QTZ Velocity | 0–100 | Strength of velocity adjustment<br>Higher settings of this parameter will cause the velocities to be adjusted closer toward the velocities of the template. |

## Groove Template List

| | |
|---|---|
| **16 Beat Dance type** | |
| Dance-Nm-L.Ac | exact/low dynamics |
| Dance-Nm-H.Ac | exact/high dynamics |
| Dance-Nm-L.Sw | exact/light swing |
| Dance-Nm-H.Sw | exact/strong swing |
| Dance-Hv-L.Ac | dragging/low dynamics |
| Dance-Hv-H.Ac | dragging/high dynamics |
| Dance-Hv-L.Sw | dragging/light swing |
| Dance-Hv-H.Sw | dragging/strong swing |
| Dance-Ps-L.Ac | rushing/low dynamics |
| Dance-Ps-H.Ac | rushing/high dynamics |
| Dance-Ps-L.Sw | rushing/light swing |
| Dance-Ps-H.Sw | rushing/strong swing |
| **16 Beat Fusion type** | |
| Fuson-Nm-L.Ac | exact/low dynamics |
| Fuson-Nm-H.Ac | exact/high dynamics |
| Fuson-Nm-L.Sw | exact/light swing |
| Fuson-Nm-H.Sw | exact/strong swing |
| Fuson-Hv-L.Ac | dragging/low dynamics |
| Fuson-Hv-H.Ac | dragging/high dynamics |
| Fuson-Hv-L.Sw | dragging/light swing |
| Fuson-Hv-H.Sw | dragging/strong swing |
| Fuson-Ps-L.Ac | rushing/low dynamics |
| Fuson-Ps-H.Ac | rushing/high dynamics |
| Fuson-Ps-L.Sw | rushing/light swing |
| Fuson-Ps-H.Sw | rushing/strong swing |
| **16 Beat Reggae type** | |
| Regge-Nm-L.Ac | exact/low dynamics |
| Regge-Nm-H.Ac | exact/high dynamics |
| Regge-Nm-L.Sw | exact/light swing |
| Regge-Nm-H.Sw | exact/strong swing |
| Regge-Hv-L.Ac | dragging/low dynamics |
| Regge-Hv-H.Ac | dragging/high dynamics |
| Regge-Hv-L.Sw | dragging/light swing |
| Regge-Hv-H.Sw | dragging/strong swing |
| Regge-Ps-L.Ac | rushing/low dynamics |
| Regge-Ps-H.Ac | rushing/high dynamics |
| Regge-Ps-L.Sw | rushing/light swing |
| Regge-Ps-H.Sw | rushing/strong swing |
| **8 Beat Pops type** | |
| Pops-Nm-L.Ac | exact/low dynamics |
| Pops-Nm-H.Ac | exact/high dynamics |
| Pops-Nm-L.Sw | exact/light swing |
| Pops-Nm-H.Sw | exact/strong swing |
| Pops-Hv-L.Ac | dragging/low dynamics |
| Pops-Hv-H.Ac | dragging/high dynamics |
| Pops-Hv-L.Sw | dragging/light swing |
| Pops-Hv-H.Sw | dragging/strong swing |
| Pops-Ps-L.Ac | rushing/low dynamics |
| Pops-Ps-H.Ac | rushing/high dynamics |
| Pops-Ps-L.Sw | rushing/light swing |
| Pops-Ps-H.Sw | rushing/strong swing |
| **8 Beat Rhumba type** | |
| Rhumb-Nm-L.Ac | exact/low dynamics |
| Rhumb-Nm-H.Ac | exact/high dynamics |
| Rhumb-Nm-L.Sw | exact/light swing |
| Rhumb-Nm-H.Sw | exact/strong swing |
| Rhumb-Hv-L.Ac | dragging/low dynamics |
| Rhumb-Hv-H.Ac | dragging/high dynamics |
| Rhumb-Hv-L.Sw | dragging/light swing |
| Rhumb-Hv-H.Sw | dragging/strong swing |
| Rhumb-Ps-L.Ac | rushing/low dynamics |
| Rhumb-Ps-H.Ac | rushing/high dynamics |
| Rhumb-Ps-L.Sw | rushing/light swing |
| Rhumb-Ps-H.Sw | rushing/strong swing |

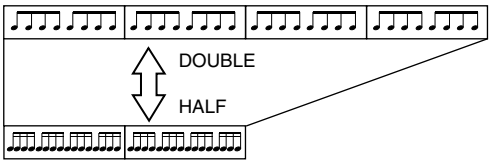
| Others | |
|---|---|
| Samba 1 | samba (pandero) |
| Samba 2 | samba (surdo and timba) |
| Axe 1 | axe (caixa) |
| Axe 2 | axe (surdo) |
| Salsa 1 | salsa (cascara) |
| Salsa 2 | salsa (conga) |
| Triplets | triplets |
| Quituplets | quintuplets |
| Sextuplets | sextuplets |
| 7 Against 2 | seven notes played over two beats |
| Lagging Tri | lagging triplets |

**NOTE**

Quantization will correct only note messages; other messages are not corrected. This means that if messages that modify the sound in real time (such as pitch bend) have been recorded in the pattern, some Quantize settings may cause the timing of these messages to become incorrect, so that they are no longer played correctly. It is best to use Quantize on patterns that do not contain messages that produce realtime change.

# Reclock

This operation doubles or halves the note values of performance data recorded in the pattern. For example, a four-measure pattern recorded at tempo = 120 can be converted to a two-measure pattern with halved note values, and played at tempo = 60 to produce the identical playback. If you want to connect patterns whose tempo differs drastically, you can use the Reclock operation to match the note values of the two patterns.




* *Using the Reclock operation will not change the original tempo of the pattern.*

| Parameter | Range | Explanation |
|---|---|---|
| Reclock Size | HALF, DOUBLE | How the note values are to be changed<br>**HALF:** Note values will be halved.<br>**DOUBLE:** Note values will be doubled. |

* *You cannot set this parameter in a way that would make the Reclock operation produce a pattern longer than 998 measures or shorter than 1 measure.*

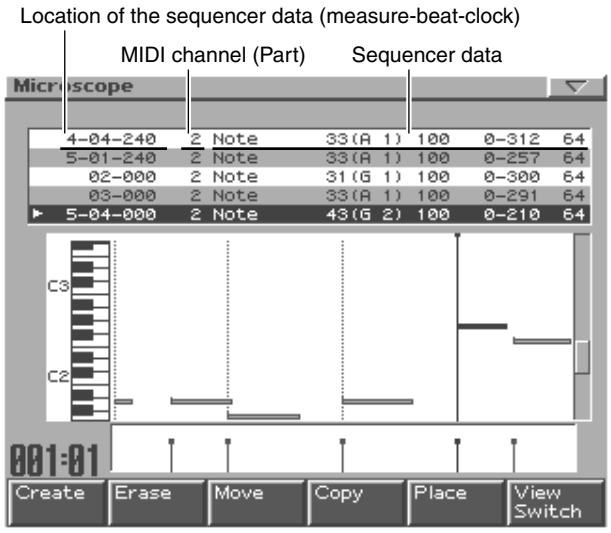
# Microscope

This lets you edit individual events of performance data within a completed pattern.

* *You must stop the pattern before you can edit it.*

## Basic procedure in the Microscope

1. **Select the pattern that you want to edit.**
2. **Press [F2 (Edit)] to access the Pattern Edit Menu screen.**
3. **Press [F1 (Micro Scope)] to access the Microscope screen.**




4. **Use part buttons [1]–[16] and [TEMPO/MUTE] to select the part that you want to edit.**
5. **Use [CURSOR (up/down)] to select the performance data that you want to edit.**
6. **Use [CURSOR (left/right)] to select the parameter that you want to edit.**
7. **Use [VALUE] or [INC/DEC] to edit the value.**
8. **Repeat steps *4*–*7* to continue editing.**
9. **When you are finished, press [EXIT].**

## Performance data that can be edited in the Microscope

The Microscope editor lets you edit the following nine types of data (MIDI message).

| MIDI message | Explanation |
|---|---|
| Note | Note data for playing sounds<br>From the left, the parameters are Note Number, which indicates the name of the note; On Velocity, which specifies the force with which the key is pressed; Duration (Beat-Tick), which specifies the duration of the note; and Off Velocity, which determines the speed with which the key is released. |
| Program Change | Messages that switch sounds (patches)<br>The program number (PC#) selects the sound. |
| Control Change | Messages that can apply effects such as modulation or portamento, depending on the controller number of the message<br>The controller number (CC#) selects the function, and Value specifies the depth of the effect (function). |
| Pitch Bend | Messages that change the pitch while you play<br>The value specifies the amount of pitch change. |
| Poly Aftertouch | Messages that apply aftertouch to individual keys<br>From the left, the parameters are Note Number which specifies the key, and Value which specifies the depth of the aftertouch. |
| Channel Aftertouch | Messages that apply aftertouch to an entire MIDI channel<br>Value specifies the depth of the aftertouch. |
| System Exclusive | MIDI messages specific to the MC-909 |
| Tempo Change | Messages that change the tempo |
| Mute Control | Mute data for each part |

MEMO

System Exclusive, Tempo Change, and Mute Control are included in the Tempo/Mute Part (p. 42).

### Function buttons

| | |
|---|---|
| [F1 (Create)] | Inserts new performance data. |
| [F2 (Erase)] | Erases performance data. |
| [F3 (Move)] | Moves performance data. |
| [F4 (Copy)] | Copies performance data. |
| [F5 (Place)] | Places performance data. |
| [F6 (View Switch)] | Displays only specific data.<br>Data marked by "✔" will be displayed. |
| [SHIFT] + [F1 (V-Zoom In)] | Narrow the range of keys shown in the display.<br>Use this when you want to view certain notes at greater magnification. |
| [SHIFT] + [F2 (V-Zoom Out)] | Expand the range of notes shown in the display.<br>Use this when you want to see which notes have been input. |

* *In the Microscope, you can press [ENTER] to transmit the currently selected performance data from the MIDI OUT connector.*

## Inserting performance data (Create)

Here's how to insert new performance data at a desired location in a pattern.

1. **Press [F1 (Create)].**
   The Create Event window will appear.
2. **Use [VALUE] or [INC/DEC] to select the performance data that you want to insert.**
3. **Press [F6 (OK)].**
   The Create Position window will appear.
4. **Use [CURSOR (left/right)] to move the cursor to the "measure," "beat," and "clock" fields, and use [VALUE] or [INC/DEC] to specify the location at which the data will be inserted.**
5. **Press [F6 (OK)] to insert the performance data.**
6. **The parameters of the inserted performance data will have the default values, so edit the values as necessary.**

## Erasing performance data (Erase)

Here's how to erase only a single specific event of performance data.

1. **Use [CURSOR (up/down)] to move the cursor to the performance data that you want to erase.**
2. **Press [F2 (Erase)] to erase that performance data.**

## Moving performance data (Move)

Here's how to move a performance data event to a different location.

1. **1. Use [CURSOR (up/down)] to move the cursor to the performance data that you want to move.**
2. **Press [F3 (Move)].**
   The Move Event window will appear.
3. **Use [CURSOR (left/right)] to move the cursor to the "measure," "beat," and "clock" fields, and use [VALUE] or [INC/DEC] to specify the location to which the data will be moved.**
4. **Press [F6 (OK)] to move the performance data.**

## Copying performance data (Copy)

Here's how to copy a performance data event to the specified location. This is convenient when you want to use the same performance data two or more times.

1. **Use [CURSOR (up/down)] to move the cursor to the performance data that you want to copy.**
2. **Press [F4 (Copy)] to copy the event.**
3. **Press [F5 (Place)].**
   The Place Event window will appear.
4. **Use [CURSOR (left/right)] to move the cursor to the "measure," "beat," and "clock" fields, and use [VALUE] or [INC/DEC] to specify the location to which the data will be pasted.**
5. **Press [F6 (OK)] to paste the performance data.**

## Editing a system exclusive message

1. **Press [TEMPO/MUTE CONTROL] to select the tempo/mute part.**
2. **Use [CURSOR (up/down)] to move the cursor to the location of the system exclusive message that you want to edit.**
3. **Press [CURSOR (right)].**
   The System Exclusive Edit window will appear.
4. **Use [CURSOR] to move the cursor to the location of the data that you want to edit.**
5. **Use [VALUE] or [INC/DEC] to edit the value.**
6. **Press [F6 (OK)] to finalize the data.**

### Function buttons

| | |
|---|---|
| [F1 (Auto Sum)] | If the message is a Roland type IV system exclusive message, you can calculate the checksum automatically when the values are finalized. If this displays a "✔" mark, the check sum will be calculated automatically when the data values are finalized. |
| [F2 (Delete)] | Deletes the data at the cursor location. |
| [F3 (Insert)] | Inserts data at the cursor location. |
| [F4 (Test)] | Transmits the data being edited from the MIDI OUT connector. |
| [F5 (Cancel)] | Cancels the change in the data. |
| [F6 (OK)] | Finalizes the data. |

# Saving a pattern

Pattern settings that you edit will be lost if you edit another pattern or turn off the power. If you want to keep the edited data, you must save it as follows.

**1. Select the pattern that you want to save.**

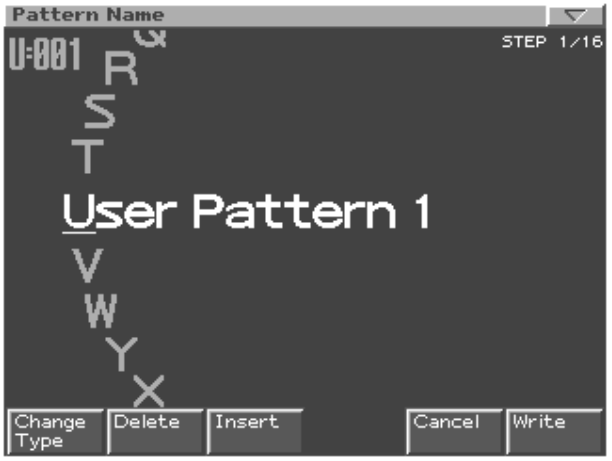
**2. Press [WRITE].**

The write menu screen will appear.

Make sure that "Pattern" is highlighted.


**3. Press [ENTER] or [F1 (PTN)].**

The pattern name input screen will appear.



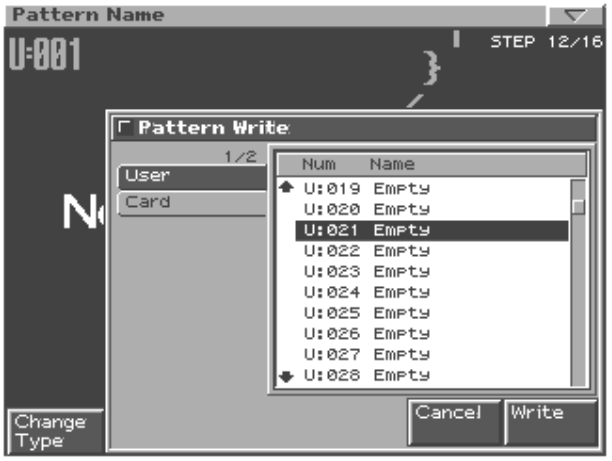

**4. Assign a name to the pattern you created.**

| | |
|---|---|
| [CURSOR (left/right)] | Moves the cursor (the location at which to enter/edit a character). |
| [CURSOR (up/down)] | Switches letters between uppercase and lowercase. |
| [VALUE] [INC/DEC] | Selects characters. |
| [F1 (Change Type)] | Selects the type of character.<br>Each time you press this, you will alternately select the first character of the uppercase alphabet (A), lowercase alphabet (a), or numerals and symbols (0). |
| [F2 (Delete)] | Deletes the character at the cursor location, while shifting the following characters to the left, closing the gap. |
| [F3 (Insert)] | Inserts a space at the cursor location. |

* *If you decide not to enter the name, press [F5 (Cancel)].*

**5. When you finish inputting the name, press [F6 (Write)].**

A screen will appear in which you can select the pattern to which the data will be written.




**6. Use [VALUE] or [INC/DEC] to select the pattern to which the data will be written.**

Use [CURSOR (left/right)] to select the bank (user or card).

**7. Press [F6 (Write)].**

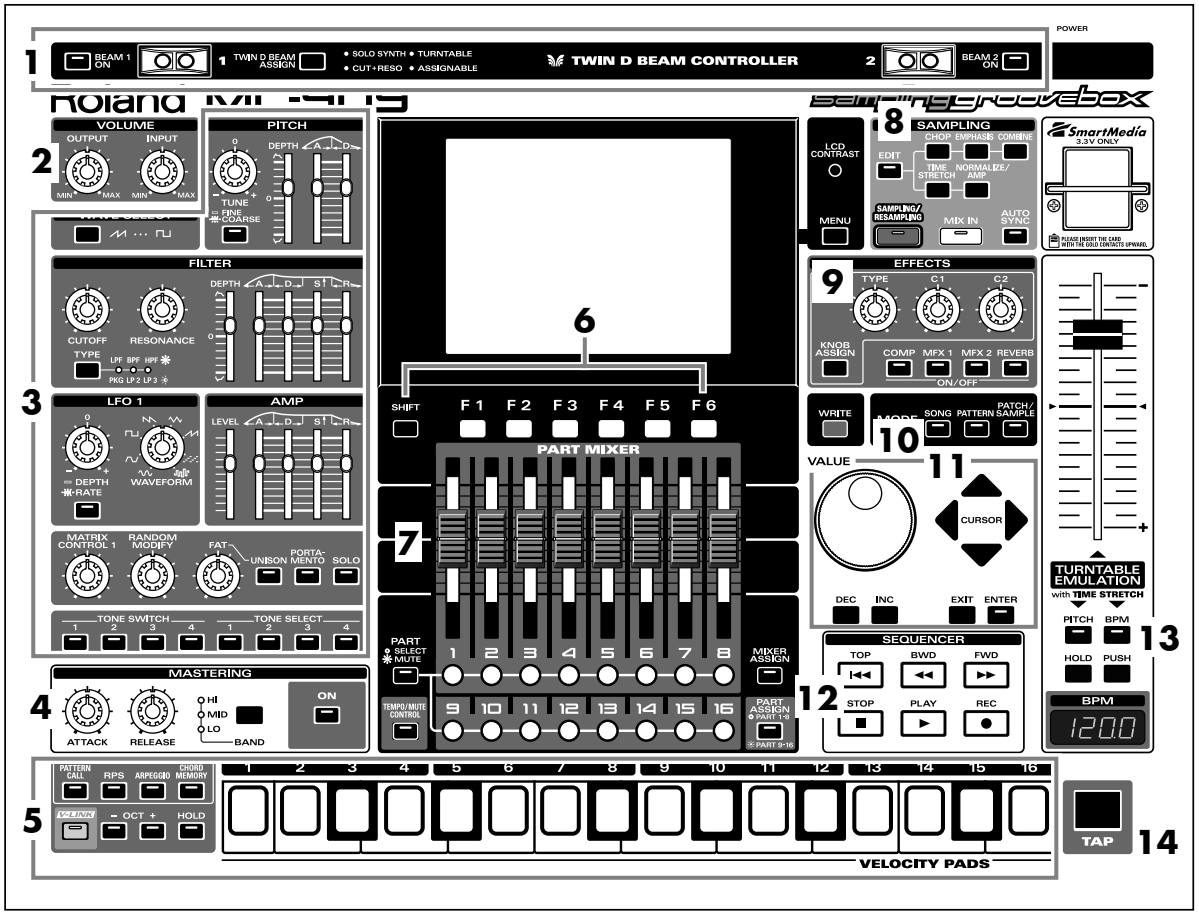
A message will ask you to confirm that you want to write the data.

**8. To write the data, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# Patch/Sample Mode

# How Things Work (in Pattern mode)




When you press the Mode section **[PATCH/SAMPLE] button**, the button's indicator will light and the MC-909 will be in Patch/Sample mode.

In Patch/Sample mode, the various parts of the panel will perform the following functions.

## 1. D Beam controllers

Pass your hand over these to modify the pattern (p. 35).

| | |
|---|---|
| [BEAM 1 ON] | Turns the left D Beam controller (BEAM 1) on/off. |
| [BEAM 2 ON] | Turns the right D Beam controller (BEAM 2) on/off. |
| [TWIN D BEAM ASSIGN] | Selects the function of the D Beam controller. |

## 2. Volume section

| | |
|---|---|
| [OUTPUT] | Adjusts the output volume of the MIX OUT jacks and the headphone. |
| [INPUT] | Adjusts the input volume from the INPUT jacks. |

## 3. Realtime Modify section

These controls modify the sound in real time (p. 33).

| Knob/Button | Parameter |
|---|---|
| [WAVE SELECT] | Displays the Wave List. |
| **PITCH** block | |
| [TUNE] | **button is not lit:** Patch Fine Tune (p. 57)<br>**button is lit:** Patch Coarse Tune (p. 57) |
| [DEPTH] | Pitch Envelope Depth (p. 59) |
| [A] | Pitch Envelope Time1 (p. 59) |
| [D] | Pitch Envelope Time3 (p. 59) |
| **FILTER** block | |
| [TYPE] | Filter Type (p. 59) |
| [CUTOFF] | Cutoff Frequency (p. 59) |
| [RESONANCE] | Resonance (p. 60) |
| [DEPTH] | Filter Envelope Depth (p. 61) |
| [A] | Filter Envelope Time1 (p. 61) |
| [D] | Filter Envelope Time3 (p. 61) |
| [S] | Filter Envelope Level3 (p. 61) |
| [R] | Filter Envelope Time4 (p. 61) |
| **AMP** block | |
| [LEVEL] | Patch Level (p. 62) |
| [A] | Amp Envelope Time1 (p. 63) |
| [D] | Amp Envelope Time3 (p. 63) |
| [S] | Amp Envelope Level3 (p. 63) |
| [R] | Amp Envelope Time4 (p. 63) |
| **LFO 1** block | |
| [DEPTH/RATE] | **button is not lit:** LFO1 Pitch/Filter/Amp/Pan Depth (p. 64, p. 65)<br>* Selectable<br>**button is lit:** LFO1 Rate (p. 64) |
| [WAVEFORM] | LFO1 Waveform (p. 64) |

| Knob/Button | Parameter |
|---|---|
| **Others** | |
| [MATRIX CONTROL 1] | Parameters set to CTRL1 Destination (p. 68) |
| [RANDOM MODIFY] | Randomly modifies the sound generator parameters for the current part (p. 56). |
| [FAT] | Unison Fat Level (p. 66) |
| [UNISON] | Unison Switch (p. 66) |
| [PORTAMENTO] | Portamento Switch (p. 65) |
| [SOLO] | Mono/Poly (p. 65) |
| **TONE SWITCH** | |
| [1]–[4] | Turns the tone on/off (p. 56). |
| **TONE SELECT** | |
| [1]–[4] | Selects a tone to edit (p. 56). |

## 4. Mastering section

| | |
|---|---|
| [ON] | Switches the mastering effect (compressor) on/off. |
| [BAND] | Selects the frequency band to adjust. |
| [ATTACK] | Specify the time from when the volume goes up the threshold level until the compressor effect applies. |
| [RELEASE] | Specify the time from when the volume falls below the threshold level until the compressor effect no longer applies. |

## 5. Velocity pads

Use these pads as a keyboard to play sounds or trigger phrases (p. 27).

## 6. Function buttons

These buttons access the function screens indicated in the bottom line of the display.

## 7. Part Mixer section

Here you can adjust the volume, pan, etc., of each part (p. 33).

| | |
|---|---|
| [PART] (SELECT/MUTE) | Selects the function of the Part buttons [1]–[16].<br>The buttons work as Part Select buttons when the indicator is not lighted, and as Mute buttons when the indicator is lit. |
| [TEMPO/MUTE CONTROL] | Switches on/off the Tempo/Mute part (a part that records tempo changes and mute operations, p. 42). |
| [MIXER ASSIGN] | When you press this button so its indicator lights, the Mixer screen will appear. |
| [PART ASSIGN] | Selects the parts that are controlled by the sliders.<br>The sliders will control parts 1–8 if this indicator is not lighted, or parts 9–16 if the indicator is lit. |

## 8. Sampling section

| | |
|---|---|
| [EDIT] | Displays the Sample Edit screen (p. 114). |
| [SAMPLING/RESAMPLING] | Displays the Sampling menu screen (p. 112). |
| [MIX IN] | Mixes the sound from the INPUT jack into the output (p. 34). |
| [AUTO SYNC] | Synchronizes a sample to the pattern (p. 36). |

## 9. Effect section

Applies special effects to the sound (p. 88).

| | |
|---|---|
| [COMP]–[REVERB] | Switch each effect on/off (p. 88). |
| [KNOB ASSIGN] | Selects the effect to be controlled in real time (p. 91). |
| [TYPE] | Selects the type of effect. |
| [C1], [C2] | Modifies the assigned function in real time. |

## 10. Mode section

Press the [PATTERN] button to enter Pattern mode.

Pressing one of the other two buttons will switch you to the corresponding mode.

## 11. Cursor/Value section

Use these buttons and dial to select patterns or input values (p. 18).

You can press [ENTER] to see a list of the values that can be specified for the currently selected parameter.

## 12. Sequencer section

| | |
|---|---|
| [PLAY] | Plays a pattern (p. 24). |
| [STOP] | Stops playback/recording. |
| [FWD] | Advances to the next measure. |
| [BWD] | Returns to the previous measure. |
| [TOP] | Moves to the beginning of the pattern. |
| [REC] | Used when recording (p. 37). |

## 13. Turntable emulation

Applies an effect that simulates increasing/decreasing the rotational speed of a turntable (p. 36).

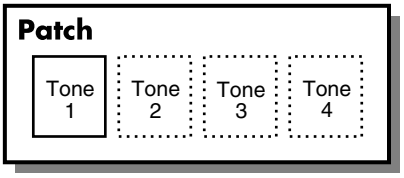
## 14. TAP button

Lets you set the BPM (tempo) by pressing the button at the desired timing (p. 25).

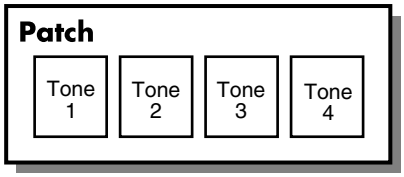
# Patch Edit

## How a Patch Is Organized

The type of sound most commonly played on the MC-909 is called a Patch. Each Patch can contain up to four Tones.




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



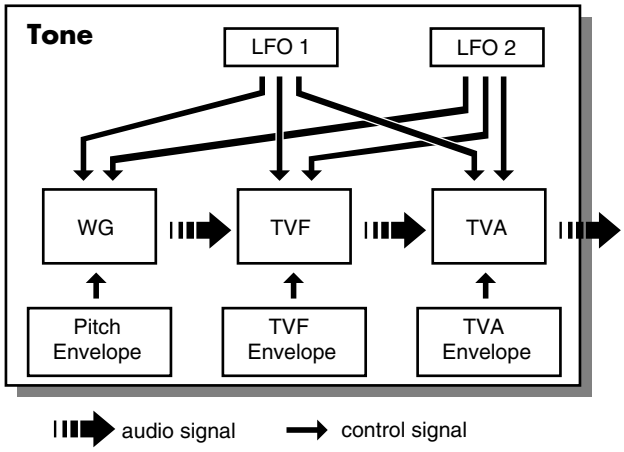

Example 2: A Patch consisting of four Tones.

You can turn the Tones in a Patch on or off. Only Tones that are turned on are heard when you play the Patch. (p. 56)

You can also set the structure of a Patch to specify how Tones 1 and 2 and Tones 3 and 4 are combined. (p. 66)

## How a Tone Is Organized

Tones are the smallest programmable unit of sound on the MC-909, and are the basic building blocks that make up a Patch. You can't play a Tone by itself-it can only be played as part of a Patch or Rhythm Set. A Tone consists of the following five components.




### WG (Wave Generator)

This selects the PCM waveform material that provides the basis of the Tone. Two waveforms can be assigned to each Tone.

The MC-909 has 693 different waveforms. (See Waveform List p. 150.)

All Patches built into the MC-909 consist of combinations of Tones based on these waveforms.

### TVF (Time Variant Filter)

This specifies how the frequency components of the Tone change.

### TVA (Time Variant Amplifier)

This determines how the volume and panning of the Tone change.

### Envelope

An envelope applies changes to the Tone over time. There are separate envelopes for pitch, TVF (filter) and TVA (volume). For example, you would use the TVA Envelope to modify the way in which the Tone attacks and decays.

### LFO (Low Frequency Oscillator)

Use the LFO to create cyclical changes-or cyclical "modulation"-in a Tone. Each Tone has two LFOs. An LFO can be applied to the Tone's pitch settings, TVF (filter), and TVA (volume). When an LFO is applied to pitch, a vibrato effect is produced. When an LFO is applied to the TVF cutoff frequency, a wah-wah effect is produced. When an LFO is applied to the TVA volume, a tremolo effect is produced.

## Tips for Creating a Patch

- Choose a Patch that's similar to the sound you wish to create.
  When you want to create a new sound, it's a good idea to begin with a Patch that's close to the sound that you have in mind. Starting with a Patch that bears no resemblance to the one you want to create is likely to result in much more programming work for you.
- Decide which Tones will sound
  When creating a Patch, it's important to decide which Tones you want to use. It's also important to turn off unused Tones to avoid wasting voices, unnecessarily reducing the number of simultaneous notes you can play.
- Check the way in which the Tones are combined
  Structure Type 1&2 and 3&4 are important parameters that determine how the four Tones are combined. Before you select new Tones, make sure you understand how the currently selected Tones are affecting each other.

### Top screen of Patch/Sample mode


| | |
|---|---|
| Bank<br>Num (Number)<br>Patch/Rhythm (Patch Name/Rhythm Set Name) | Bank/Number/Name of the patch (rhythm set) used by each part (1–16) |
| Lev (Part Level)<br>Pan (Part Pan)<br>Key (Part Key Shift)<br>Rev (Par Reverb Send Level) | Refer to p. 33 |
| Out (Part Output Assign) | How the original sound of each part will be output<br>**DRY:** Output to MIX OUTPUT jacks without passing through effects<br>**MFX1 (2):** Output through multi-effects 1 (or 2)<br>**COMP:** Output through the compressor<br>**DIR1 (2):** Output to the DIRECT 1 (or DIRECT 2) jacks without passing through effects<br>**RHY:** Output according to the settings of the rhythm set assigned to the part<br>* "RHY" can be set only when a rhythm set is assigned to the part. |
| Seq<br>(Sequencer Output Assign) | Output distination from the sequencer<br>**INT:** Internal soundgenerator<br>**EXT:** MIDI OUT connector<br>**BOTH:** Both of the above simultaneously |

### Function buttons

| | |
|---|---|
| [F1 (List)]<br>(Patch List) | Select a patch/rhythm set from a list (p. 55). |
| [F2 (Edit)]<br>(Patch Edit) | Edit the settings of a patch/rhythm set (p. 56, p. 70). |
| [F3 (Mixer)]<br>(Part Mixer) | Specify the volume/pan of each part (p. 33). |
| [F4 (Effects)] | Apply special effects to the sound (p. 88). |
| [F5 (Mastering)] | Make settings for the mastering effect (p. 108). |
| [F6 (BPM/Click)] | Set the tempo, and turn the metronome on/off (p. 25). |

# Selecting a patch/rhythm set

## Selecting from a list

**1. Press [F1 (List)] to display the Patch List screen.**

The currently selected patch/rhythm set (the current patch/rhythm set) will be highlighted.


**2. To select a patch, press [F3 (Patch)]. To select a rhythm set, press [F4 (Rhythm)].**

**3. Use [F1] [F2] or [CURSOR (left/right)] to select a bank.**

**4. Press [F6 (Select)] to finalize your selection.**

## Selecting a patch by category

**1. In the Patch Select screen, press [F5 (Categ)].**

The patches will be displayed by category.

**2. Use [F1] [F2] or [CURSOR (left/right)] to select a category.**

**3. Press [F6 (Select)] to finalize your selection.**

**NOTE**

Rhythm sets do not have categories.

## Selecting directly

**1. In the top screen of Patch/Sample mode, use [CURSOR] to move the cursor to the patch/rhythm set name or bank.**

**2. Use [VALUE] or [INC/DEC] to make your selection.**

# Selecting the Tone(s) That Will Sound

Turn "on" the tone(s) that you want to sound. If you want to hear just a specific tone, turn the other tones "off."
Press **TONE SWITCH [1]–[4]** to switch a tone on (button's indicator lit) or off (indicator extinguished).

# Patch editing procedure

## Editing from the Panel Knobs

Several of the sound generator parameters can be edited directly from the panel knobs.
Parameters that can be edited are marked by "#" in the detailed editing list.

### Special editing

| | |
|---|---|
| [RANDOM MODIFY] | This controls the sound generator parameters of the current part. It is a convenient way to use randomness to create sounds you like. Once you turn this toward the right, the parameters will be modified randomly. If you turn it all the way to the left and then toward the right once again, the parameters will be newly re-selected and modified randomly. |
| [FAT] | This is valid if [UNISON] is on.<br>It produces a detune effect (when the knob is between the far left and the center), or a harmonize effect (when the knob is between the center and the far right). |

When you get a sound that you like, save the patch (p. 77).

### LFO1 waveform morphing

The LFO1 waveform can be morphed (gradually shifted between waveforms) in the order shown on the panel.

## Detailed Editing

1. **In the top screen of Patch/Sample mode, move the cursor to the patch that you want to edit.**
2. **Press [F2 (Edit)] to access the Edit screen.**
3. **Use [F1] and [F2] to select a parameter group.**
4. **Press [CURSOR (up/down)] to select the parameter.**
5. **Use [VALUE] or [INC/DEC] to edit the desired parameter.**
   * *You can press [F6 (Zoom Edit)] to edit some parameters graphically.*
   * *You can press [ENTER] to see a list of the values that can be specified for the currently selected parameter.*
   * *You can also use the panel knobs and sliders to edit the sound (p. 52).*
6. **When you are finished editing, press [EXIT] to return to the top screen.**

## Selecting a Tone to Edit

Press TONE SELECT [1]–[4] so the indicator for the tone you want to edit is lighted.

* *By simultaneously pressing two or more [TONE SELECT] buttons, you can simultaneously select two or more tones.*

## Wave

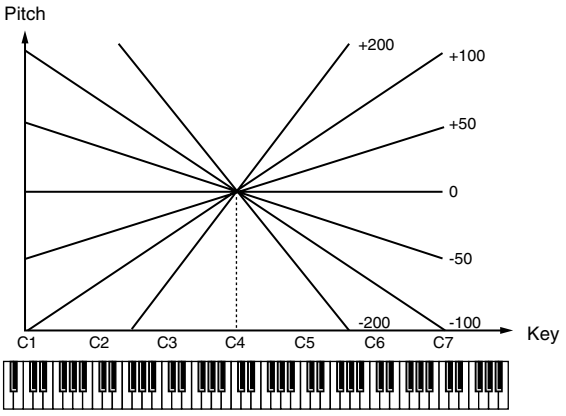
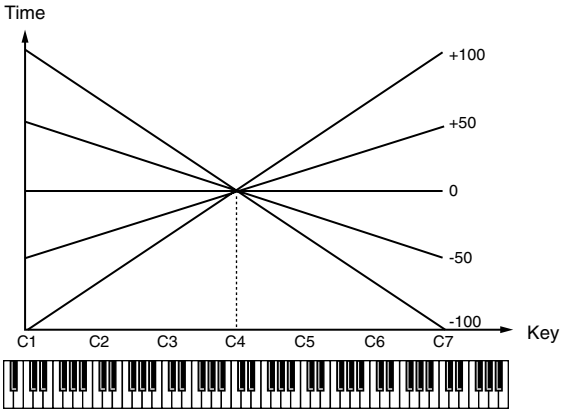
These parameters select the PCM waveform that is to form the basis of the tone, and apply effects to the waveform.

| Parameter | Range | Explanation |
|---|---|---|
| Wave Group | INT, SRX, PRES, USER, CARD | Group of the waveform upon which the tone is to be based<br>**INT:** Waveforms stored in internal memory<br>**SRX:** Waveforms stored in a wave expansion board<br>**PRES:** Preset sample waveforms<br>**USER:** User sample waveforms<br>**CARD:** Card sample waveforms<br>* SRX can be selected only if a wave expansion board is installed. |
| Wave No. L/MONO<br>Wave No. R | 0 (OFF)–693 | Waveform upon which the tone is to be based<br>On the MC-909 you can specify a separate waveform for the L and R channels.<br>* If you want to use the same waveform for the L and R channels, set the R channel to 0 (OFF). |
| Wave Gain | -6, 0, +6, +12 dB | Waveform gain (amplitude)<br>The value will change in steps of 6 dB (decibels). An increase of 6 dB will double the gain. If you want to use the booster to distort the sound, it is effective to set this to the maximum. |
| **FXM (Frequency Cross Modulation)**<br>FMX creates a complex overtone structure by using a specific waveform to frequency-modulate the selected waveform. This is suitable for creating extreme sounds or sound effects. | | |
| FXM SW<br>(Wave FXM Switch) | OFF, ON | Selects whether FMX will be used (ON) or not (OFF) |
| FXM Color<br>(Wave FXM Color) | 1–4 | Selects how FXM will apply frequency modulation.<br>Increasing this value will produce a rougher sound. Decreasing this value will produce a more metallic sound. |
| FXM Depth<br>(Wave FXM Depth) | 0–16 | Depth of frequency modulation applied by FXM |

## Pitch

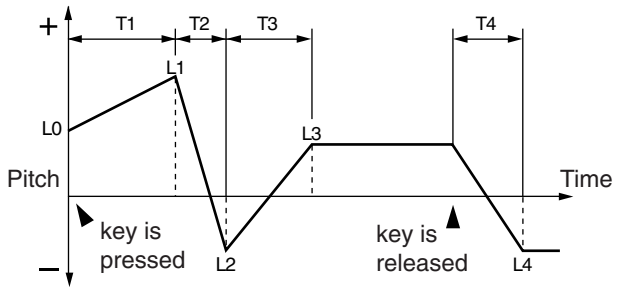
These parameters specify the pitch of the waveform, and how your keyboard playing dynamics will affect the pitch envelope (change in pitch over time).

| Parameter | Value | Description |
|---|---|---|
| Patch Coarse Tune # | -48– +48 | Pitch of the entire patch<br>Specifies the pitch in semitone steps over a range of +/-4 octaves. |
| Patch Fine Tune # | -50– +50 | Pitch of the entire patch<br>Adjusts the pitch in one-cent steps (1/100th of a semitone) over a range of 1/2 semitone upward or downward. |
| Tone Coarse Tune | -48– +48 | Pitch of the tone<br>Adjusts the pitch in semitone steps over a range of +/-4 octaves. |
| Tone Fine Tune | -50– +50 | Pitch of the tone<br>Adjusts the pitch in one-cent steps (1/100th of a semitone) over a range of 1/2 semitone upward or downward. |
| Rnd Pitch Depth<br>(Tone Random Pitch Depth) | 0–1200 | Range of random pitch change that occurs each time a pad is pressed<br>Set this to 0 if you do not want the pitch to change randomly. This value is set in units of one cent (1/100th of a semitone). |

| Parameter | Value | Description |
|---|---|---|
| Pitch Keyfollow (Wave Pitch Keyfollow) | -200– +200 | Amount of pitch change that occurs when you play upward one octave (12 notes)<br>Set this to +100 if you want the pitch to rise one octave as you play 12 notes upward (as on a conventional keyboard). Set this to +200 if you want the pitch to rise two octaves as you play 12 notes upward. Conversely, set this to a negative value if you want the pitch to fall as you play upward on the keyboard. Set this to 0 if you want the same pitch to be sounded regardless of the note you play.<br>  |
| P-Env V-Sens (Pitch Envelope Velocity Sensitivity) | -63– +63 | Amount of pitch change that will occur in response to your pad playing dynamics.<br>Increasing this value will produce a greater difference in pitch between softly and strongly played notes. Negative (-) values will produce the opposite result. |
| P-Env T1 V-Sens (Pitch Envelope Time 1 Velocity Sensitivity) | -63– +63 | Amount by which T1 (time) of the pitch envelope will change in response to the speed (velocity) at which you press a pad.<br>Increasing this value will produce a greater difference between softly and strongly played notes. Set this to a positive (+) value if you want to speed up the T1 time, or to a negative (-) value to slow it down. |
| P-Env T4 V-Sens (Pitch Envelope Time 4 Velocity Sensitivity) | -63– +63 | Amount by which T4 (time) of the pitch envelope will change in response to the speed at which you release a pad (key-off velocity)<br>Increasing this value will produce a greater difference between quickly released and slowly released notes. Set this to a positive (+) value if you want to speed up the T4 time, or to a negative (-) value to slow it down. |
| P-Env Time KF (Pitch Envelope Time Keyfollow) | -100– +100 | Amount by which the pitch envelope times (T2--T4) will change in response to the key you play<br>Relative to middle C (C4), higher settings for this parameter will produce greater change. Positive (+) values will cause the times to become shorter as you play toward the right on the velocity pad. Conversely, negative (-) values will cause the times to become longer.<br>  |

## Pitch Env (Pitch Envelope)

These parameters specify the depth of the pitch envelope (the way in which pitch will change over time), and the shape of the envelope itself.

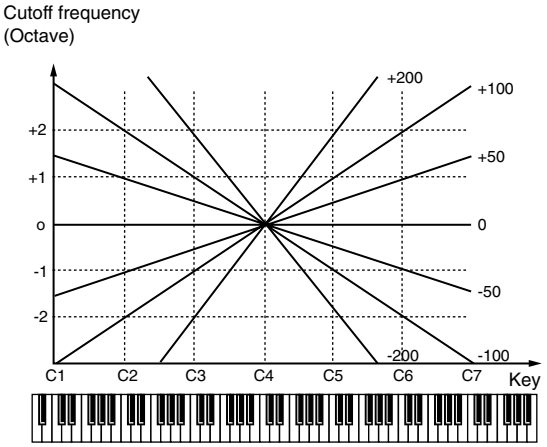
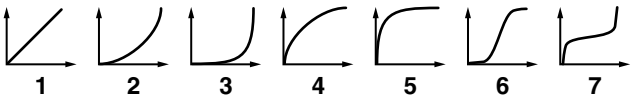
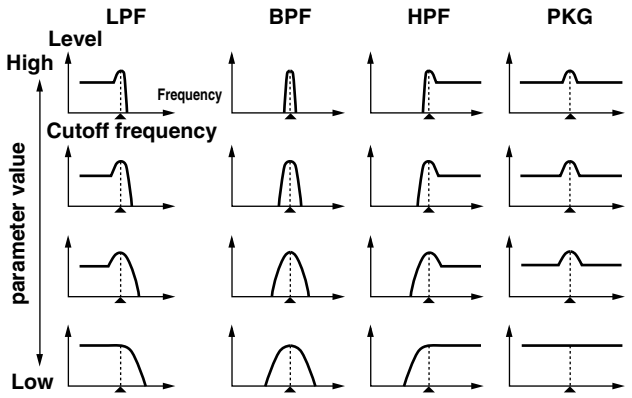



| Parameter | Value | Description |
|---|---|---|
| P-Env Depth # | -12– +12 | Pitch envelope depth<br>Increasing this value will produce greater change. Negative (-) values will invert the change produced by the envelope. |
| P-Env Time1–4 # | 0–127 | Pitch envelope times (T1–T4)<br>Increasing this value will lengthen the time until the next pitch level is reached (for example, T2 is the time over which the pitch will change from L1 to L2).<br>* Realtime modify knob [A] adjusts Time 1, and knob [D] adjusts Time 3. |
| P-Env Level0–4 | -63– +63 | Pitch envelope levels (L0–L4)<br>These parameters specify the amount by which the pitch will change from the basic pitch (specified by Coarse Tune and Fine Tune) at each point of the envelope. Positive (+) values will raise the pitch above the basic pitch, and negative (-) values will lower it. |

## Filter

These parameters are settings for the TVF (Time Variant Filter). They modify the timbral character of the tone by adjusting the brightness and fatness of the sound.

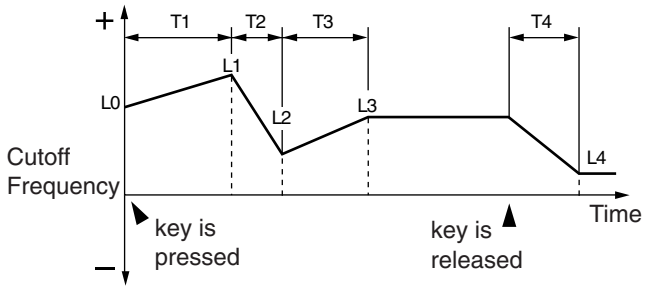
| Parameter | Value | Description |
|---|---|---|
| Filter Type # | OFF, LPF, BPF, HPF, PKG, LPF2, LPF3 | Type of filter<br>A filter cuts a specific frequency region of the sound to modify the brightness or thickness of the sound.<br>**OFF:** A filter will not be used.<br>**LPF:** Low Pass Filter. Cuts the region that lies above the cutoff frequency. The sound will become more mellow as the high frequency region is cut. This is the most commonly used type of filter.<br>**BPF:** Band Pass Filter. Leaves only the region in the vicinity of the cutoff frequency, and cuts the rest. Suitable for creating sounds with a distinctive character.<br>**HPF:** High Pass Filter. Cuts the region that lies below the cutoff frequency. Suitable for creating percussion instrument sounds that have a distinctive high range.<br>**PKG:** Peaking filter. Emphasizes the region in the vicinity of the cutoff frequency. You can create a wah effect by using an LFO to cyclically modulate the cutoff frequency.<br>**LPF2:** Low Pass Filter 2. Cuts the region that lies above the cutoff frequency. This lets you leave the cutoff frequency fixed, and use the TVF envelope settings to vary the depth of the cutoff. Since this does not impair the feeling of energy of the sound, it is effective for acoustic-type sounds.<br>* The resonance setting is ignored.<br>**LPF3:** Low Pass Filter 3. Cuts the region that lies above the cutoff frequency. This filter cuts the high frequency region more gently than LPF2. Since this does not impair the feeling of energy of the sound, it is effective for acoustic-type sounds.<br>* The resonance setting is ignored. |
| Cutoff Frequency # | 0–127 | Frequency (cutoff frequency) at which the filter will begin affecting the frequency content of the waveform<br>**If the Filter Type is LPF/LPF2/LPF3**, reducing the cutoff frequency will diminish the higher overtones, producing a more mellow sound. Raising the cutoff frequency will brighten the sound.<br>**If the Filter Type is BPF**, the cutoff frequency value will change the harmonic content that will be sounded. This is suitable for creating sounds with a distinctive character.<br>**If the Filter Type is HPF**, raising the cutoff frequency will diminish the lower overtones, emphasizing only the bright portion of the sound.<br>**If the Filter Type is PKG**, the cutoff frequency value will change the harmonic content that will be boosted. |

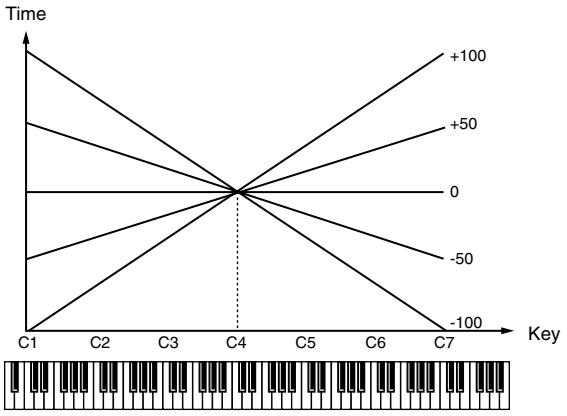
| Parameter | Value | Description |
|---|---|---|
| Cutoff Keyfollow | -200– +200 | Specifies how the pad position will affect the cutoff frequency<br>Relative to the cutoff frequency of the C4 key, positive (+) values will raise the cutoff frequency as you play above C4, and negative (-) values will lower the cutoff frequency as you play above C4. Increasing this value will produce a correspondingly greater change.<br>  |
| Cutoff Velo Curve (Cutoff Frequency Velocity Curve) | FIX, 1–7 | Curve by which pad playing dynamics will affect the cutoff frequency<br>If you select "FIX," the cutoff frequency will remain fixed regardless of your playing dynamics.<br>  |
| Cutoff Velo Sens (Cutoff Frequency Velocity Sensitivity) | -63– +63 | Amount by which your pad playing dynamics will affect the cutoff frequency<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. |
| Resonance # | 0–127 | Amount by which the sound in the region of the cutoff frequency will be emphasized<br>Increasing this value will produce a more strongly distinctive character. Raising this excessively will cause oscillation and distortion.<br>  |
| Reso Velo Sens (Resonance Velocity Sensitivity) | -63– +63 | Amount by which your pad playing dynamics will affect the resonance<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. |
| F-Env V-Curve (Filter envelope velocity curve) | FIX, 1–7 | Curve by which keyboard playing dynamics will affect the filter envelope<br>If you select "FIX," the filter envelope will remain constant regardless of your playing dynamics.<br>  |
| F-Env V-Sens (Filter envelope velocity sensitivity) | -63– +63 | Amount by which your pad playing dynamics will affect the filter envelope depth<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. |
| F-Env T1 V-Sens (Filter Envelope Time 1 Velocity Sensitivity) | -63– +63 | Amount by which your pad playing dynamics (velocity) will affect T1 (time) of the filter envelope<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. Specify a positive (+) value if you want to speed up the T1 time, or a negative (-) value to slow it down. |

| Parameter | Value | Description |
|---|---|---|
| F-Env T4 V-Sens (Filter Envelope Time 4 Velocity Sensitivity) | -63– +63 | Amount by which the speed at which you release the pad (key-off velocity) will affect T4 (time) of the filter envelope<br>Increasing this value will cause a correspondingly greater difference between slowly released and quickly released notes. Specify a positive (+) value if you want to speed up the T4 time, or a negative (-) value to slow it down. |

## Filter Env (Filter Envelope)

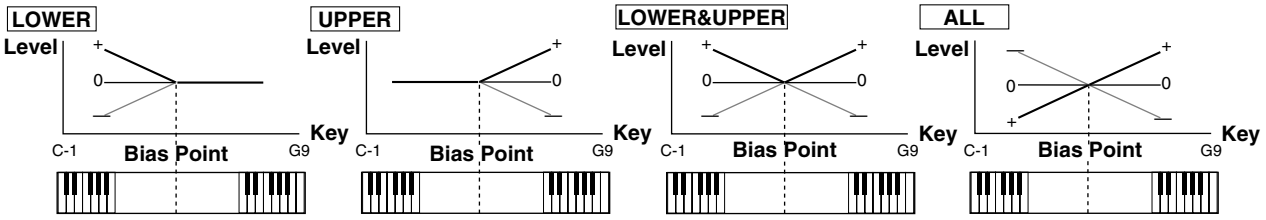
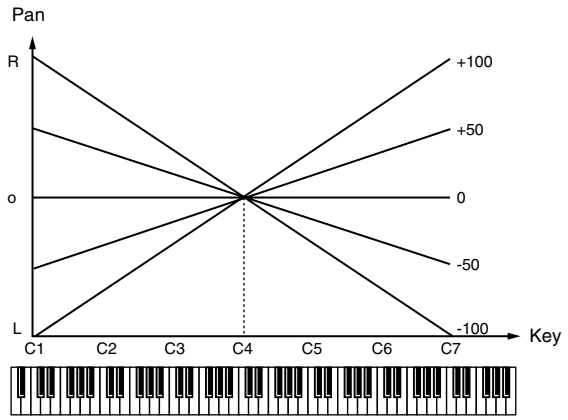
These parameters specify the depth of the filter envelope (time-variant change in cutoff frequency), and specify the shape of the envelope itself.




| Parameter | Value | Description |
|---|---|---|
| F-Env Depth (Filter envelope depth) | -63– +63 | Depth of the filter envelope<br>Increasing this value will produce a greater effect. Negative (-) values will invert the envelope. |
| F-Env Time KF (Filter Envelope Time Keyfollow) | -100– +100 | Amount by which the note you play (relative to C4) will affect the filter envelope times (T2–T4)<br>Increasing this value will cause greater change to occur. Positive (+) values will cause the times to become shorter as you play toward the right of the keyboard. Conversely, negative (-) values will cause the times to become longer.<br>  |
| F-Env Time1–4 # (Filter Envelope Time 1–4) | 0–127 | Filter envelope times (T1–T4)<br>Higher settings of these values will lengthen the time over which the next cutoff frequency level of the envelope is reached. (For example, T2 is the time over which the level changes from L1 to L2.)<br>* Realtime modify knob [A] adjusts Time 1, knob [D] adjusts Time 3, and knob [R] adjusts Time 4. |
| F-Env Level0–4 # (Filter Envelope Level 0–4) | 0–127 | Filter envelope levels (L1–L3)<br>Specifies the change in cutoff frequency at each point, relative to the reference level.<br>* Realtime modify knob [S] adjusts Level 3. |

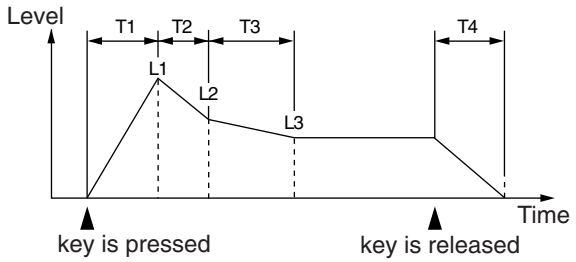
## Amp

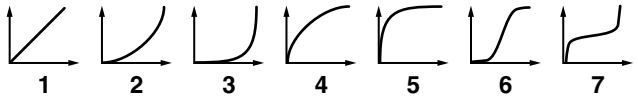
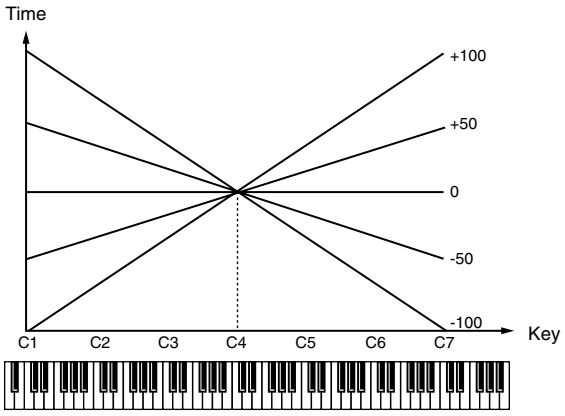
These TVA (Time Variant Amplifier) parameters specify how the volume and pan of the sound will change.

| Parameter | Value | Description |
|---|---|---|
| Patch Level # | 0–127 | Volume of the entire patch |
| Tone Level | 0–127 | Volume of each tone<br>This parameter is used mainly to adjust the volume balance between tones. |
| **BIAS**<br>Use the Bias parameter when you want the position of notes on a keyboard to affect the TVA level.<br>  <br> | | |
| Bias Level | -100– +100 | Angle at which the volume will change relative to the bias direction<br>Increasing this value will produce a greater change. Negative (-) values will invert the direction of the change. |
| Bias Position | 0–127 | Selects the note number relative to which the volume will change. |
| Bias Direction | LWR, UPR, L&U, ALL | Direction of change relative to the bias point<br>**LWR:** Notes below the bias point<br>**UPR:** Notes above the bias point<br>**L&U:** Notes to the left and right of the bias point<br>**ALL:** Bias level varies the angle relative to the bias point |
| Tone Pan | L64–63R | Pan of each tone<br>L64 is far left, 0 is center, and 63R is far right. |
| Pan Keyfollow (Tone Pan Keyfollow) | -100– +100 | Set this parameter if you want the pan to be affected by the note you play.<br>Increasing this value will produce a greater change relative to middle C (C4). Positive (+) values will cause the pan to move toward the right as you play toward the right. Conversely, negative (-) values will adjust pan toward the right.<br>  <br> |
| Random Pan Depth (Tone Random Pan Depth) | 0–63 | Amount by which the pan will be varied randomly each time you play a note<br>Increasing this value will produce a greater amount of random change. |
| Alter Pan Depth (Tone Alternate Pan Depth) | L63–63R | Amount by which the pan will be moved alternately between left and right each time you play a note<br>Increasing this value will produce a greater amount of change. This value can be adjusted in the L or R direction, and these will invert the order in which the tone is panned to left and right. If you want two tones to alternate between left and right, set each tone to opposite L and R values. |

## Amp Env (Amp Envelope)

These parameters specify the depth of the amp envelope (change in volume over time) and the shape of the envelope itself.




| Parameter | Value | Description |
|---|---|---|
| A-Env V-Curve (Amp Envelope Velocity Curve) | FIX, 1–7 | Curve by which pad playing dynamics will affect the volume of the tone<br>If you specify "FIX," the volume of the tone will remain the same regardless of your playing dynamics.<br>  <br> |
| A-Env V-Sens (Amp Envelope Velocity Sensitivity) | -63– +63 | Amount by which pad playing dynamics will affect the volume of the tone<br>Specify a positive (+) value if you want the volume of the tone to increase as you play more strongly.<br>Specify a negative (-) value if you want the volume to decrease. |
| A-Env T1 V-Sens (Amp Envelope Time 1 Velocity Sensitivity) | -63– +63 | Amount by which T1 (time) of the Amp envelope will change in response to your playing dynamics<br>Increasing this value will produce a greater change between softly played and strongly played notes.<br>Specify a positive (+) value if you want the T1 time to speed up, or a negative (-) value if you want it to slow down. |
| A-Env T4 V-Sens (Amp Envelope Time 4 Velocity Sensitivity) | -63– +63 | Amount by which T4 (time) of the Amp envelope will change in response to the speed at which you release the pad (key-off velocity)<br>Increasing this value will produce a greater change between slowly released and quickly released notes. Specify a positive (+) value if you want the T4 time to speed up, or a negative (-) value if you want it to slow down. |
| A-Env Time KF (Amp Envelope Time Keyfollow) | -100– +100 | Amount by which Amp envelope times (T2–T4) will be affected by the pad you play<br>Higher settings for this value will produce a greater change relative to the C4 key. Positive (+) values will cause the times to become shorter as you play toward the right. Conversely, negative (-) values will cause the times to become longer.<br>  <br> |
| A-Env Time1–4 # (Amp Envelope Time 1–4) | 0–127 | Amp envelope times (T1–T4)<br>Higher settings of these values will lengthen the time over which the next volume level of the envelope is reached. (For example, T2 is the time over which the level changes from L1 to L2.)<br>* Realtime modify knob [A] adjusts Time 1, knob [D] adjusts Time 3, and knob [R] adjusts Time 4. |
| A-Env Level1–3 # (Amp Envelope Level 1–3) | 0–127 | Amp envelope levels (L1–L3)<br>Specifies the change in volume at each point, relative to the reference level.<br>* Realtime modify knob [S] adjusts Level 3. |

# LFO1/LFO2

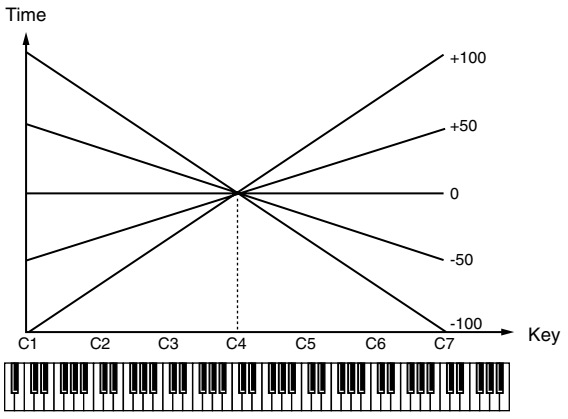
LFO (Low Frequency Oscillator) creates cyclic changes. Each tone has two LFOs, and these can be used to apply change to pitch, filter cutoff frequency, amp level, and pan.

## Using the LFOs

An LFO applied to pitch creates vibrato, applied to filter cutoff frequency creates a wah effect, and applied to amp level creates tremolo. When LFO is applied to pan, a distinctive auto-pan effect is produced.

LFO settings can also be used to do things such as cyclically exchanging two tones. For example, to cyclically exchange tones 1 and 2, specify the same LFO effect for each, and set the LFO depth to opposite polarities (+/-) for the amp level.

* *The parameters of LFO 1 and 2 are the same.*

| Parameter | Value | Description |
|---|---|---|
| LFO1(2) Waveform # | SIN, TRI, SAWU, SAWD, SQR, RND, BD-U, BD-D, TRP, S&H, CHS, XSIN, TWM,STRS, VSIN, M001–M113 | LFO waveform<br>**SIN:** sine wave **TRI:** triangle wave **SAWU:** sawtooth wave **SAW-D:** sawtooth wave (inverted)<br>**SQR:** square wave **RND:** random wave<br>**BD-U:** a waveform that lets the LFO output waveform rise to the reference level and holds it there<br>**BD-D:** a waveform that lets the LFO output waveform fall to the reference level and holds it there<br>**TRP:** trapezoidal wave **S&H:** sample and hold wave (LFO value will change once each period)<br>**CHS:** chaos wave<br>**XSIN:** sine wave that reverses between positive and negative at an extremely short interval<br>**TWM:** modified triangle wave **STRS:** stair-step wave **VSIN:** modified sine wave suitable for vibrato<br>**M001–M113:** the waveform will change continuously from a sine wave to sample & hold<br>* If you select "BD-U" or "BD-D," set the Key Trigger (p. 64) parameter to "ON." There will be no effect if you set it to "OFF." |
| LFO1(2) Rate # | 0–127, note | Speed of the LFO cycle<br>* The chaos waveform has no cycle. If you select the chaos waveform, the rate setting will be ignored. |
| Offset (LFO Offset) | -100– +100 | Offset level of the LFO waveform<br>Adjusts the waveform upward or downward. |
| Rate Detune (LFO Rate Detune) | 0–127 | Amount by which the LFO rate will be changed |
| Delay Time (LFO Delay Time) | 0–127 | Time from when you press (or release) a pad until the LFO amplitude begins to change |
| Delay Time KF (LFO Delay Keyfollow) | -100– +100 | Amount by which the Delay Time will be affected by the note you play<br>Modifies the Delay Time parameter according to the note you play, relative to C4 (middle C). Specify a positive (+) value if you want the LFO effect to be applied more quickly as you play higher notes, or specify a negative (-) value if you want a greater delay to occur before the effect is applied. Higher settings will produce a correspondingly greater change.<br>  |
| Fade Mode (LFO Fade Mode) | On<, On>, Off<, Off> | How the LFO effect is applied<br>**On< (ON-IN):** The effect will be applied gradually after you press the pad.<br>**On> (ON-OUT):** The effect will be applied when you press the pad, and will gradually disappear.<br>**Off< (OFF-IN):** The effect will be applied gradually after you release the pad.<br>**Off> (OFF-OUT):** The effect will be applied as long as you hold down the pad, and will gradually disappear when you release the pad. |
| Fade Time (LFO Fade Time) | 0–127 | Rise (or decay) time for the LFO effect |
| Key Trigger (LFO Key Trigger) | OFF, ON | Selection for whether the beginning of the LFO cycle will be aligned to the timing at which you press a pad (ON), or will not be aligned (OFF) |
| Pitch Depth # (LFO Pitch Depth) | -63– +63 | Depth to which the LFO will affect the WG pitch |

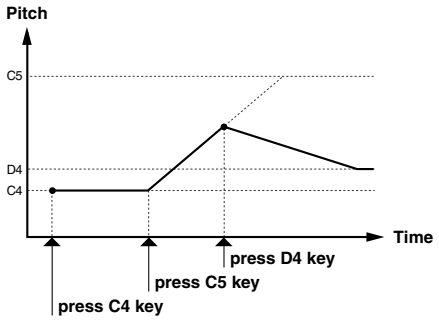
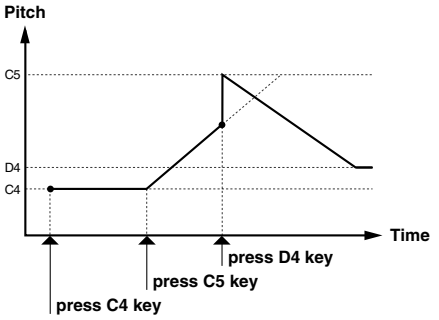
| Parameter | Value | Description |
|---|---|---|
| Filter Depth # (LFO Filter Depth) | -63– +63 | Depth to which the LFO will affect the filter cutoff frequency |
| Amp Depth # (LFO Amp Depth) | -63– +63 | Depth to which the LFO will affect the amp level |
| Pan Depth # (LFO Pan Depth) | -63– +63 | Depth to which the LFO will affect the amp pan<br>* If the Waveform is "XSIN," it may be difficult to notice the effect. |

**note:**

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

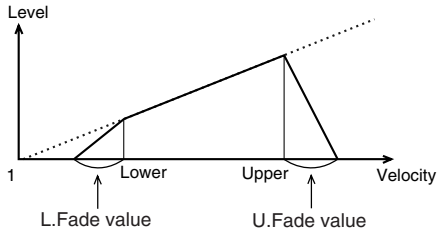
## Solo/Porta (Portamento)

| Parameter | Value | Description |
|---|---|---|
| Mono/Poly # | MONO, POLY | Specifies how notes will be produced<br>**MONO:** Only one note at a time will sound.<br>**POLY:** More than one note can be played simultaneously.<br>It is effective to use the MONO setting when playing a patch of a single-note instrument such as sax or flute. |
| Legato Switch | OFF, ON | Specifies whether legato will be used (ON) or not (OFF)<br>Legato is a function that is available when the Mono/Poly parameter is set to MONO. When Legato is turned ON, pressing another key while the previously played key is still held down will cause the pitch to change to the newly played key, while the note continues to sound. This can be used to simulate the hammering-on/pulling-off performance techniques used by a guitarist. |
| Legato Retrigger | OFF, ON | Selects whether the note will be retriggered when using Legato.<br>Normally, you will leave this "ON." If this parameter is turned "OFF," pressing another key while the previously played key is still held down will cause only the pitch to change, which may cause an unnatural-sounding result for some waveforms. It is best to turn this "OFF" when playing wind or bowed-string instrument sounds, or when simulating a monophonic synthesizer.<br>* This setting is ignored if the Legato Switch is "OFF." |
| **PORTAMENTO**<br>Portamento is a function that causes the Patch's pitch to change smoothly from one note to the next note played. When the Key Mode Asign is MONO, this can be effective in simulating performance techniques such as a violinist's glissando. | | |
| Portamento Switch # | OFF, ON | Portamento on/off |
| Porta Mode (Portamento Mode) | NORMAL, LEGATO | Method of play for which the portamento effect will be applied<br>**NORMAL:** Portamento will always be applied.<br>**LEGATO:** Portamento will be applied only when you play legato (i.e., press the next note before releasing the previous note). |
| Portamento Type | RATE, TIME | How the difference in pitch between the notes you play will affect the time over which the pitch change occurs<br>**RATE:** The time over which the pitch changes will be proportionate to the difference in pitch between the two notes.<br>**TIME:** The pitch change will occur over a fixed time, regardless of the difference in pitch between the two notes. |

| Parameter | Value | Description |
|---|---|---|
| Porta Start (Portamento Start) | PITCH, NOTE | Portamento begins anew if you press another key during a pitch movement. This setting specifies how the new portamento starts.<br>**PITCH:** The pitch begins changing immediately to the new note's pitch when its key is pressed.<br>  <br><br>**NOTE:** The pitch begins changing to the new note's pitch only after it has first reached its original pitch destination.<br>  <br> |
| Portamento Time | 0–127 | Time over which the next pitch is reached |
| Unison Switch # | OFF, ON | Switches the detune effect on/off<br>If this is "ON," the sound of the selected patch will be layered (three notes), producing a fatter sound.<br>* If this is turned "ON," the Mono/Poly parameter will also be set to "MONO" ([SOLO] will light), and the selected patch automatically uses single notes. |
| Unison Fat Level # | 0–127 | Strength of the detune effect<br>Increasing this value will cause the pitch of the layered notes to be raised and lowered farther away from each other (maximum one octave up and down). |

## TMT (Tone Mix Table)

These parameters specify how the tones will be combined, and how they will be played.

| Parameter | Value | Description |
|---|---|---|
| Structure Type 1&2 (3&4) | 1–10 | How tones 1 and 2, or 3 and 4, will be combined<br>If you press [F6 (Zoom Edit)] while this parameter is selected, the screen will show the way in which the tones are combined. (Press [EXIT] to return to the previous screen.)<br>**B** indicates Booster, and **R** indicates Ring Modulator.<br>* If you select Type 2–10 and turn off one of the tones, the other tone will use the conventional configuration of WG/TVF/TVA. |
| Booster 1&2 (3&4) (Booster Gain) | 0, +6, +12, +18 dB | Depth of the booster effect when "Type" is set to 3 or 4 |
| **TMT (Tone Mix Table)**<br>On the MC-909, you can specify how each tone will sound in response to pad playing dynamics (velocity). These parameters are collectively referred to as the TMT (Tone Mix Table) settings.<br>  <br> | | |
| Velocity Control (TMT Velocity Control) | OFF, ON, RANDOM | Specifies whether velocity data will be used (ON) or ignored (OFF)<br>If you specify RANDOM, the tones will sound randomly, regardless of velocity data. |

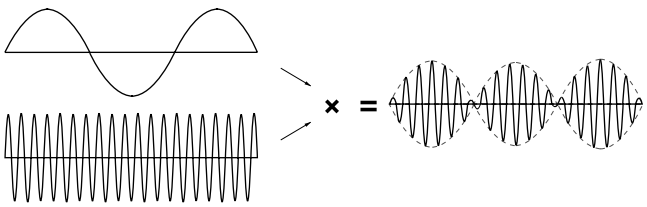
| Parameter | Value | Description |
|---|---|---|
| Velo Fade Lower (TMT Velocity Fade Width Lower) | 0–127 | Rate of volume change when you play less strongly than the lower limit of the velocity range<br>Greater settings for this value will cause the volume to decrease more gradually. Set this to 0 if you want notes outside the velocity range to not sound at all. |
| Velo Range Lower (TMT Velocity Range Lower) | 1–Upper | Lower limit of velocities that will sound the tone<br>Set this parameter if you want to use velocity to switch between tones. |
| Velo Range Upper (TMT Velocity Range Upper) | Lower–127 | Upper limit of velocities that will sound the tone<br>Set this parameter if you want to use velocity to switch between tones.<br>* It is not possible to set Lower to a greater value than Upper, nor Upper to a lesser value than Lower. |
| Velo Fade Upper (TMT Velocity Fade Width Upper) | 0–127 | Rate of volume change when you play more strongly than the upper limit of the velocity range<br>Greater settings for this value will cause the volume to decrease more gradually. Set this to 0 if you want notes outside the velocity range to not sound at all. |
| TMT Control Switch | OFF, ON | Specifies whether the controller of the matrix control will control TMT (ON) or not (OFF)<br>By turning Velocity Control (TMT Velocity Control) OFF and turning this parameter on/off, you can easily switch between sounding all tones and using the matrix control. This is convenient when checking the sound. |
| Bend Range Down | -48–0 | Specifies the pitch change that occurs when the Pitch Bend lever is moved fully to the left (or down on some MIDI controllers). |
| Bend Range Up | 0–48 | Specifies the pitch change that occurs when the Pitch Bend lever is moved fully to the right (or up on some MIDI controllers). |

**What is a Booster?**

A Booster amplifies the incoming signal, causing it to distort. This creates an effect similar to the distortion often used on an electric guitar.

**What is a Ring Modulator?**

A Ring Modulator mathematically multiplies two Tones, creating a new sound that includes inharmonic overtones that were not present in either of the two original Tones. Since the difference in pitch between the two Tones changes the overtone structure, an un-pitched "metallic" sound often results. Ring modulation is therefore especially suitable for creating bells and other metallic sounds.



## CTRL1

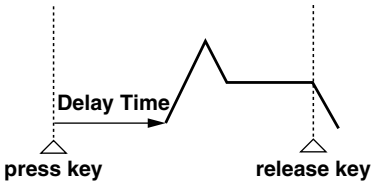
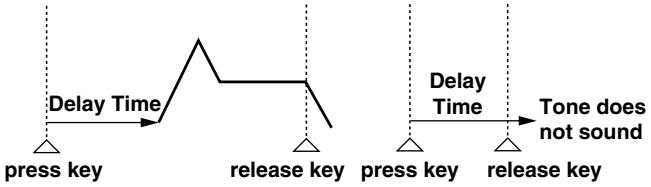
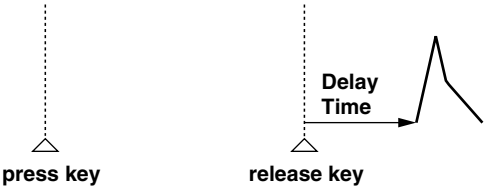
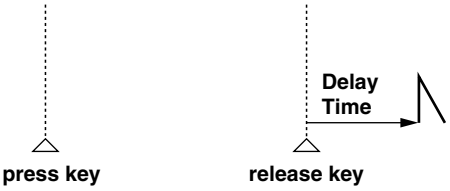
These parameters let you specify the operation and result of various controllers.

| Parameter | Value | Description |
|---|---|---|
| **MATRIX CTRL #**<br>This selects the parameters to be controlled by Matrix Control Source 1–4 and the Sens settings, as well as the specific Tones whose parameters you wish to control. Up to four destination parameters can be selected for each controller and controlled simultaneously. | | |
| CTRL1 Destination 1–4 (Matrix Control 1 Destination 1–4) | OFF, PCH, CUT, RES, LEV, PAN, DRY, CHO, REV, PIT-LFO1(2), TVF-LFO1(2), TVA-LFO1(2), PAN-LFO1(2), LFO1(2)-RATE, PIT-ATK, PIT-DCY, PIT-REL, TVF-ATK, TVF-DCY, TVF-REL, TVA-ATK, TVA-DCY, TVA-REL, TMT, FXM, MFX-CTRL1–4 | Parameter to be controlled |
| CTRL1 Sens 1–4 (Matrix Control 1 Sens 1–4) | -63– +63 | Range of change obtained through operating the controller<br>Negative (-) values will invert the change. If you set LFO depth to a negative value, the phase will be inverted. Setting LFO rate to a negative value will lengthen the cycle, and setting it to a positive value will shorten the cycle. |
| CTRL1 Switch 1–4 (Matrix Control 1 Tone Control Switch 1–4) | OFF, ON, REVS | Tones to which the preceding two parameter settings will apply<br>The settings will apply to tones for which this is turned "ON." The effect will be inverted for tones that are set to "REVS." |

## General

Various other parameters are provided here.

| Parameter | Value | Description |
|---|---|---|
| Patch Priority | LAST, LOUDEST | Specifies what will happen if the maximum polyphony (64 voices) is exceeded<br>**LAST:** Voices played most recently will be given priority, while currently sounding voices will be successively turned off, beginning with the oldest one.<br>**LOUDEST:** Voices of the loudest volume will be given priority, while currently sounding voices will be successively turned off, beginning with the one with the lowest volume. |
| Tone Env Mode (Tone Envelope Mode) | NSUS, SUST | Specifies how notes will continue to sound while you hold down the key<br>**NSUS (NO-SUSTAIN):** The sound will decay naturally even if you continue to hold down the pad.<br>**SUST (SUSTAIN):** The sound will be sustained as long as you hold down the pad.<br>* If you have selected a one-shot waveform, the sound will not be sustained even if you select "SUST." |

| Parameter | Value | Description |
|---|---|---|
| **Tone Delay**<br>This produces a time delay between the moment a key is pressed (or released) and the moment the Tone actually begins to sound. Since you can adjust the timing of each Tone in a Patch, you can create effects in which pressing a single key produces two or more sounds occurring at different times. If you don't wish to use Tone Delay, set Tone Dly to NORMAL and Tone Delay Time to 0. | | |
| Tone Delay Mode | NORM,<br>HOLD,<br>OFFN,<br>OFFD | Specifies how the tone will be sounded<br>* If you have selected a decay-type waveform (in which the sound disappears naturally even if you do not release the key), the sound may not be heard if you set this parameter to OFFN or OFFD.<br>**NORM (NORMAL):** The Tone sounds after the specified Delay Time.<br>  <br><br>**HOLD:** The Tone will only sound if the key is held for longer than the specified Delay Time. If the key is released before the Delay Time has elapsed, the Tone will not sound.<br>  <br><br>**OFFN (KEY-OFF-NORMAL):** The Tone doesn't sound while the key is being pressed, but sounds after the specified Delay Time when the key is released.<br>  <br><br>**OFFD (KEY-OFF-DECAY):** The Tone doesn't sound while the key is being pressed, but sounds after the specified Delay Time when the key is released. However, for this setting-unlike KEY-OFF-NOR- the TVA envelope of the Tone begins when the key is first pressed. As a result, in most cases, only the decay portion of the sound is heard.<br>  <br> |
| Tone Delay Time | 0–127, note | Time by which each tone will be delayed when using tone delay<br>If you've selected a Structure Type of 2–10, the output of tone 1 (3) and 2 (4) will be combined into tone 2 (4). Thus, the setting of tone 1 (3) will have no effect. |

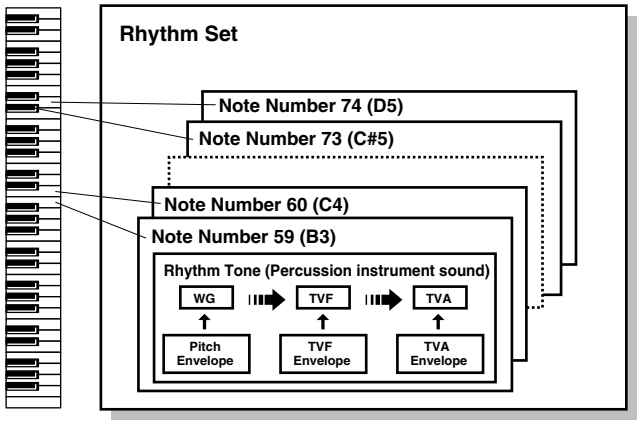
**note:**

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

# Rhythm Edit

## How Percussion Instruments Are Organized

A Rhythm Set is a collection of Rhythm Tones, each of which represents a percussion instrument played on a single key. An instrument consists of the following four elements.




### WG (Wave Generator)

This specifies the PCM waveform (or "wave") that forms the basis of the Rhythm Tone - four waveforms can be assigned to each Rhythm Tone. You can also determine how the pitch of the Rhythm Tone will change.

The MC-909 has 693 different waveforms. (See Waveform List p. 150.)

All Rhythm Sets built into the MC-909 consist of Rhythm Tones based on these waveforms.

### TVF (Time Variant Filter)

This sets how the frequency characteristics of the Rhythm Tone will change.

### TVA (Time Variant Amplifier)

This sets how the Rhythm Tone's volume and stereo positioning will change.

### Envelope

An envelope applies changes to the Rhythm Tone over time. There are separate envelopes for pitch, TVF (filter) and TVA (volume). For example, you would use the TVA Envelope to modify the way in which the Rhythm Tone attacks and decays.

## Selecting the Wave(s) That Will Sound

Turn "on" the wave(s) that you want to sound. If you want to hear just a specific wave, turn the other waves "off."

Press **TONE SWITCH [1]–[4]** to switch a wave on (button's indicator lit) or off (indicator extinguished).

## Rhythm editing procedure

1. **In the top screen of Patch/Sample mode, move the cursor to the rhythm set that you want to edit.**
2. **Press [F2 (Edit)] to access the edit screen.**
3. **Use [F1] [F2] or [CURSOR (left/right)] to select a parameter group.**
4. **Use [CURSOR (up/down)] to select a parameter.**
5. **Use [VALUE] or [INC/DEC] to edit the parameter.**

   * *You can also use the panel knobs and sliders to edit the sound (p. 52).*
6. **When you are finished editing, press [EXIT] to return to the top screen.**

## Selecting the rhythm tone to edit

Press a velocity pad 1–16 to select the rhythm tone that you want to edit.

## Selecting the wave that you want to edit

Press TONE SELECT [1]–[4] to illuminate the button for the wave that you want to edit.

* *By simultaneously pressing two or more [TONE SELECT] buttons, you can simultaneously select two or more waves.*

## Wave

These parameters select the PCM waveform that is to form the basis of the rhythm tone, and apply effects to the waveform.

| Parameter | Value | Description |
|---|---|---|
| Wave Group | INT, SRX, PRES, USER, CARD | Group of the waveform upon which the rhythm tone is to be based<br>**INT:** Waveforms stored in internal memory<br>**SRX:** Waveforms stored in a wave expansion board<br>**PRES:** Preset sample waveforms<br>**USER:** User sample waveforms<br>**CARD:** Card sample waveforms<br>* SRX can be selected only if a wave expansion board is installed. |
| Wave No. L/MONO<br>Wave No. R | 0 (OFF)–693 | Waveform upon which the tone is to be based<br>On the MC-909 you can specify a separate waveform for the L and R channels.<br>* If you want to use the same waveform for the L and R channels, set the R channel to 0 (OFF). |
| Wave Gain | -6, 0, +6, +12 dB | Waveform gain (amplitude)<br>The value will change in steps of 6 dB (decibels). An increase of 6 dB will double the gain. If you want to use the booster to distort the sound, it is effective to set this to the maximum. |
| **FXM (Frequency Cross Modulation)**<br>FMX creates a complex overtone structure by using a specific waveform to frequency-modulate the selected waveform. This is suitable for creating extreme sounds or sound effects. | | |
| Wave FXM SW<br>(Wave FXM Switch) | OFF, ON | Selects whether FXM will be used (ON) or not (OFF) |
| Wave FXM Color<br>(Wave FXM Color) | 1–4 | Selects how FXM will apply frequency modulation.<br>Increasing this value will produce a rougher sound. Decreasing this value will produce a more metallic sound. |
| Wave FXM Depth<br>(Wave FXM Depth) | 0–16 | Depth of frequency modulation applied by FXM |

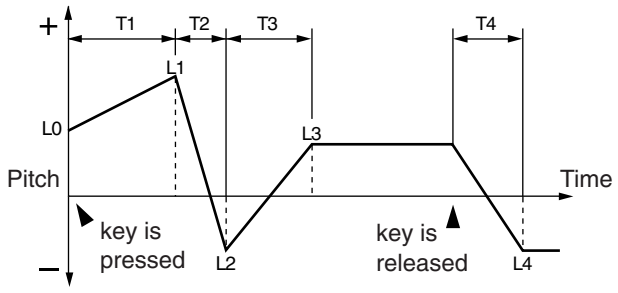
## Pitch

These parameters specify the pitch of the waveform.

| Parameter | Value | Description |
|---|---|---|
| Coarse Tune (Rhythm Tone Coarse Tune) | 0 (C-1)–127 (G9) | Basic pitch at which the Rhythm tone will play |
| Fine Tune (Rhythm Tone Fine Tune) | -50– +50 | Pitch of the Rhythm tone<br>Adjusts the pitch in one-cent steps (1/100th of a semitone) over a range of 1/2 semitone upward or downward. |
| Random Pitch (Random pitch depth) | 0–1200 | This specifies the width of random pitch deviation that will occur each time a key is pressed. If you don't want random pitch changes, set it to 0. The parameter can be adjusted in units of 1 cent (1/100th of a semitone). |
| Wave Coarse Tune | -48– +48 | Pitch of the Wave<br>Adjusts the pitch in semitone steps over a range of +/-4 octaves. |
| Wave Fine Tune | -50– +50 | Pitch of the Wave<br>Adjusts the pitch in one-cent steps (1/100th of a semitone) over a range of 1/2 semitone upward or downward. |

## Pitch Env (Pitch Envelope)

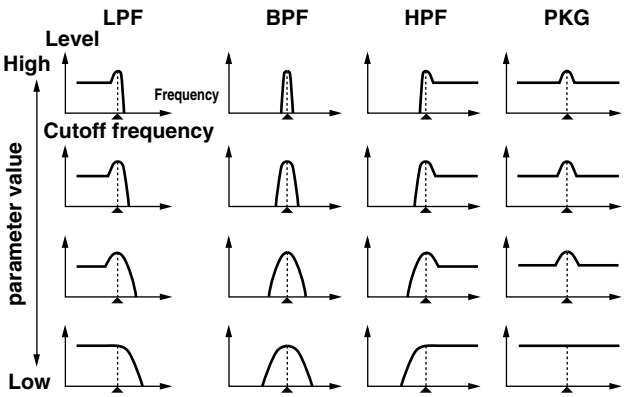
These parameters specify the depth of the pitch envelope (the way in which pitch will change over time), and the shape of the envelope itself.




| Parameter | Value | Description |
|---|---|---|
| P-Env Depth | -12– +12 | Pitch envelope depth<br>Increasing this value will produce greater change. Negative (-) values will invert the change produced by the envelope. |
| P-Env V-Sens (Pitch Envelope Velocity Sensitivity) | -63– +63 | Amount of pitch change that will occur in response to your pad playing dynamics.<br>Increasing this value will produce a greater difference in pitch between softly and strongly played notes. Negative (-) values will produce the opposite result. |
| P-Env T1 V-Sens (Pitch Envelope Time 1 Velocity Sensitivity) | -63– +63 | Amount by which T1 (time) of the pitch envelope will change in response to the speed (velocity) at which you press a pad.<br>Increasing this value will produce a greater difference between softly and strongly played notes. Set this to a positive (+) value if you want to speed up the T1 time, or to a negative (-) value to slow it down. |
| P-Env T4 V-Sens (Pitch Envelope Time 4 Velocity Sensitivity) | -63– +63 | Amount by which T4 (time) of the pitch envelope will change in response to the speed at which you release a pad (key-off velocity)<br>Increasing this value will produce a greater difference between quickly released and slowly released notes. Set this to a positive (+) value if you want to speed up the T4 time, or to a negative (-) value to slow it down. |
| P-Env Time1–4 | 0–127 | Pitch envelope times (T1–T4)<br>Increasing this value will lengthen the time until the next pitch level is reached (for example, T2 is the time over which the pitch will change from L1 to L2).<br>* Realtime modify knob [A] adjusts Time 1, and knob [D] adjusts Time 3. |
| P-Env Level0–4 | -63– +63 | Pitch envelope levels (L0–L4)<br>These parameters specify the amount by which the pitch will change from the basic pitch (specified by Coarse Tune and Fine Tune) at each point of the envelope. Positive (+) values will raise the pitch above the basic pitch, and negative (-) values will lower it. |

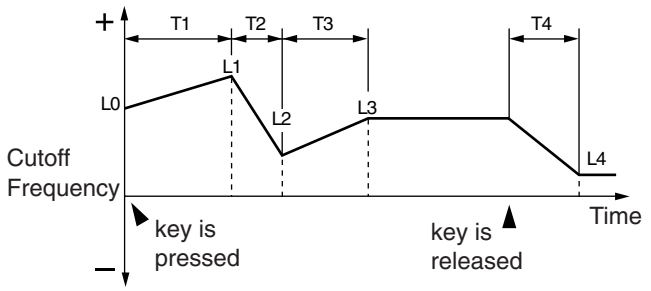
## Filter

These parameters are settings for the TVF (Time Variant Filter). They modify the timbral character of the tone by adjusting the brightness and fatness of the sound.

| Parameter | Value | Description |
|---|---|---|
| Filter Type | OFF, LPF, BPF, HPF, PKG, LPF2, LPF3 | Type of filter<br>A filter cuts a specific frequency region of the sound to modify the brightness or thickness of the sound.<br>**OFF:** A filter will not be used.<br>**LPF:** Low Pass Filter. Cuts the region that lies above the cutoff frequency. The sound will become more mellow as the high frequency region is cut. This is the most commonly used type of filter.<br>**BPF:** Band Pass Filter. Leaves only the region in the vicinity of the cutoff frequency, and cuts the rest. Suitable for creating sounds with a distinctive character.<br>**HPF:** High Pass Filter. Cuts the region that lies below the cutoff frequency. Suitable for creating percussion instrument sounds that have a distinctive high range.<br>**PKG:** Peaking filter. Emphasizes the region in the vicinity of the cutoff frequency. You can create a wah effect by using an LFO to cyclically modulate the cutoff frequency.<br>**LPF2:** Low Pass Filter 2. Cuts the region that lies above the cutoff frequency. This lets you leave the cutoff frequency fixed, and use the TVF envelope settings to vary the depth of the cutoff. Since this does not impair the feeling of energy of the sound, it is effective for acoustic-type sounds.<br>* The resonance setting is ignored.<br>**LPF3:** Low Pass Filter 3. Cuts the region that lies above the cutoff frequency. This filter cuts the high frequency region more gently than LPF2. Since this does not impair the feeling of energy of the sound, it is effective for acoustic-type sounds.<br>* The resonance setting is ignored. |
| Cutoff Frequency | 0–127 | Frequency (cutoff frequency) at which the filter will begin affecting the frequency content of the waveform<br>**If the Filter Type is LPF/LPF2/LPF3**, reducing the cutoff frequency will diminish the higher overtones, producing a more mellow sound. Raising the cutoff frequency will brighten the sound.<br>**If the Filter Type is BPF**, the cutoff frequency value will change the harmonic content that will be sounded. This is suitable for creating sounds with a distinctive character.<br>**If the Filter Type is HPF**, raising the cutoff frequency will diminish the lower overtones, emphasizing only the bright portion of the sound.<br>**If the Filter Type is PKG**, the cutoff frequency value will change the harmonic content that will be boosted. |
| Cutoff Velo Curve (Cutoff Frequency Velocity Curve) | FIX, 1–7 | Curve by which pad playing dynamics will affect the cutoff frequency<br>If you select "FIX," the cutoff frequency will remain fixed regardless of your playing dynamics.<br>  <br> |
| Cutoff Velo Sens (Cutoff Frequency Velocity Sensitivity) | -63– +63 | Amount by which your pad playing dynamics will affect the cutoff frequency<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. |
| Resonance | 0–127 | Amount by which the sound in the region of the cutoff frequency will be emphasized<br>Increasing this value will produce a more strongly distinctive character. Raising this excessively will cause oscillation and distortion.<br>  <br> |
| Reso Velo Sens (Resonance Velocity Sensitivity) | -63– +63 | Amount by which your pad playing dynamics will affect the resonance<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. |

## Filter Env (Filter Envelope)

These parameters specify the depth of the filter envelope (time-variant change in cutoff frequency), and specify the shape of the envelope itself.




| Parameter | Value | Description |
|---|---|---|
| F-Env Depth (Filter envelope depth) | -63– +63 | Depth of the filter envelope<br>Increasing this value will produce a greater effect. Negative (-) values will invert the envelope. |
| F-Env V-Curve (Filter envelope velocity curve) | FIX, 1–7 | Curve by which keyboard playing dynamics will affect the filter envelope<br>If you select "FIX," the filter envelope will remain constant regardless of your playing dynamics.<br>  <br>1 2 3 4 5 6 7 |
| F-Env V-Sens (Filter envelope velocity sensitivity) | -63– +63 | Amount by which your pad playing dynamics will affect the filter envelope depth<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. |
| F-Env T1 V-Sens (Filter Envelope Time 1 Velocity Sensitivity) | -63– +63 | Amount by which your pad playing dynamics (velocity) will affect T1 (time) of the filter envelope<br>Increasing this value will cause a correspondingly greater difference between softly played and strongly played notes. Negative (-) values will invert the change. Specify a positive (+) value if you want to speed up the T1 time, or a negative (-) value to slow it down. |
| F-Env T4 V-Sens (Filter Envelope Time 4 Velocity Sensitivity) | -63– +63 | Amount by which the speed at which you release the pad (key-off velocity) will affect T4 (time) of the filter envelope<br>Increasing this value will cause a correspondingly greater difference between slowly released and quickly released notes. Specify a positive (+) value if you want to speed up the T4 time, or a negative (-) value to slow it down. |
| F-Env Time1–4 (Filter Envelope Time 1–4) | 0–127 | Filter envelope times (T1–T4)<br>Higher settings of these values will lengthen the time over which the next cutoff frequency level of the envelope is reached. (For example, T2 is the time over which the level changes from L1 to L2.)<br>* Realtime modify knob [A] adjusts Time 1, knob [D] adjusts Time 3, and knob [R] adjusts Time 4. |
| F-Env Level0–4 (Filter Envelope Level 0–4) | 0–127 | Filter envelope levels (L1–L3)<br>Specifies the change in cutoff frequency at each point, relative to the reference level.<br>* Realtime modify knob [S] adjusts Level 3. |

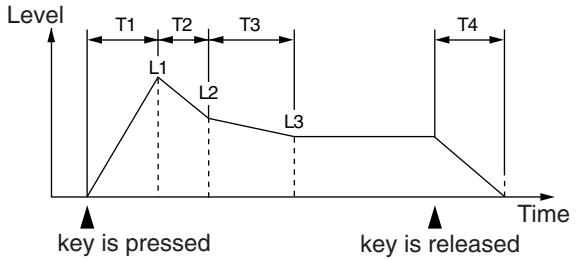
## Amp

These TVA (Time Variant Amplifier) parameters specify how the volume and pan of the sound will change.

| Parameter | Value | Description |
|---|---|---|
| Tone Level (Rhythm Tone Level) | 0–127 | Volume of each Rhythm Tone<br>This parameter is used mainly to adjust the volume balance between Rhythm Tones. |
| Wave Level | 0–127 | Volume of each wave<br>This parameter is used mainly to adjust the volume balance between waves. |
| Tone Pan (Rhythm Tone Pan) | L64–63R | Pan of each Rhythm Tone<br>L64 is far left, 0 is center, and 63R is far right. |
| Random Pan Depth | 0–63 | Amount by which the pan will be varied randomly each time you play a note<br>Increasing this value will produce a greater amount of random change. |
| Alternate Pan Depth | L63–63R | Amount by which the pan will be moved alternately between left and right each time you play a note<br>Increasing this value will produce a greater amount of change. This value can be adjusted in the L or R direction, and these will invert the order in which the tone is panned to left and right. If you want two tones to alternate between left and right, set each tone to opposite L and R values. |
| Wave Pan | L64–63R | Pan of each wave<br>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).<br>The range of the panning change is set by the Random Pan Depth setting. |
| Wave Alt Pan Sw (Wave Alternate Pan Switch) | OFF, ON, REVS | Set this to ON to pan the Wave according to the Alternate Pan Depth settings, or to REVS when you want the panning reversed.<br>If you do not want the panning to change each time a key is pressed, set this to OFF. |

## Amp Env (Amp Envelope)

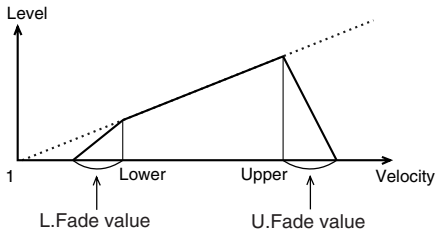
These parameters specify the depth of the amp envelope (change in volume over time) and the shape of the envelope itself.




| Parameter | Value | Description |
|---|---|---|
| A-Env V-Curve (Amp Envelope Velocity Curve) | FIX, 1–7 | Curve by which pad playing dynamics will affect the volume of the tone<br>If you specify "FIX," the volume of the tone will remain the same regardless of your playing dynamics.<br>  <br> |
| A-Env V-Sens (Amp Envelope Velocity Sensitivity) | -63– +63 | Amount by which pad playing dynamics will affect the volume of the tone<br>Specify a positive (+) value if you want the volume of the tone to increase as you play more strongly.<br>Specify a negative (-) value if you want the volume to decrease. |
| A-Env T1 V-Sens (Amp Envelope Time 1 Velocity Sensitivity) | -63– +63 | Amount by which T1 (time) of the Amp envelope will change in response to your playing dynamics<br>Increasing this value will produce a greater change between softly played and strongly played notes.<br>Specify a positive (+) value if you want the T1 time to speed up, or a negative (-) value if you want it to slow down. |
| A-Env T4 V-Sens (Amp Envelope Time 4 Velocity Sensitivity) | -63– +63 | Amount by which T4 (time) of the Amp envelope will change in response to the speed at which you release the pad (key-off velocity)<br>Increasing this value will produce a greater change between slowly released and quickly released notes. Specify a positive (+) value if you want the T4 time to speed up, or a negative (-) value if you want it to slow down. |
| A-Env Time1–4 (Amp Envelope Time 1–4) | 0–127 | Amp envelope times (T1–T4)<br>Higher settings of these values will lengthen the time over which the next volume level of the envelope is reached. (For example, T2 is the time over which the level changes from L1 to L2.)<br>* Realtime modify knob [A] adjusts Time 1, knob [D] adjusts Time 3, and knob [R] adjusts Time 4. |
| A-Env Level1–3 (Amp Envelope Level 1–3) | 0–127 | Amp envelope levels (L1–L3)<br>Specifies the change in volume at each point, relative to the reference level.<br>* Realtime modify knob [S] adjusts Level 3. |

## WMT (Wave Mix Table)

With the MC-909, up to four stereo Waves can be assigned to a single Rhythm Tone. You can select the way tones sound according to the force with which the keys are played, thus allowing you to create Rhythm Tones featuring great expressive power. This function is called **WMT (Wave Mix Table)**.




| Parameter | Value | Description |
|---|---|---|
| Velocity Control (WMT Velocity Control) | OFF, ON, RANDOM | Specifies whether velocity data will be used (ON) or ignored (OFF)<br>If you specify RANDOM, the waves will sound randomly, regardless of velocity data. |
| Velo Fade Lower (WMT Velocity Fade Width Lower) | 0–127 | Rate of volume change when you play less strongly than the lower limit of the velocity range<br>Greater settings for this value will cause the volume to decrease more gradually. Set this to 0 if you want notes outside the velocity range to not sound at all. |
| Velo Range Lower (WMT Velocity Range Lower) | 1–Upper | Lower limit of velocities that will sound the tone<br>Set this parameter if you want to use velocity to switch between waves. |
| Velo Range Upper (WMT Velocity Range Upper) | Lower–127 | Upper limit of velocities that will sound the tone<br>Set this parameter if you want to use velocity to switch between waves.<br>* It is not possible to set Lower to a greater value than Upper, nor Upper to a lesser value than Lower. |
| Velo Fade Upper (WMT Velocity Fade Width Upper) | 0–127 | Rate of volume change when you play more strongly than the upper limit of the velocity range<br>Greater settings for this value will cause the volume to decrease more gradually. Set this to 0 if you want notes outside the velocity range to not sound at all. |

## Genaral

Various other parameters are provided here.

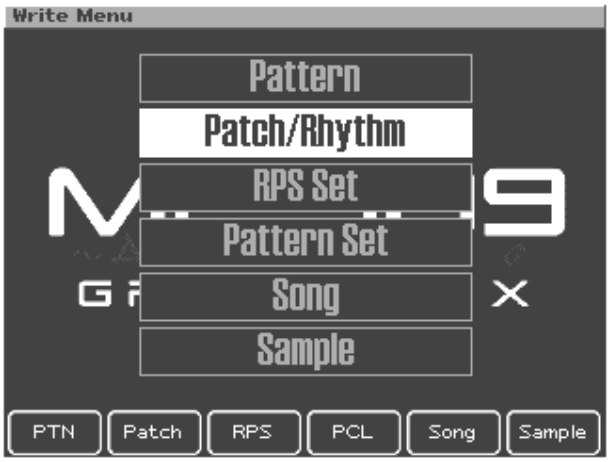
| Parameter | Value | Description |
|---|---|---|
| Rhythm Level (Rhythm Set Level) | 0–127 | Overall volume of the Rhythm Set |
| Assign Type | MULTI, SINGLE | This setting determines whether a Rhythm Tone note that is playing is stopped when the same note is played again (SINGLE), or whether it will continue to play, layered with the new note. |
| Mute Group | OFF, 1–31 | The Mute Group function allows you to designate two or more Rhythm Tones that are not allowed to sound simultaneously. For example, in a real-world acoustic drum set, an open hi-hat and a closed hi-hat sound will never occur simultaneously, since they're produced by the same instrument. To simulate this behavior on the MC-909, you can set the open and closed hi-hat Rhythm Tones to the same Mute Group. You can have up to 31 Mute Groups per Rhythm Set. If you do not want a Rhythm Tone to use a Mute Group, turn the feature off. |
| Tone Env Mode (Rhythm Tone Envelope Mode) | NSUS, SUST | When a loop-type waveform is selected, it will normally continue to sound as long as a key is pressed. If you want a note to decay naturally even when the key remains pressed, set this to "NSUS."<br>* If a one-shot type Wave is selected, it will not sustain even if this parameter is set to "SUST." |
| Tone Pitch Bend Range (Rhythm Tone Pitch Bend Range) | 0–48 | Specifies the amount of pitch change that will occur when you move the Pitch Bend Lever. |
| Tone Reverb Send Level (Rhythm Tone Reverb Send Level) | 0–127 | Specifies the depth of reverb applied to each Rhythm Tone<br>Set this to 0 if you don't want to apply reverb. |
| Tone Output Asgn (Rhythm Tone Output Assign) | DRY, MFX1, MFX2, COMP, DIR1, DIR2 | Specifiests the original sound of each Rhythm Tone will be output<br>**DRY:** Output to MIX OUTPUT jacks without passing through effects<br>**MFX1 (2):** Output through multi-effects 1 (or 2)<br>**COMP:** Output through the compressor<br>**DIR1 (2):** Output to the DIRECT 1 (or DIRECT 2) jacks without passing through effects |

# Saving a Patch/Rhythm Set

Patch/rhythm set settings that you edit will be lost if you re-select the patch/rhythm set or turn off the power. If you want to keep your edits, you must use the following procedure to save the data.

**1. Press [WRITE].**

The Write menu screen will appear.
Make sure that "Patch/Rhythm" is highlighted.




**2. Press [ENTER] or [F2 (Patch)].**

The patch name/rhythm set name entry screen will appear.

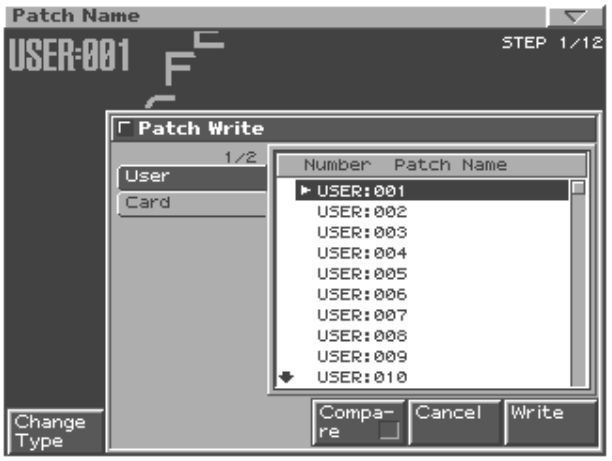

**3. Assign a name to the patch/rhythm set.**

| | |
|---|---|
| [CURSOR (left/right)] | Moves the cursor (the location at which to enter/edit a character). |
| [CURSOR (up/down)] | Switches letters between uppercase and lowercase. |
| [VALUE] [INC/DEC] | Selects characters. |
| [F1 (Change Type)] | Selects the type of character.<br>Each time you press this, you will alternately select the first character of the uppercase alphabet (A), lowercase alphabet (a), or numerals and symbols (0). |
| [F2 (Delete)] | Deletes the character at the cursor location, while shifting the following characters to the left, closing the gap. |
| [F3 (Insert)] | Inserts a space at the cursor location. |

* *If you decide not to enter the name, press [F5 (Cancel)].*

**4. When you have finished entering the name, press [F6 (Write)].**

A screen in which you can select the write-destination patch/rhythm set will appear.




**5. Use [VALUE] or [INC/DEC] to select the write-destination patch/rhythm set.**

Use [CURSOR (left/right)] to select the bank (user, card).

**6. Press [F6 (Write)].**

A message will ask you to confirm that you want to write the data.

**7. To write the data, press [F6 (Execute)].**

* *If you decide to cancel, press [F5 (Cancel)].*

# Copying and Initializing a Patch/Rhythm Set

## Copying a Patch Tone

Here's how the tone settings of a patch can be copied to the specified tone of the currently selected patch.

1. **In the top screen of patch / sample mode, move the cursor to the copy-destination patch.**
2. **Press [F2 (Edit)] to access the edit screen.**
3. **Press [F5 (Tone Copy)].**
   The Patch Tone Copy window will appear.
4. **Use [CURSOR] and [VALUE] to select the copy-source patch and tone, and the copy-destination tone.**

| Parameter | Value | Description |
|---|---|---|
| **Source** | | |
| Patch Bank | Current, Preset A–G, User, Card | Bank of the copy-source patch<br>To specify the currently selected patch as the copy-source, set this to "Current." |
| No. | 1–128 | Patch number of the copy-source<br>If Patch Bank is set to "Current," this cannot be selected. |
| Source Patch Tone | 1–4 | Copy-source tone at the copy-source patch |
| **Destination** | | |
| Temporary Patch Tone | 1–4 | Copy-destination tone at the currently selected patch |

5. **Press [F6 (Execute)].**
   A message will ask you for confirmation.
6. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

If you press [F4 (Compare)] in step 4 so a "✔" appears in the check box, you can use the velocity pads to play the copy source patch.

## Initializing a Patch

Here's how the settings of the currently selected patch can be returned to their default values.

1. **In the top screen of patch / sample mode, select a part assigned a patch.**
2. **Turn [VALUE] to select the patch that you want to initialize.**
3. **Press [F2 (Edit)] to access the edit screen.**
4. **Press [F4 (Patch Init)].**
   A message will ask you for confirmation.
5. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

## Copying a Rhythm Tone (Key)

Here's how the rhythm tone (percussion sound) settings of a rhythm set can be copied to the specified rhythm tone of the currently selected rhythm set.

1. **In the top screen of patch / sample mode, move the cursor to the copy-destination rhythm set.**
2. **Press [F2 (Edit)] to access the edit screen.**
3. **Press [F5 (R.Tone Copy)].**
   The Rhythm Tone Copy window will appear.
4. **Use [CURSOR] and [VALUE] to select the copy-source rhythm set and rhythm tone, and the copy-destination rhythm tone.**

| Parameter | Value | Description |
|---|---|---|
| **Source** | | |
| Rhythm Bank | Current, Preset A, User, Card | Bank of the copy-source rhythm set<br>To specify the currently selected rhythm set as the copy-source, set this to "Current." |
| No. | 1–128 | Rhythm set number of the copy-source<br>If Rhythm Bank is set to "Current," this cannot be selected. |
| Source Rhythm Key | B3–D5 | Copy-source rhythm tone (key) at the copy-source rhythm set |
| **Destination** | | |
| Temporary Rhythm Key | B3–D5 | Copy-destination rhythm tone (key) at the currently selected rhythm set |

5. **Press [F6 (Execute)].**
   A message will ask you for confirmation.
6. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

If you press [F4 (Compare)] in step 4 so a "✔" appears in the check box, you can use the velocity pads to play the copy source rhythm set.

## Initializing a Rhythm Set

Here's how the settings of the currently selected rhythm set can be returned to their default values.

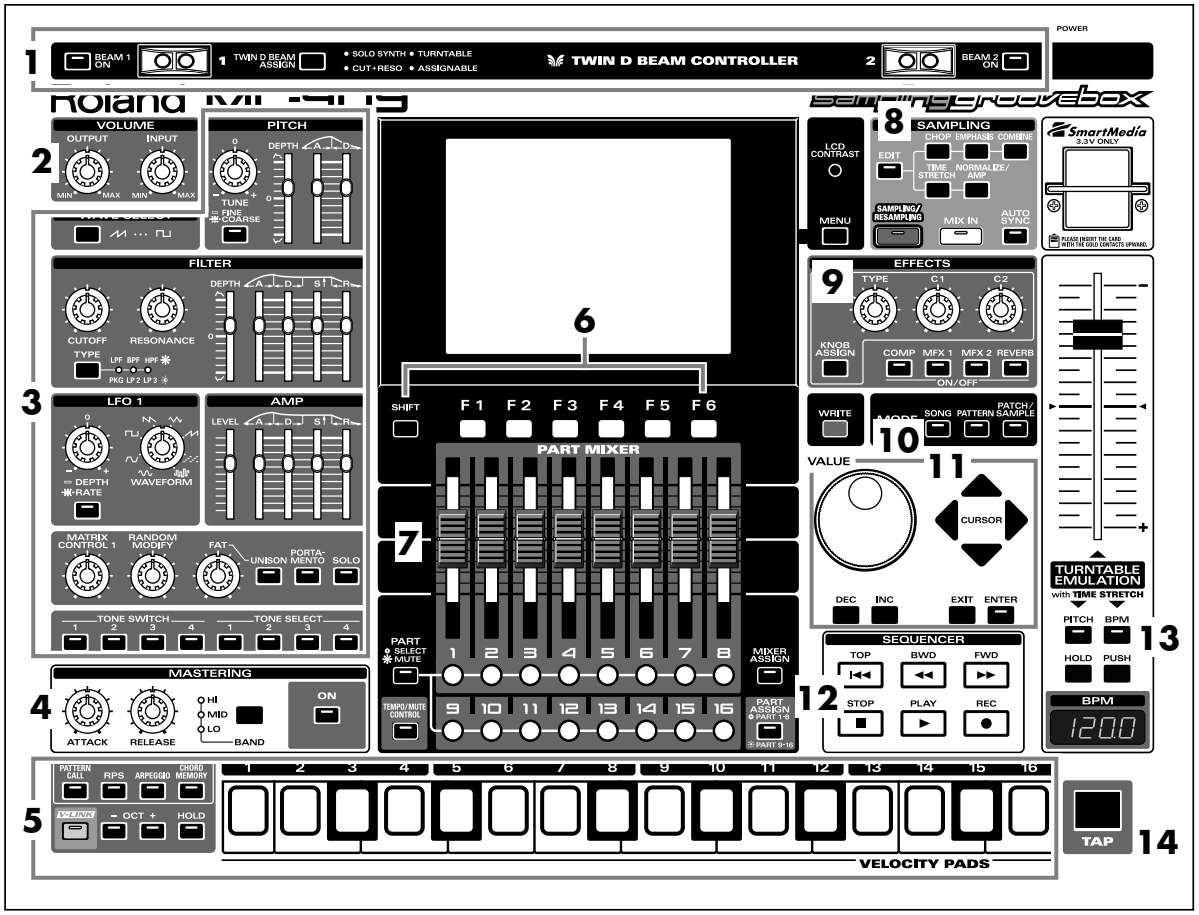
1. **In the top screen of patch / sample mode, select a part assigned a rhythm set.**
2. **Turn [VALUE] to select the rhythm set that you want to initialize.**
3. **Press [F2 (Edit)] to access the edit screen.**
4. **Press [F4 (Rhythm Init)].**
   A message will ask you for confirmation.
5. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

# Song Mode

**In this mode you can play, record, and edit songs.**

# How Things Work (in Song mode)




When you press the Mode section **[SONG] button**, the button's indicator will light and the MC-909 will be in Song mode.
In Song mode, the various parts of the panel will perform the following functions.

## 1. D Beam controllers

Pass your hand over these to modify the pattern (p. 35).

| | |
|---|---|
| [BEAM 1 ON] | Turns the left D Beam controller (BEAM 1) on/off. |
| [BEAM 2 ON] | Turns the right D Beam controller (BEAM 2) on/off. |
| [TWIN D BEAM ASSIGN] | Selects the function of the D Beam controller. |

## 2. Volume section

| | |
|---|---|
| [OUTPUT] | Adjusts the output volume of the MIX OUT jacks and the headphone. |
| [INPUT] | Adjusts the input volume from the INPUT jacks. |

## 3. Realtime Modify section

These controls modify the sound (p. 33).

## 4. Mastering section

| | |
|---|---|
| [ON] | Switches the mastering effect (compressor) on/off. |
| [BAND] | Selects the frequency band to adjust. |
| [ATTACK] | Specify the time from when the volume goes up the threshold level until the compressor effect applies. |
| [RELEASE] | Specify the time from when the volume falls below the threshold level until the compressor effect no longer applies. |

## 5. Velocity pads

Use these pads as a keyboard to play sounds or trigger phrases (p. 27).

## 6. Function buttons

These buttons access the function screens indicated in the bottom line of the display.

## 7. Part Mixer section

Here you can adjust the volume, pan, etc., of each part (p. 33).

| | |
|---|---|
| [PART] (SELECT/MUTE) | Selects the function of the Part buttons [1]–[16].<br>The buttons work as Part Select buttons when the indicator is not lighted, and as Mute buttons when the indicator is lit. |
| [TEMPO/MUTE CONTROL] | Switches on/off the Tempo/Mute part (a part that records tempo changes and mute operations, p. 42). |
| [MIXER ASSIGN] | When you press this button so its indicator lights, the Mixer screen will appear. |
| [PART ASSIGN] | Selects the parts that are controlled by the sliders.<br>The sliders will control parts 1–8 if this indicator is not lighted, or parts 9–16 if the indicator is lit. |

## 8. Sampling section

| | |
|---|---|
| [EDIT] | When you press this button, the Sample edit screen will appear (p. 114). |
| [SAMPLING/RESAMPLING] | When you press this button, the Sampling menu screen will appear (p. 112). |
| [MIX IN] | Mix the sound from the INPUT jacks into the output (p. 34). |
| [AUTO SYNC] | Synchronize a sample with the pattern (p. 36). |

## 9. Effect section

Applies special effects to the sound (p. 88).

| | |
|---|---|
| [COMP]–[REVERB] | Switch each effect on/off (p. 88). |
| [KNOB ASSIGN] | Selects the effect to be controlled in real time (p. 91). |
| [TYPE] | Selects the type of effect. |
| [C1], [C2] | Modifies the assigned function in real time. |

## 10. Mode section

Press the [SONG] button to enter Song mode.

Pressing one of the other two buttons will switch you to the corresponding mode.

## 11. Cursor/Value section

Use these buttons and dial to select songs or input values (p. 18).

## 12. Sequencer section

| | |
|---|---|
| [PLAY] | Plays a song (p. 82). |
| [STOP] | Stops playback/recording. |
| [FWD] | Advances to the next step. |
| [BWD] | Returns to the previous step. |
| [TOP] | Moves to the beginning of the song. |
| [REC] | Used when recording (p. 83). |

## 13. Turntable emulation

Applies an effect that simulates increasing/decreasing the rotational speed of a turntable (p. 36).

## 14. TAP button

Lets you set the BPM (tempo) by pressing the button at the desired timing (p. 25).

# Playing songs

Two or more patterns connected in the order of playback are called a "song."

When you play back a song, the patterns will switch automatically—you don't need to select each pattern yourself. In one song, you can register up to 50 patterns in the desired order of playback.

The number describing the order in which the patterns are arranged is called the "step."

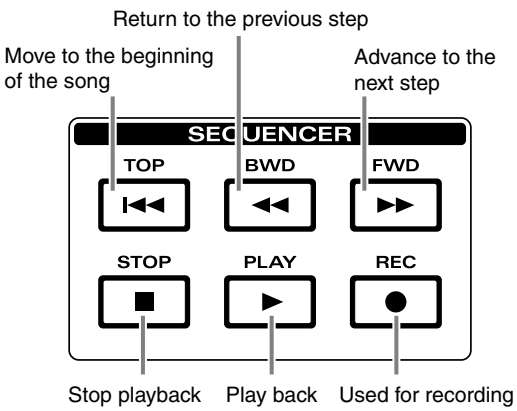
### Top screen of Song mode


### Function buttons

| | |
|---|---|
| [F1 (Next Step)] | When Song Step Sw (p. 128) is set to "MANUAL," playback will automatically advance to the next step if you press this button to display the "✔" mark. |
| [F2 (Song Edit)] | Edit the settings of the song (p. 84). |
| [F3 (Mixer)] | Specify the volume, pan, etc., of each part (p. 33). |
| [F4 (Effects)] | Apply special effects to the sound (p. 88). |
| [F5 (Mastering)] | Make settings for the mastering effect (p. 108). |
| [F6 (BPM Click)] | Set the tempo, and turn the metronome on/off (p. 25). |

## Basic playback operation

Use the following buttons to control the playback.




* *The [FWD], [BWD], and [TOP] buttons can also be used during playback.*

## Song Reset

You can have playback resume from step 1 when the currently playing pattern finishes playing.

This is convenient when you want to play back a few measures while you adjust the BPM to match a turntable, and then when the BPM is correct, play back from step 1.

1. **While the song is playing, press [PLAY].**

   The screen will indicate "SONG RESET."

   When the currently playing pattern finishes, the playback will return to the beginning of the song.

## Selecting a song to play

There are two ways to select a song: directly, or from a list.

### Selecting a song directly

While the song is stopped, use [VALUE] or [INC/DEC] to select another song.

### Selecting a song from a list

1. **Press [ENTER].**

   The song list will appear.

2. **Use [VALUE], [INC/DEC], or [CURSOR (up/down)] to select a song.**

   If you hold down [SHIFT] while using these controls, the song number will change in steps of ten.

3. **Press [F6 (Select)] or [ENTER] to confirm your selection.**

* *If you decide not to execute, press [F5 (Cancel)].*

## Changing the BPM or mute status

In Song mode as well, you can change the BPM or part muting status in the same way as in Pattern mode. For details on how to change these, refer to the section "Playing a pattern" (p. 24).

# Recording a song

You can input patterns one by one to specify the order in which the patterns will be played back.

## Recording procedure

1. **Use [VALUE] or [INC/DEC] to select the song number that you want to record.**
2. **Press [REC].**


3. **Select the pattern to be played at this step.**
   Refer to **Selecting a pattern to play back** (p. 24)
4. **Press [ENTER].**
   You will proceed to the next step.
5. **Repeat the above steps 3 and 4 to input the patterns to be played for the subsequent steps.**
6. **After you have finished inputting the last step, press [STOP] to end the recording process.**

## Auditioning a pattern

While you are recording, you can press [PLAY] to audition the selected pattern. You can select different patterns while you audition them. To stop the auditioning, press [STOP].

## Moving between steps

After recording several steps, you can press [BWD] [FWD] to move between steps.

## Editing the setup parameters

During song recording, you can edit setup parameters (p. 26) such as part mute and effect settings and then press [ENTER] to register the state of those parameters. This will simply store the setup parameters of each pattern as song data, and does not affect the original pattern in any way.
By using this to change the mute status of a pattern or to change the MFX type, you can have a single pattern play in a variety of ways as the song progresses.

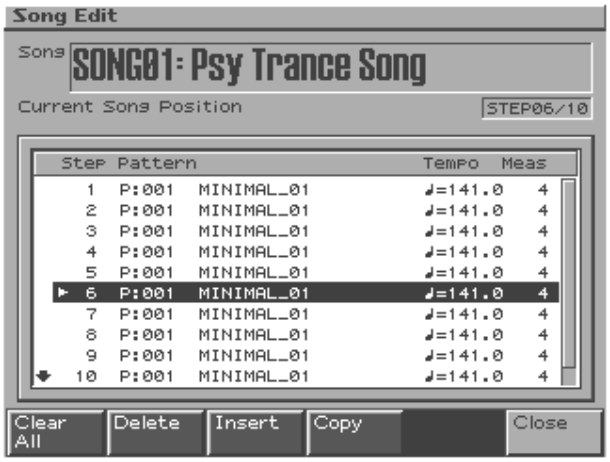
- Tempo (BPM) can be input/edited only at the first step.
- It is not possible to change the tempo during the song.

# Song editing

"Song editing" is the process of editing individual steps of performance data for a song.

* *You must stop the song playback before you can edit the song.*

1. **Select the song that you want to edit.**
2. **In Song mode, press [F2 (Song Edit)] to access the Song Edit screen.**




### Type of song editing

| | |
|---|---|
| [F1 (Clear All)] (Clear All Steps) | Erase all steps. |
| [F2 (Delete Step)] | Delete an unwanted step. |
| [F3 (Insert Step)] | Insert a step. |
| [F4 (Copy)] (Song Copy) | Copies a song to a different song. |
| [F6 (Close)] | Returns to the previous screen. |

## Clear All Steps

This operation clears all of the steps that you input, returning them to the blank condition. Use this when you want to create a song from scratch.

1. **Press [F1 (Clear All)].**

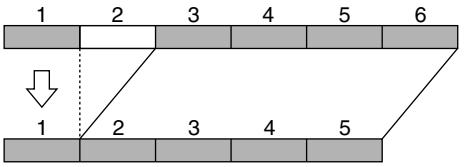
   A message will ask you for confirmation.

2. **If you are sure that you want to clear all steps, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

## Delete Step

This operation deletes an unwanted step from the song, and joins the two sections.

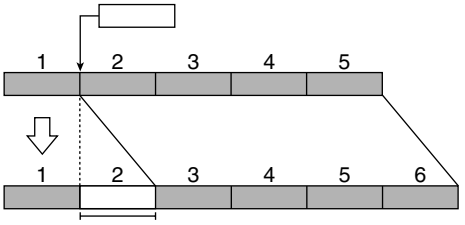



1. **Use [VALUE] or [INC/DEC] to select the step that you want to delete.**
2. **Press [F2 (Delete)].**

   The selected step will be deleted.

## Insert Step

This operation inserts a step into the song, and moves subsequent steps backward by one.




1. **Use [VALUE] or [INC/DEC] to select the step at which you want to insert a pattern.**

   In the example shown above, select step 2.

2. **Press [F3 (Insert)].**

   A step containing the same pattern as the step you selected in step 1 will be inserted, and the subsequent steps will be moved backward by one.

## Song Copy

This operation copies song data to a different song.

1. **Press [F4 (Copy)].**
2. **Select the copy-destination song.**
3. **Press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

**NOTE**

If the copy destination contains data, that data will be erased when you execute this copy operation.

# Saving a song

Songs that you record will be lost if you turn off the power. If you want to keep the song data, you must save it as follows.

**1. Select the song that you want to save.**

**2. Press [WRITE].**

The write menu screen will appear.

Make sure that "Song" is highlighted.


**3. Press [ENTER] or [F5 (Song)].**

The song name input screen will appear.

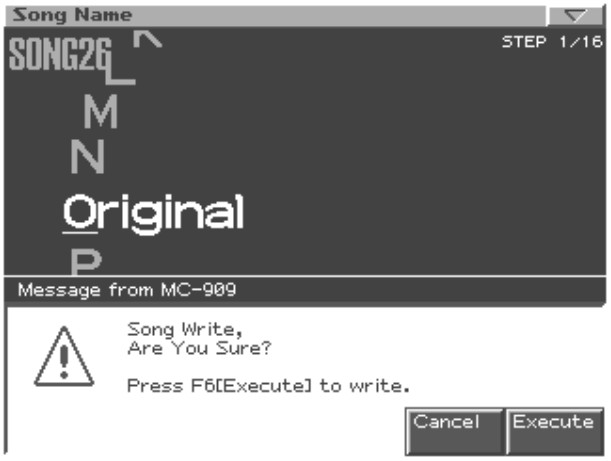

**4. Assign a name to the song you created.**

| | |
|---|---|
| [CURSOR (left/right)] | Moves the cursor (the location at which to enter/edit a character). |
| [CURSOR (up/down)] | Switches letters between uppercase and lowercase. |
| [VALUE] [INC/DEC] | Selects characters. |
| [F1 (Change Type)] | Selects the type of character.<br>Each time you press this, you will alternately select the first character of the uppercase alphabet (A), lowercase alphabet (a), or numerals and symbols (0). |
| [F2 (Delete)] | Deletes the character at the cursor location, while shifting the following characters to the left, closing the gap. |
| [F3 (Insert)] | Inserts a space at the cursor location. |

* *If you decide not to enter the name, press [F5 (Cancel)].*

**5. When you finish inputting the name, press [F6 (Write)].**

A message will ask you to confirm that you want to write the data.




**6. To write the data, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# MEMO

# Effects

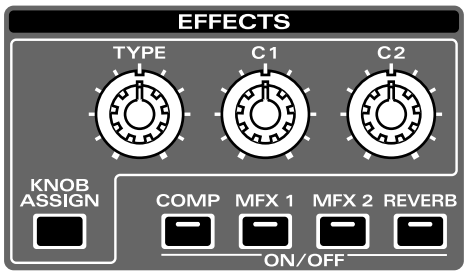
**Compressor/Multi-effect/Reverb/Mastering Effect settings**

# Effects

Here you can apply special effects to the sound.

## Effect on/off

Use the ON/OFF buttons of the Effects section to switch each effect on/off.




[COMP]: Compressor
[MFX 1]: Multi-effects 1
[MFX 2]: Multi-effects 2
[REVERB]: Reverb

## Effect settings

**1. In the top screen of each mode, press [F4 (Effects)].**

**2. Press [F1]–[F5] to select an effect to adjust.**

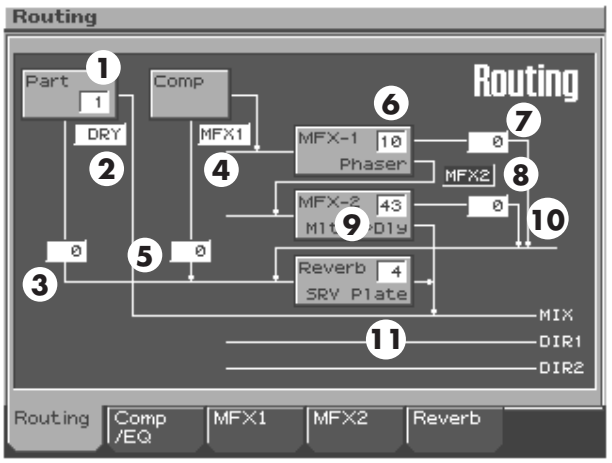
| | |
|---|---|
| [F1 (Routing)] | Specify the connections (routing) between parts, effects, and output destinations. |
| [F2 (Comp/EQ)] | Compressor settings. |
| [F3 (MFX 1)] | Multi-effects 1 settings. |
| [F4 (MFX 2)] | Multi-effects 2 settings. |
| [F5 (Reverb)] | Reverb settings. |

**3. Use [CURSOR] to select a parameter.**

**4. Use [VALUE] or [INC/DEC] to make settings.**

## Effect connection (Effect Routing)

You can specify the connections independently for each pattern. The way in which the direct sound is output (**2**) and the depth of reverb (**3**) can be set independently for each part.




| Parameter | Range | Explanation |
|---|---|---|
| **1.** Part Number | 1–16, EXT | The part for which you are making effect settings.<br>**EXT:** External input |
| **2.** Part Output Assign | DRY, MFX1, MFX2, COMP, DIR1, DIR2, RHY | How the original sound of each part will be output<br>**DRY:** Output to MIX OUTPUT jacks without passing through effects<br>**MFX1 (2):** Output through multi-effects 1 (or 2)<br>**COMP:** Output through the compressor<br>**DIR1 (2):** Output to the DIRECT 1 (or DIRECT 2) jacks without passing through effects<br>**RHY:** Output according to the settings of the rhythm set assigned to the part<br>* "RHY" can be set only when a rhythm set is assigned to the part. |
| **3.** Part Reverb Send Level | 0–127 | Depth of reverb applied to each part<br>Set this to 0 if you don't want to apply reverb. |
| **4.** Comp Output Assign | (see explanation) | Output destination of the sound processed through the compressor.<br>**DRY:** MIX OUTPUT jacks<br>**MFX1 (2):** Multi-effects 1 (or 2 ) |
| **5.** Comp Reverb Send Level | 0–127 | Depth of reverb applied to the sound processed through the compressor<br>Set this to 0 if you don't want to apply reverb. |
| **6.** (MFX Type) | See "Multi-Effects List" (p. 92) | The effect used by multi-effects 1<br>* For details on each effect, refer to "Multi-Effects List" (p. 92). |

| Parameter | Range | Explanation |
|---|---|---|
| **7.** MFX1 Reverb Send Level | 0–127 | Depth of reverb applied to the sound processed through multi-effects 1<br>Set this to 0 if you don't want to apply reverb. |
| **8.** MFX1 Output Assign | DRY, MFX2 | Output destination of the sound processed through multi-effects 1<br>**DRY:** MIX OUTPUT jacks<br>**MFX2:** Multi-effects 2 (multi-effects 1 and 2 will be connected in series) |
| **9.** (MFX Type) | See "Multi-Effects List" (p. 92) | The effect used by multi-effects 2<br>* For details on each effect, refer to "Multi-Effects List" (p. 92). |
| **10.** MFX2 Reverb Send Level | 0–127 | Depth of reverb applied to the sound processed through multi-effects 2<br>Set this to 0 if you don't want to apply reverb. |
| **11.** (Reverb Type) | See "Reverb" (p. 90) | The type of reverb<br>* For details on reverb, refer to "Reverb" (p. 90). |

HINT

If you change the "Output Assign" setting, the routing connections in the screen will also change.

NOTE

Parameters 4–11 in the above table are linked with the identically named parameters in the setting screens of each effect.

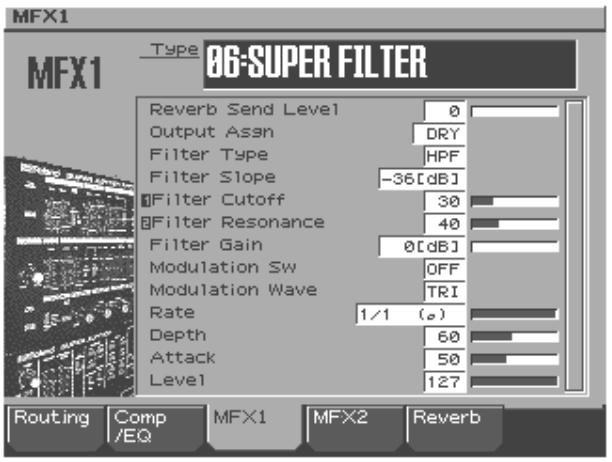
# Compressor

The compressor is an effect that limits the level of loud sounds and boosts the level of soft sounds, making the overall level more consistent.


| Parameter | Range | Explanation |
|---|---|---|
| Comp Reverb Send Level | 0–127 | Depth of reverb applied to the sound processed through the compressor<br>Set this to 0 if you don't want to apply reverb. |
| Comp Output Assign | DRY, MFX1, MFX2 | Output destination of the sound processed through the compressor<br>**DRY:** MIX OUTPUT jacks<br>**MFX1 (2):** Multi-effects 1 (or 2) |
| Attack Time | 0.05–50 ms | Time from when the volume goes up the threshold level until the compressor effect applies |
| Release Time | 0.05–2000 ms | Time from when the volume falls below the threshold level until the compressor effect no longer applies |
| Threshold | 0–127 | Volume level at which compression begins |
| Ratio | 1:1–inf:1 | Compression ratio (inf: infinity) |
| Output Gain | 0– +24 dB | Level of the output sound |
| Low Freq | 200, 400 Hz | Reference frequency of the low range |
| Low Gain | -15– +15 | Amount of low-range boost/cut |
| High Freq | 2k, 4k, 8kHz | Reference frequency of the high range |
| High Gain | -15– +15 | Amount of high-range boost/cut |
| Level | 0–127 | Output volume of the compressor |

## Multi-effects

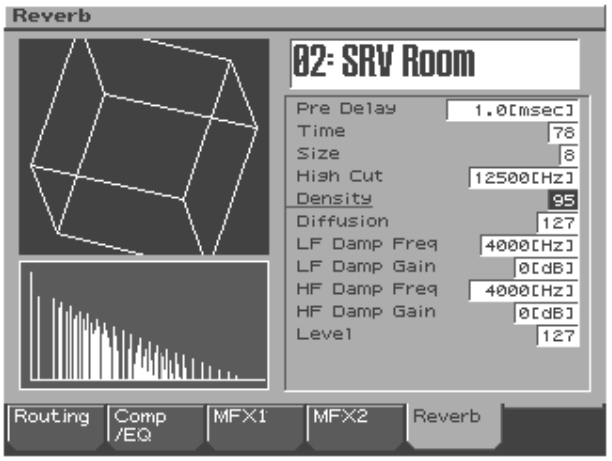
These are general-purpose multi-effects that can transform the sound, and give it a completely different character. MFX1 provides 38 types, and MFX2 provides 47 types. You can select one effect type for each of these two effect units. A wide range of types are included, such as distortion and flanger. Although the multi-effect types include a compressor, this is independent of the compressor described earlier.




| Parameter | Range | Explanation |
|---|---|---|
| (MFX Type) | 0–38 (MFX1)<br>0–47 (MFX2) | The effect used by multi-effects 1 (or 2)<br>* For details on each effect, refer to "Multi-Effects List" (p. 92). |
| MFX1 (2) Reverb Send Level | 0–127 | Depth of reverb applied to the sound processed through multi-effect 1 (2)<br>Set this to 0 if you don't want to apply reverb. |
| MFX1 Output Assign | DRY, MFX2 | Output destination of the sound processed through multi-effects 1<br>**DRY:** MIX OUTPUT jacks<br>**MFX2:** Multi-effects 2 (multi-effects 1 and 2 will be connected in series)<br>* This parameter exists only for MFX 1. |

## Reverb

Reverb is an effect that creates the reverberation that is characteristic of sound heard in a hall. You can choose from four types of reverb.

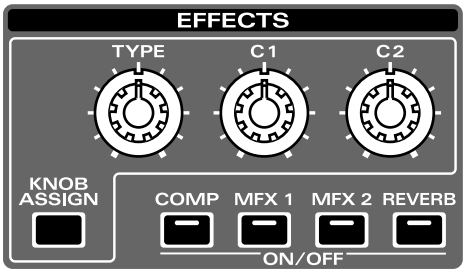



| Parameter | Range | Explanation |
|---|---|---|
| (Reverb Type) | OFF, 1–4 | Type of reverb<br>**OFF:** Reverb not used<br>**1 (REVERB):** Basic reverb<br>**2 (SRV ROOM):** A more detailed simulation of room reverberation<br>**3 (SRV HALL):** A more detailed simulation of hall reverberation<br>**4 (SRV PLATE):** A simulation of a plate echo (a reverb device using a metal plate) |
| **1 (REVERB)** | | |
| Type | ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2, DELAY, PAN-DELAY | Type of reverb/delay<br>**ROOM1:** Short, high-density reverberation<br>**ROOM2:** Short, low-density reverberation<br>**STAGE1:** A greater amount of late reverberation<br>**STAGE2:** Emphasis on early reflections<br>**HALL1:** Clear reverberation<br>**HALL2:** Rich reverberation<br>**DELAY:** A conventional delay<br>**PAN-DELAY:** A delay in which the reflected sound moves between left and right |
| Time | 0–127 | Length of reverberation (Type: ROOM1–HALL2)<br>Delay time (Type: DELAY, PAN-DELAY) |
| HF Damp | 200–8000 Hz, BYPASS | Frequency at which the high-frequency portion of the reverberation will be cut (BYPASS: no cut) |
| Delay Feedback | 0–127 | Number of delay repetitions (valid only if Type is DELAY or PAN-DELAY) |
| Level | 0–127 | Volume of the reverb sound/delay sound |

| Parameter | Range | Explanation |
|---|---|---|
| **2 (SRV ROOM) / 3 (SRV HALL) / 4 (SRV PLATE)** | | |
| Pre Delay | 0.0–100.0 ms | Delay time from original sound until reverb is heard |
| Time | 0–127 | Length of reverb |
| Size | 1–8 | Size of room/hall |
| High Cut | 160–12500 Hz, BYPASS | Frequency at which the high-frequency portion of the final output sound will be cut (BYPASS: no cut) |
| Density | 0–127 | Density of reverb |
| Diffusion | 0–127 | Change in reverb density over time<br>Higher settings will cause density to increase as time passes. (This is more noticeable with longer Time settings.) |
| LF Damp Freq | 50–4000 Hz | Frequency at which the low-frequency portion of the reverb will be cut |
| LF Damp Gain | -36–0 dB | Amount of attenuation for LF Damp (0: no attenuation) |
| HF Damp Freq | 4000–12500 Hz | Frequency at which the high-frequency portion of the reverb will be cut |
| HF Damp Gain | -36–0 dB | Amount of attenuation for HF Damp (0: no attenuation) |
| Level | 0–127 | Volume of the reverb sound |

# Realtime control of effects

The Effects section lets you control effect parameters in real time.




## Selecting the effect that you want to control

**1. Press and hold [KNOB ASSIGN].**

The ON/OFF button of the currently selected effect will blink.

**2. Still holding down [KNOB ASSIGN], press one of the [COMP]–[REVERB] buttons to select the effect you want to control.**

| Knob | Parameter |
|---|---|
| **When "COMP" is selected** | |
| [TYPE] | Attack Time |
| [C1] | Release time |
| [C2] | Threshold |
| **When "MFX1/2" is selected** | |
| [TYPE] | Select the type of effect (p. 92). |
| [C1], [C2] | Control the assigned function in real time. |
| **When "REVERB" is selected** | |
| [TYPE] | Reverb Type |
| [C1] | Time |
| [C2] | Level |

**NOTE**

If you are controlling a multi-effect parameter that is set in terms of a note value, it will not be possible to use the knob to select the note.

# Multi-Effects List

## Multi-Effects Types

There are 47 types of multi-effect. MFX1 lets you use 38 types (delay-type effects are unavailable), and MFX2 lets you use all 47 types.

| | | |
|---|---|---|
| **FILTER (9 types)** | | |
| 01 | STEREO EQ | p. 92 |
| 02 | SPECTRUM | p. 92 |
| 03 | ENHANCER | p. 93 |
| 04 | ISOLATOR | p. 93 |
| 05 | LOW BOOST | p. 93 |
| 06 | SUPER FILTER | p. 93 |
| 07 | STEP FILTER | p. 94 |
| 08 | AUTO WAH | p. 94 |
| 09 | HUMANIZER | p. 94 |
| **MODULATION (7 types)** | | |
| 10 | PHASER | p. 94 |
| 11 | STEREO PHASER | p. 95 |
| 12 | STEP PHASER | p. 95 |
| 13 | RING MODULATOR | p. 95 |
| 14 | TREMOLO | p. 95 |
| 15 | AUTO PAN | p. 96 |
| 16 | ROTARY | p. 96 |
| **CHORUS (6 types)** | | |
| 17 | HEXA-CHORUS | p. 96 |
| 18 | TREMOLO CHORUS | p. 96 |
| 19 | SPACE-D | p. 97 |
| 20 | STEREO CHORUS | p. 97 |
| 21 | STEREO FLANGER | p. 97 |
| 22 | STEP FLANGER | p. 98 |
| **DYNAMICS (7 types)** | | |
| 23 | OVERDRIVE | p. 98 |
| 24 | DISTORTION | p. 98 |
| 25 | GUITAR AMP SIMULATOR | p. 99 |
| 26 | STEREO COMPRESSOR | p. 100 |
| 27 | STEREO LIMITER | p. 100 |
| 28 | SLICER | p. 100 |
| 29 | GATE | p. 101 |
| **LOFI (6 types)** | | |
| 30 | LOFI NOISE | p. 101 |
| 31 | LOFI COMPRESS | p. 102 |
| 32 | LOFI RADIO | p. 102 |
| 33 | TELEPHONE | p. 102 |
| 34 | PHONOGRAPH | p. 102 |
| 35 | TAPE ECHO | p. 103 |
| **PITCH (2 types)** | | |
| 36 | FBK PITCH SHIFTER | p. 103 |
| 37 | 2Vo PITCH SHIFTER | p. 103 |
| **REVERB (1 type)** | | |
| 38 | GATED REVERB | p. 104 |
| **DELAY (9 types)** * These cannot be selected for MFX1. | | |
| 39 | STEREO DELAY | p. 104 |
| 40 | MODULATION DELAY | p. 105 |
| 41 | TRIPLE TAP DELAY | p. 105 |
| 42 | QUADRUPLE TAP DELAY | p. 105 |
| 43 | MULTI TAP DELAY | p. 106 |
| 44 | REVERSE DELAY | p. 106 |
| 45 | SHUFFLE DELAY | p. 106 |
| 46 | TIME CONTROL DELAY | p. 107 |
| 47 | TIME SKIP DELAY | p. 107 |

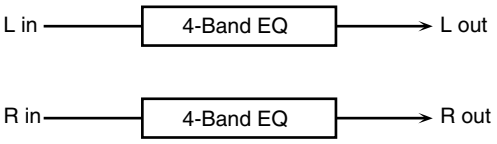
## Multi-Effects Parameters

MEMO

Parameters with the designators "#1" and "#2" can be controlled using the [C1] and [C2] knobs of the effect section.

### 01: STEREO EQ (Stereo Equalizer)

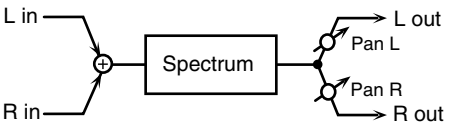
This is a four-band stereo equalizer (low, mid x 2, high).




| Parameter | Value | Description |
|---|---|---|
| Low Freq | 200, 400 Hz | Frequency of the low range |
| Low Gain #1 | -15– +15 dB | Gain of the low frequency range |
| High Freq | 2000, 4000, 8000 Hz | Frequency of the high range |
| High Gain #2 | -15– +15 dB | Gain of the high frequency range |
| Mid1 Freq | 200–8000 Hz | Frequency of Middle Range 1 |
| Mid1 Q | 0.5, 1.0, 2.0, 4.0, 8.0 | Width of Middle Range 1<br>Select a higher Q value to narrow Middle Range 1. |
| Mid1 Gain | -15– +15 dB | Gain of Middle Range 1 |
| Mid2 Freq | 200–8000 Hz | Frequency of Middle Range 2 |
| Mid2 Q | 0.5, 1.0, 2.0, 4.0, 8.0 | Width of Middle Range 2<br>Select a higher Q value to narrow Middle Range 2. |
| Mid2 Gain | -15– +15 dB | Gain of Middle Range 2 |
| Level | 0–127 | Output level |

### 02: SPECTRUM

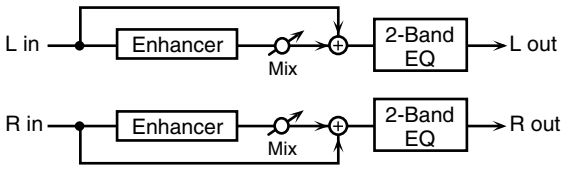
This is a type of filter that modifies the timbre by boosting or cutting the level of specific frequencies. It is similar to an equalizer, but has eight frequency points fixed at locations most useful for adding character to the sound.




| Parameter | Value | Description |
|---|---|---|
| Q | 0.5, 1.0, 2.0, 4.0, 8.0 | Simultaneously adjusts the width of the adjusted ranges for all of the frequency bands. |
| Pan #1 | L64–63R | Stereo location of the SPECTRUM output |
| Level #2 | 0–127 | Output level |
| Band 1 (250Hz)<br>Band 2 (500Hz)<br>Band 3 (1kHz)<br>Band 4 (1.25Hz)<br>Band 5 (2kHz)<br>Band 6 (3.15Hz)<br>Band 7 (4kHz)<br>Band 8 (8kHz) | -15– +15 dB | Gain of each frequency band<br>* This can be set using the sliders of the part mixer. |

## 03: ENHANCER

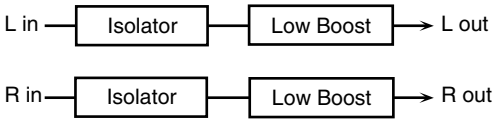
Controls the overtone structure of the high frequencies, adding sparkle and brightness to the sound.




| Parameter | Value | Description |
|---|---|---|
| Sens #1 | 0–127 | Sensitivity of the enhancer |
| Mixl #2 | 0–127 | Level of the overtones generated by the enhancer |
| Low Gain | -15– +15 dB | Gain of the low frequency range of frequencies |
| High Gain | -15– +15 dB | Gain of the high frequency range of frequencies |
| Level | 0–127 | Output level |

## 04: ISOLATOR

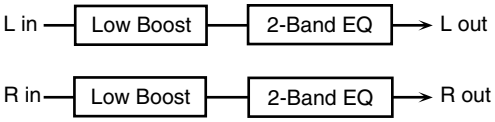
This is an equalizer that radically cuts the volume of selected frequencies, allowing you to create special effects cutting the volume in various ranges.




| Parameter | Value | Description |
|---|---|---|
| Boost/Cut High<br>Boost/Cut Middle #1<br>Boost/Cut Low #2 | -60– +4 dB | These boost and cut each of the High, Middle, and Low frequency ranges.<br>At -60 dB, the sound becomes inaudible. 0 dB is equivalent to the input level of the sound. |
| AntiPhase Middle Sw | OFF, ON | Settings of the Anti-Phase function for the Middle frequency ranges.<br>When turned on, a stereo copy of the sound is phase-inverted and added to the signal. |
| AntiPhase Middle Level | 0–127 | Adjusts the level settings for the Middle frequency ranges.<br>Adjusting this level for certain frequencies allows you to lend emphasis to specific elements within a sound. (This is effective only for stereo source.) |
| Anti Phase Low Sw<br>Anti Phase Low Level | OFF, ON<br>0–127 | Settings of the Anti-Phase function for the Middle frequency ranges<br>The parameters are the same as for the Middle frequency ranges. |
| Low Boost Sw | OFF, ON | Turns Low Booster on/off.<br>This emphasizes the bottom frequencies to create a heavy bass sound. |
| Low Boost Level | 0–127 | Increasing this value gives you a heavier low end.<br>* Depending on the Isolator and filter settings, this effect may be hard to hear. |
| Level | 0–127 | Output level |

## 05: LOW BOOST

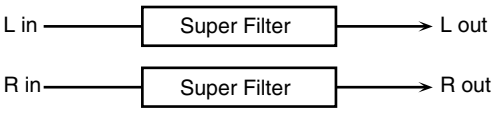
Boosts the volume of the lower range, creating powerful lows.




| Parameter | Value | Description |
|---|---|---|
| Boost Frequency #1 | 50–125 Hz | Center frequency at which the lower range will be boosted |
| Boost Gain #2 | 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 |

## 06: SUPER FILTER

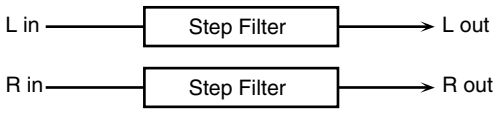
This is a filter with an extremely sharp slope. The cutoff frequency can be varied cyclically.




| Parameter | Value | Description |
|---|---|---|
| Filter Type | LPF, BPF, HPF, NOTCH | Filter type<br>Frequency range that will pass through each filter<br>**LPF**: frequencies below the cutoff<br>**BPF:** frequencies in the region of the cutoff<br>**HPF:** frequencies above the cutoff<br>**NOTCH:** frequencies other than the region of the cutoff |
| Filter Slope | -12, -24, -36 dB | Amount of attenuation per octave<br>**-36 dB:** extremely steep<br>**-24 dB:** steep **-12 dB:** gentle |
| Filter Cutoff #1 | 0–127 | Cutoff frequency of the filter<br>Increasing this value will raise the cutoff frequency. |
| Filter Resonance #2 | 0–127 | Filter resonance level<br>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, SQU, SIN, SAW1, SAW2 | How the cutoff frequency will be modulated<br>TRI: triangle wave<br>SQR: square wave<br>SIN: sine wave<br>SAW1: sawtooth wave (upward)<br>SAW2: sawtooth wave (downward) |
| Rate | 0.05–10.0 Hz, note | Rate of modulation |
| Depth | 0–127 | Depth of modulation |
| Attack | 0–127 | Speed at which the cutoff frequency will change<br>This is effective if Modulation Wave is SQR, SAW1, or SAW2. |
| Level | 0–127 | Output level |

## 07: STEP FILTER

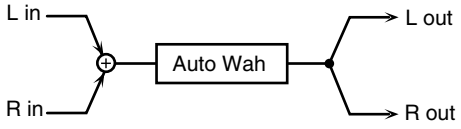
This is a filter whose cutoff frequency can be modulated in steps. You can specify the pattern by which the cutoff frequency will change.




| Parameter | Value | Description |
|---|---|---|
| Rate | 0.05–10.00 Hz, note | Rate of modulation |
| Attack #1 | 0–127 | Rate at which the cutoff frequency will change between beats |
| Filter Type | LPF, BPF, HPF, NOTCH | Filter type<br>Frequency range that will pass through each filter<br>**LPF:** frequencies below the cutoff<br>**BPF:** frequencies in the region of the cutoff<br>**HPF:** frequencies above the cutoff<br>**NOTCH:** frequencies other than the region of the cutoff |
| Filter Slope | -12, -24, -36 dB | Amount of attenuation per octave<br>**-12 dB:** gentle<br>**-24 dB:** steep<br>**-36 dB:** extremely steep |
| Filter Resonance #2 | 0–127 | Filter resonance level<br>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 |
| Beat 1-1–4-4 | 0–127 | Cutoff frequency for each 16th note of a 4/4 measure<br>* This can be set using the sliders of the part mixer. |

## 08: AUTO WAH

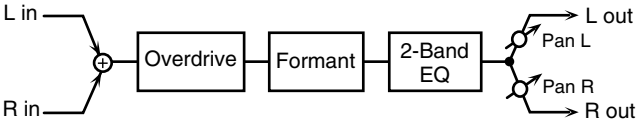
A filter that turns on and off to create a cyclical change in timbre.




| Parameter | Value | Description |
|---|---|---|
| Filter Type | LPF, BPF | Type of filter<br>**LPF**: The wah effect is applied over a wide frequency range.<br>**BPF**: The wah effect is applied over a narrow frequency range |
| Rate #2 | 0.05–10.00 Hz, note | Frequency of modulation |
| Depth | 0–127 | Depth of modulation |
| Sens | 0–127 | Adjusts the sensitivity with which the filter is controlled. |
| Manual #1 | 0–127 | Adjusts the center frequency at which the effect is applied. |
| Peak | 0–127 | Adjusts the amount of the wah effect that occurs in the range of the center frequency.<br>Set a higher value for Q to narrow the range to be affected. |
| Level | 0–127 | Output level |

## 09: HUMANIZER

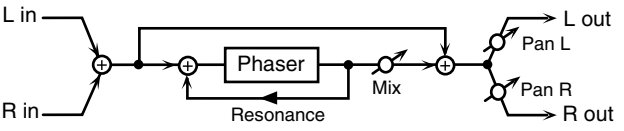
Adds a vowel character to the sound, making it similar to a human voice.




| Parameter | Value | Description |
|---|---|---|
| Drive Sw | OFF, ON | Turns Drive on/off. |
| Drive | 0–127 | Degree of distortion<br>Also changes the volume. |
| Vowel1 #1 | a, e, i, o, u | Selects the vowel. |
| Vowel2 #2 | 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<br>**49 or less:** Vowel 1 will have a longer duration.<br>**50:** Vowel 1 and 2 will be of equal duration.<br>**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: PHASER

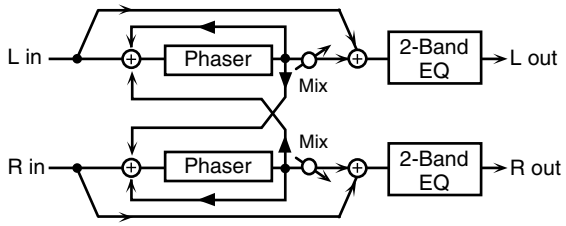
Adds a phase-shifted sound to the original sound, producing a swirling modulation that creates spaciousness and depth.




| Parameter | Value | Description |
|---|---|---|
| Manual #1 | 0–127 | Adjusts the basic frequency at which the sound will be modulated. |
| Rate #2 | 0.05–10.00 Hz | 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 PHASER output |
| Level | 0–127 | Output Level |

## 11:STEREO PHASER

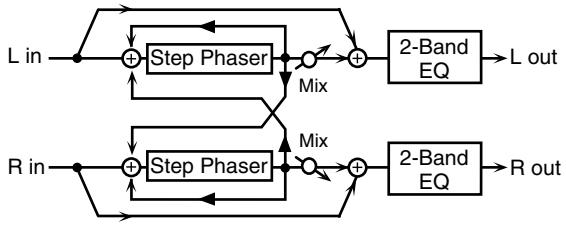
This is a stereo phaser.




| Parameter | Value | Description |
|---|---|---|
| Mode | 4, 8 stage | Number of stages in the phaser |
| Polarity | INVERSE, SYNCHRO | Selects whether the left and right phase of the modulation are the same or opposite each other.<br>**INVERSE:** The left and right phase are opposite. When using a mono source, this spreads the sound in stereo.<br>**SYNCHRO:** The left and right phase are the same. Select this when working with a stereo source. |
| Rate #2 | 0.05–10.00 Hz, note | Frequency of modulation |
| Depth | 0–127 | Depth of modulation |
| Manual #1 | 0–127 | Adjusts the basic frequency from which the sound is modulated. |
| Resonance | 0–127 | Amount of feedback |
| Cross Feedback | -98– +98 % | Adjusts the amount of the phaser sound that's fed back into the effect. Negative (-) settings invert the phase. |
| Mix | 0–127 | Level of the phase-shifted sound |
| 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 |

## 12:STEP PHASER

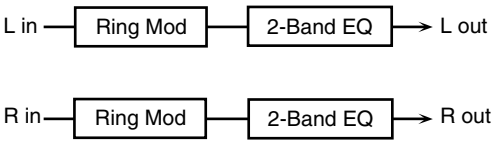
With the Step effects, you can also make stepped changes in the pitch of sounds to which the Phaser effect is applied.




| Parameter | Value | Description |
|---|---|---|
| Mode | 4, 8 stage | Number of stages in the phaser |
| Polarity | INVERSE, SYNCHRO | Selects whether the left and right phase of the modulation are the same or opposite each other.<br>**INVERSE:** The left and right phase are opposite. When using a mono source, this spreads the sound in stereo.<br>**SYNCHRO:** The left and right phase are the same. Select this when working with a stereo source. |
| Rate | 0.05–10.00 Hz, note | Frequency of modulation |
| Depth | 0–127 | Depth of modulation |
| Manual #1 | 0–127 | Adjusts the basic frequency from which the sound is modulated. |
| Resonance | 0–127 | Amount of feedback |
| Cross Feedback | -98– +98 % | Adjusts the amount of the phaser sound that's fed back into the effect. Negative (-) settings invert the phase. |
| Step Rate #2 | 0.1–20.0 Hz, note | Rate of pitch change |
| Mix | 0–127 | Level of the phase-shifted sound |
| 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 |

## 13: RING MODULATOR

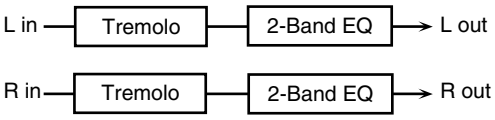
This is an effect that applies amplitude modulation (AM) to the input signal, producing bell-like sounds. You can also change the modulation frequency in response to changes in the volume of the sound sent into the effect.




| Parameter | Value | Description |
|---|---|---|
| Frequency #1 | 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 #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Level | 0–127 | Output level |

## 14: TREMOLO

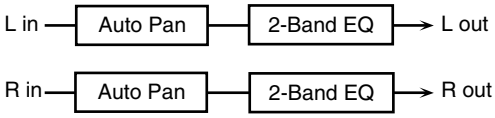
Cyclically modulates the volume to add tremolo to the sound.




| Parameter | Value | Description |
|---|---|---|
| Modulation Wave | TRI, SQR, SIN, SAW1, SAW2 | Modulation Wave<br>**TRI:** triangle wave<br>**SQR:** square wave<br>**SIN:** sine wave<br>**SAW1:** sawtooth wave (upward)<br>**SAW2:** sawtooth wave (downward) |
| Rate #1 | 0.05–10.00 Hz, note | Frequency of the change |
| Depth #2 | 0–127 | Depth to which the effect is applied |
| 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 |

## 15: AUTO PAN

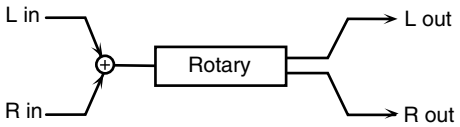
Cyclically modulates the stereo location of the sound.




| Parameter | Value | Description |
|---|---|---|
| Modulation Wave | TRI, SQR, SIN, SAW1, SAW2 | Modulation Wave<br>**TRI:** triangle wave<br>**SQR:** square wave<br>**SIN:** sine wave<br>**SAW1:** sawtooth wave (upward)<br>**SAW2:** sawtooth wave (downward) |
| Rate #1 | 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 frequency range |
| High Gain | -15– +15 dB | Gain of the high frequency range |
| Level | 0–127 | Output level |

## 16: ROTARY

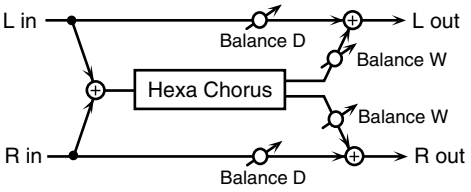
The Rotary effect simulates the sound of the rotary speakers often used with the classic electric organs. Since the movement of the high-range and low-range rotors can be set independently, the unique characteristics of these speakers can be simulated quite accurately. This effect is most suitable for electric organ Patches.




| Parameter | Value | Description |
|---|---|---|
| Tweeter Slow Rate | 0.05–10.00 Hz | Slow speed (SLOW) of the high-frequency rotor |
| Woofer Slow Rate | 0.05–10.00 Hz | Slow speed (SLOW) of the low-frequency rotor |
| Tweeter Fast Rate | 0.05–10.00 Hz | Fast speed (FAST) of the high-frequency rotor |
| Woofer Fast Rate | 0.05–10.00 Hz | Fast speed (FAST) of the low-frequency rotor |
| Speed #1 | SLOW, FAST | Simultaneously switches the rotational speed of the low frequency rotor and high frequency rotor.<br>**SLOW:** Slows down the speed to the Slow Rate.<br>**FAST:** Speeds up the speed to the Fast Rate. |
| Tweeter Acceleration | 0–15 | Adjusts the time it takes the high frequency rotor to reach the newly selected speed when switching between fast and slow speeds. |
| Woofer Acceleration | 0–15 | Adjusts the time it takes the low frequency rotor to reach the newly selected speed when switching between fast and slow speeds. |
| Tweeter Level | 0–127 | Volume of the high frequency rotor |
| Woofer Level | 0–127 | Volume of the low frequency rotor |
| Separation | 0–127 | Stereo width of the sound |
| Level #2 | 0–127 | Output level |

## 17: HEXA-CHORUS

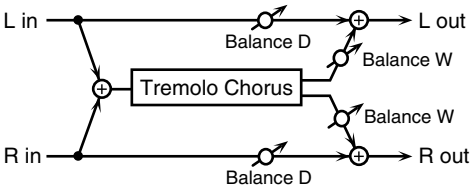
Uses a six-phase chorus (six layers of chorused sound) to give richness and spaciousness to the sound.




| Parameter | Value | Description |
|---|---|---|
| Pre Delay | 0.0–100.0 ms | Adjusts the time until chorusing is heard. |
| Rate #1 | 0.05–10.00 Hz | Frequency of modulation |
| Depth | 0–127 | Depth of modulation |
| Pre Delay Deviation | 0–20 | Adjusts the differences in Pre Delay between each chorus layer. |
| Depth Deviation | -20– +20 | Adjusts the difference in modulation depth between each chorus layer. |
| Pan Deviation | 0–20 | Adjusts the difference in stereo location between each chorus layer.<br>**0:** All chorus layers are in the center.<br>**20:** The chorus layers are spaced at 60-degree intervals relative to the center. |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the chorus sound (W) |
| Level | 0–127 | Output level |

## 18: TREMOLO CHORUS

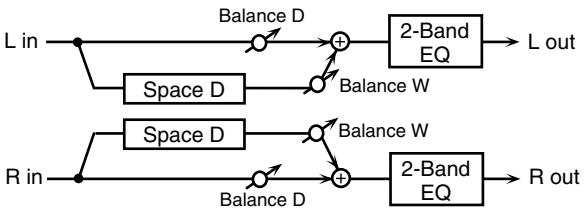
This is a chorus effect with added Tremolo (cyclic modulation of volume).




| Parameter | Value | Description |
|---|---|---|
| Pre Delay | 0.0–100.0 ms | Adjusts the time until the chorus sound is heard. |
| Chorus Rate | 0.05–10.00 Hz | Modulation frequency of the chorus effect |
| Chorus Depth | 0–127 | Modulation depth of the chorus effect |
| Tremolo Rate #1 | 0.05–10.00 Hz | Modulation frequency of the tremolo effect |
| Tremolo Separation | 0–127 | Spread of the tremolo effect |
| Tremolo Phase | 0–180 deg | Depth of the tremolo effect |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the tremolo chorus sound (W) |
| Level | 0–127 | Output level |

## 19: SPACE-D

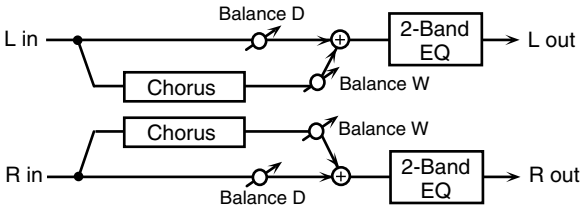
This is a multiple chorus that applies two-phase modulation in stereo. It creates no audible modulation, yet produces a transparent chorus effect.




| Parameter | Value | Description |
|---|---|---|
| Pre Delay | 0.0–100.0 ms | Adjusts the time until the chorus sound is heard. |
| Rate #1 | 0.05–10.00 Hz | 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 #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the chorus sound (W) |
| Level | 0–127 | Output level |

## 20: STEREO CHORUS

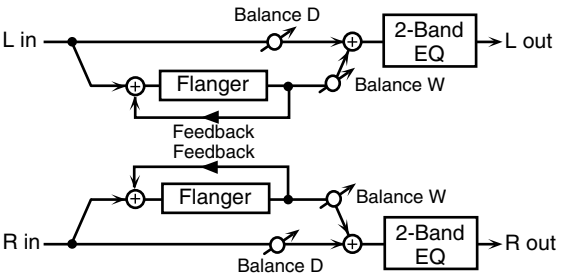
This is a stereo chorus. A filter is provided so that you can adjust the timbre of the chorused sound.




| Parameter | Value | Description |
|---|---|---|
| Filter Type | OFF, LPF, HPF | Type of filter<br>**OFF:** no filter is used<br>**LPF:** cuts the frequency range above the Cutoff Freq<br>**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 time until the chorus sound is heard. |
| Rate #1 | 0.05–10.00 Hz | 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 #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the chorus sound (W) |
| Level | 0–127 | Output level |

## 21: STEREO FLANGER

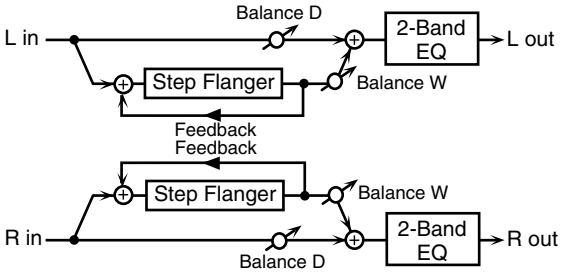
This is a stereo flanger. It produces a metallic resonance that rises and falls somewhat like a jet airplane taking off or landing. A filter is provided so that you can adjust the timbre of the flanged sound.




| Parameter | Value | Description |
|---|---|---|
| Filter Type | OFF, LPF, HPF | Type of filter<br>**OFF:** no filter is used<br>**LPF:** cuts the frequency range above the Cutoff Freq<br>**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 time until the flanger sound is heard. |
| Rate #1 | 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 #2 | -98– +98 % | Adjusts the amount of the flanger sound that's fed back into the effect. Negative (-) settings invert the phase. |
| 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 flanger sound (W) |
| Level | 0–127 | Output level |

## 22: STEP FLANGER

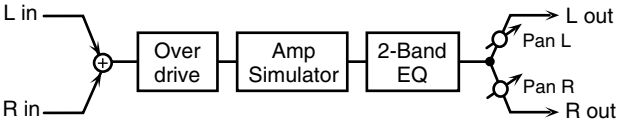
This is a flanger in which the flanger pitch changes in steps. The speed at which the pitch changes can also be specified in terms of a note value based on a specified tempo.




| Parameter | Value | Description |
|---|---|---|
| Pre Delay | 0.0–100.0 ms | Adjusts the time until the flanger sound is heard. |
| Rate | 0.05–10.00 Hz, note | Frequency of modulation |
| Depth | 0–127 | Depth of modulation |
| Feedback #2 | -98– +98 % | Adjusts the amount of the flanger sound that's fed back into the effect. Negative (-) settings invert the phase. |
| Step Rate #1 | 0.10–20.00 Hz, note | Rate (period) of pitch change |
| 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 flanger sound (W) |
| Level | 0–127 | Output level |

## 23: OVERDRIVE

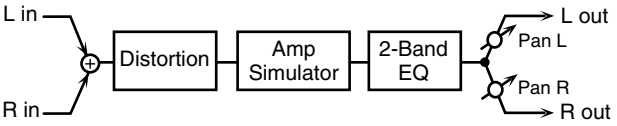
Creates a soft distortion similar to that produced by vacuum tube amplifiers.




| Parameter | Value | Description |
|---|---|---|
| Drive #1 | 0–127 | Amount of distortion<br>Also changes the volume. |
| Tone #2 | 0–127 | Sound Quality |
| Pan | L64–63R | Stereo location of the OVERDRIVE output |
| Amp Sw | OFF, ON | Amp simulator on/off |
| Amp Type | SMALL, BUILT-IN, 2-STACK, 3-STACK | Type of guitar amp<br>**SMALL:** small amp<br>**BUILT-IN:** single-unit type amp<br>**2-STACK:** large double-stack amp<br>**3-STACK:** large triple-stack amp |
| 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 |

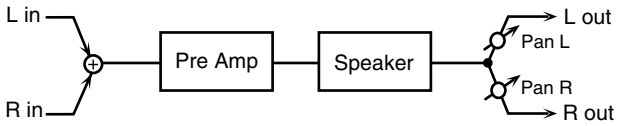
## 24: DISTORTION

Produces a more intense distortion than Overdrive. The parameters are the same as for "23: OVERDRIVE."



## 25: GUITAR AMP SIM (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, Metal 5150, Metal Lead, OD-1, OD-2 TURBO, Distortion, Fuzz | Type of guitar amp |
| Pre Amp Volume #1 | 0–127 | Volume and amount of distortion of the amp |
| Pre Amp Master #2 | 0–127 | Volume of the entire pre-amp |
| Pre Amp Gain | Low, Mid, High | Amount of pre-amp distortion |
| Pre Amp Bass | 0–127 | Tone of the bass/mid/treble frequency range<br>* Middle cannot be set if "Match Drive" is selected as the Pre Amp Type. |
| Pre Amp Middle | | |
| Pre Amp Treble | | |
| Pre Amp Presence | 0–127 (MATCH DRIVE: -127 - 0) | Tone for the ultra-high frequency range |
| Pre Amp Bright | OFF, ON | Turning this "On" produces a sharper and brighter sound.<br>* 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.<br>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 |

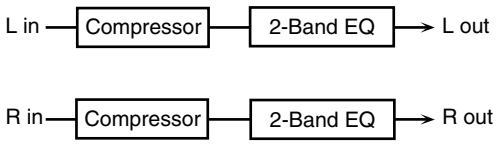
### Specifications for each Speaker Type

The speaker column indicates the diameter of each speaker unit (in inches) and the number of units.

| Type | Cabinet | Speaker | Microphone |
|---|---|---|---|
| Small1 | small open-back enclosure | 10 | dynamic |
| Small2 | 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 Stack1 | 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 |

## 26: COMPRESSOR

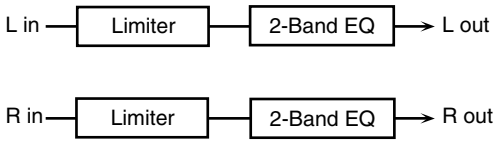
Flattens out high levels and boosts low levels, smoothing out fluctuations in volume.




| Parameter | Value | Description |
|---|---|---|
| Attack #1 | 0–127 | Sets the speed at which compression starts |
| Threshold #2 | 0–127 | Adjusts the volume at which compression begins |
| Post Gain | 0, +6, +12, +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 |

## 27: LIMITER

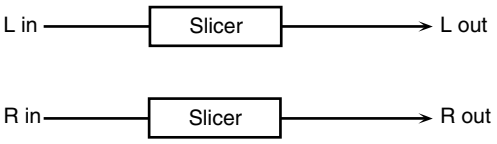
Compresses signals that exceed a specified volume level, preventing distortion from occurring.




| Parameter | Value | Description |
|---|---|---|
| Release #1 | 0–127 | Adjusts the time after the signal volume falls below the Threshold Level until compression is no longer applied. |
| Threshold #2 | 0–127 | Adjusts the volume at which compression begins |
| Ratio | 1.5:1, 2:1, 4:1, 100:1 | Compression ratio |
| Post Gain | 0, +6, +12, +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 |

## 28: SLICER

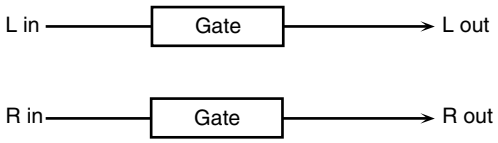
By applying successive cuts to the sound, this effect turns a conventional sound into a sound that appears to be played as a backing phrase. This is especially effective when applied to sustain-type sounds.




| Parameter | Value | Description |
|---|---|---|
| Rate #1 | 0.05–10.00 Hz, note | Cycle for one measure |
| Attack #2 | 0–127 | Speed at which the volume changes between beats |
| 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 the reset begins |
| Mode | LEGATO, SLASH | Sets the manner in which the volume changes as one beat progresses to the next.<br>**LEGATO:** The change in volume from one beat's level to the next remains unaltered. If the level of a following beat is the same as the one preceding it, there is no change in volume.<br>**SLASH:** The level is momentarily set to 0 before progressing to the level of the next beat. This change in volume occurs even if the level of the following beat is the same as the preceding beat. |
| Shuffle | 0–127 | Timing of volume changes in levels for even-numbered Beats (Beat 1-2/Beat 1-4/Beat 2-2/...).<br>The higher the value, the later the beat progresses. |
| Level | 0–127 | Output level |
| Beat 1-1–4-4 | 0–127 | For a single measure containing four quarter notes, this sets the level of each sixteenth note when the measure is divided into sixteenth notes.<br>* This can be set using the sliders of the part mixer. |

## 29: GATE

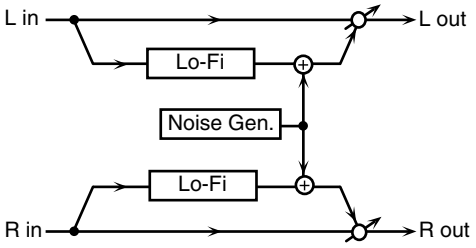
Cuts the reverb's delay according to the volume of the sound sent into the effect. Use this when you want to create an artificial-sounding decrease in the reverb's decay.




| Parameter | Value | Description |
|---|---|---|
| Threshold #1 | 0–127 | Volume level at which the gate begins to close |
| Mode | GATE, DUCK | Type of gate<br>**GATE:** The gate will close when the volume of the original sound decreases, cutting the original sound.<br>**DUCK (Ducking):** The gate will close when the volume of the original sound increases, cutting the original sound. |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Attack Time | 0–127 | Adjusts the time it takes for the gate to fully open after being triggered. |
| Hold Time | 0–127 | Adjusts the time it takes for the gate to start closing after the source sound falls beneath the Threshold. |
| Release Time | 0–127 | Adjusts the time it takes the gate to fully close after the hold time. |
| Level | 0–127 | Output level |

## 30: LOFI NOISE (Lo-Fi Noise)

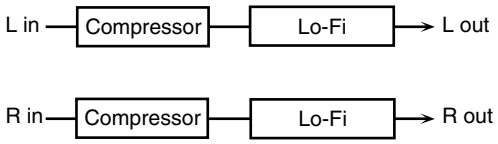
In addition to a lo-fi effect, this adds various types of noise such as white noise and disc noise.




| Parameter | Value | Description |
|---|---|---|
| LoFi Type | 1–9 | Degrades the sound quality. The sound quality grows poorer as this value is increased. |
| Post Flter Type | OFF, LPF, HPF | Type of filter<br>**OFF:** no filter is used<br>**LPF:** cuts the frequency range above the Cutoff<br>**HPF:** cuts the frequency range below the Cutoff |
| Post 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<br>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 | 50Hz, 60Hz | 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 |
| Balance #1 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Level #2 | 0–127 | Output level |

## 31: LOFI COMPRESS (Lo-Fi Compress)

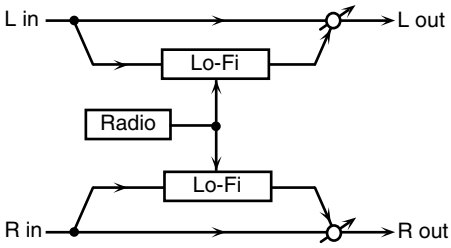
This is an effect that intentionally degrades the sound quality for creative purposes.




| Parameter | Value | Description |
|---|---|---|
| Pre Filter Type | 1–6 | Selects the type of filter applied to the sound before it passes through the Lo-Fi effect. |
| LoFi Type | 1–9 | Degrades the sound quality. The sound quality grows poorer as this value is increased. |
| Post Filter Type | OFF, LPF, HPF | Type of filter<br>**OFF:** no filter is used<br>**LPF:** cuts the frequency range above the Cutoff<br>**HPF:** cuts the frequency range below the Cutoff |
| Post Filter Cutoff | 200–8000 Hz | Basic frequency of the Post Filter |
| Balance #1 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Level #2 | 0–127 | Output level |

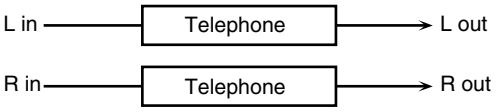
## 32: LOFI RADIO (Lo-Fi Radio)

In addition to a Lo-Fi effect, this effect also generates various types of noise, such as radio noise or disk noise.




| Parameter | Value | Description |
|---|---|---|
| LoFi Type | 1–9 | Degrades the sound quality. The sound quality grows poorer as this value is increased. |
| Post Flter Type | OFF, LPF, HPF | Type of filter<br>**OFF:** no filter is used<br>**LPF:** cuts the frequency range above the Cutoff<br>**HPF:** cuts the frequency range below the Cutoff |
| Post Filter Cutoff | 200–8000 Hz | Basic frequency of the Post Filter |
| Radio Detune #1 | 0–127 | Simulates the tuning noise of a radio. As this value is raised, the tuning drifts further. |
| RadioNoise Level | 0–127 | Volume of the radio noise |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Level | 0–127 | Output level |

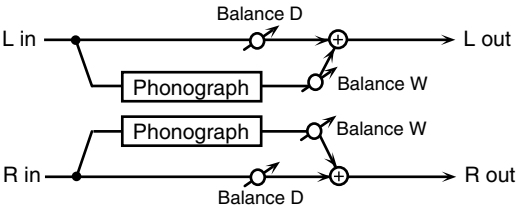
## 33: TELEPHONE




| Parameter | Value | Description |
|---|---|---|
| Voice Quality #1 | 0–15 | Audio quality of the telephone voice |
| Treble | -15– +15 dB | Bandwidth of the telephone voice |
| Balance #2 | D100:0–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Level | 0–127 | Output level |

## 34: PHONOGRAPH

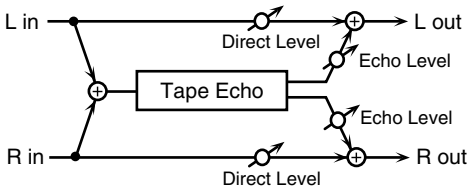
Simulates a sound recorded on an analog record and played back on a record player. This effect also simulates the various types of noise that are typical of a record, and even the rotational irregularities of an old turntable.




| Parameter | Value | Description |
|---|---|---|
| Signal Distortion | 0–127 | Depth of distortion |
| Frequency Range | 0–127 | Frequency response of the playback system<br>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<br>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 #1 | 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 #2 | 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 |

## 35: TAPE ECHO

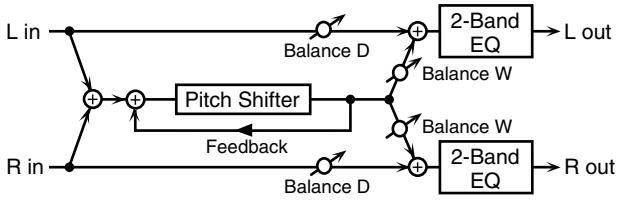
A virtual tape echo that produces a realistic tape delay sound. This simulates the tape echo section of a Roland RE-201 Space Echo.




| Parameter | Value | Description |
|---|---|---|
| Mode | S, M, L, S+M, S+L, M+L, S+M+L | Combination of playback heads to use<br>Select from three different heads with different delay times.<br>**S:** short **M:** middle **L:** long |
| Repeat Rate #1 | 0–127 | Tape speed<br>Increasing this value will shorten the spacing of the delayed sounds. |
| Intensity #2 | 0–127 | Amount of delay repeats |
| Bass | -15– +15 | Boost/cut for the lower range of the echo sound |
| Treble | -15– +15 | Boost/cut for the upper range of the echo sound |
| Head S Pan<br>Head M Pan<br>Head L Pan | L64–63R | Independent panning for the short, middle, and long playback heads |
| Tape Distortion | 0–5 | Amount of tape-dependent distortion to be added<br>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 |

## 36: FBK PITCH SHIFTER (Feedback Pitch Shifter)

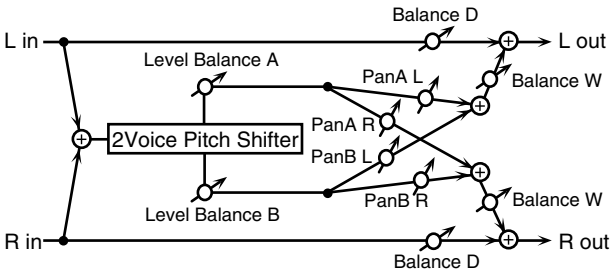
This allows the pitch-shifted sound to be fed back into the effect.




| Parameter | Value | Description |
|---|---|---|
| Mode | 1, 2, 3, 4, 5 | Setting a higher value for this parameter results in a slower response, but steadier pitch. |
| Coarse #1 | -24– +12 semi | Adjusts the pitch of the pitch-shifted sound in semitone steps. |
| Fine | -100– +100 cent | Adjusts the pitch of the pitch-shifted sound in 2-cent steps. |
| Pre Delay | 0.0–500 ms | Adjusts the time until the pitch shifted sound is heard. |
| Feedback #2 | -98– +98 % | Adjusts the amount of the pitch-shifted sound that's fed back into the effect. Negative (-) settings invert the phase. |
| Pan | L64–63R | Stereo location of the pitch-shifted 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 pitch-shifted sound (W) |
| Level | 0–127 | Output level |

## 37: 2Vo PITCH SHIFTER (2-Voice Pitch Shifter)

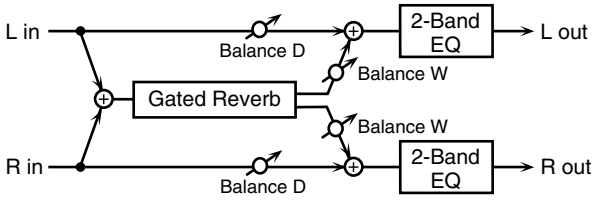
Shifts the pitch of the original sound. This 2-voice pitch shifter has two pitch shifters, and can add two pitch-shifted versions of the original sound.




| Parameter | Value | Description |
|---|---|---|
| Mode | 1, 2, 3, 4, 5 | Setting a higher value for this parameter results in a slower response, but steadier pitch. |
| Coarse A #1<br>Coarse B #2 | -24– +12 semi | Adjusts the pitch of Pitch Shift A/B in semitone steps. |
| Fine A<br>Fine B | -100– +100 cent | Adjusts the pitch of Pitch Shift A/B in 2-cent steps. |
| Pre Delay A<br>Pre Delay B | 0.0–500 ms | Adjusts the time until Pitch Shift A/B is heard. |
| Pan A<br>Pan B | L64–63R | Stereo location of Pitch Shift A/B |
| Level Balance | A100:0B– A0:100B | Volume balance between Pitch Shift A and Pitch Shift B |
| Balance | D100:0W– D0:100W | Volume balance between the direct sound (D) and the pitch shifted sound (W) |
| Level | 0–127 | Output level |

## 38: GATED REVERB

This is a special type of reverb in which the reverb is cut off without being allowed to decay naturally.

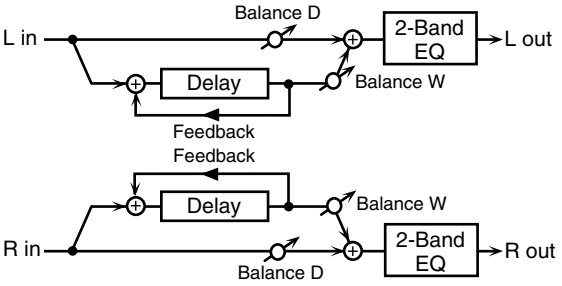



| Parameter | Value | Description |
|---|---|---|
| Type | NORMAL, REVERSE | Type of reverb<br>**NORMAL:** conventional gated reverb<br>**REVERSE:** backwards reverb |
| Pre Delay | 0.0–100.0 ms | Adjusts the time until the reverb sound is heard. |
| Time | 5–500 ms | Adjusts the time from when the reverb is first heard until it disappears. |
| Pan #1 | L64–63R | Stereo location of Pitch Shift |
| Low Gain | -15– +15 dB | Gain of the low frequency range |
| High Gain | -15– +15 dB | Gain of the high frequency range |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the reverb sound (W) |
| Level | 0–127 | Output level |

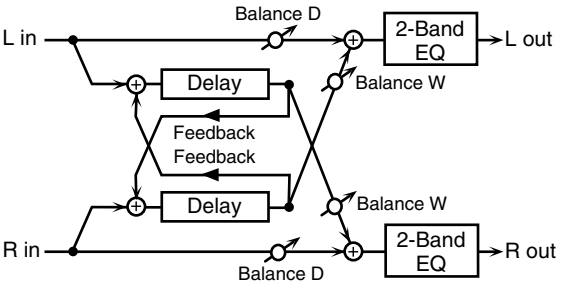
## 39: STEREO DELAY (MFX2 only)

This is a stereo delay.

When Feedback Mode is NORMAL:




When Feedback Mode is CROSS:

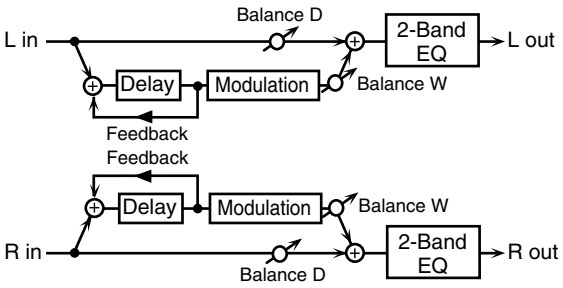



| Parameter | Value | Description |
|---|---|---|
| Feedback Mode | NORMAL, CROSS | Selects the way in which delay sound is fed back into the effect. (See the figures above.) |
| Delay Left<br>Delay Right | 0–2000 ms, note | Adjusts the time until the delay sound is heard. |
| Phase Left<br>Phase Right | NORMAL, INVERT | Phase of the delay sound |
| Feedback #1 | -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 #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the delay sound (W) |
| Level | 0–127 | Output level |

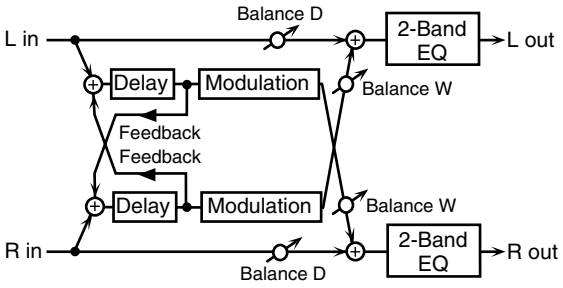
## 40: MODULATION DELAY (MFX2 only)

Adds modulation to the delayed sound.

When Feedback Mode is NORMAL:



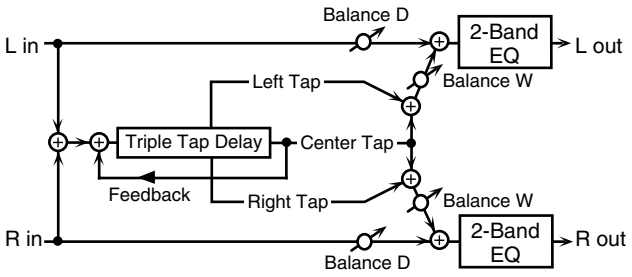

When Feedback Mode is CROSS:




| Parameter | Value | Description |
|---|---|---|
| Feedback Mode | NORMAL, CROSS | Selects the way in which delay sound is fed back into the effect (See the figures above.) |
| Delay Left<br>Delay Right | 0–2000 ms, note | Adjusts the time until the delay sound is heard. |
| 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, BY-PASS | 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 | 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 |

## 41: TRIPLE TAP DELAY (MFX2 only)

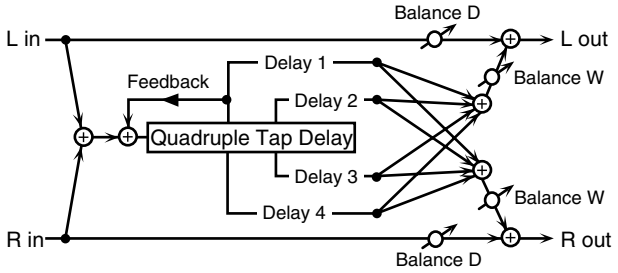
Produces three delay sounds; center, left and right.

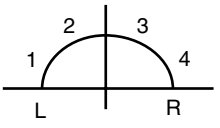



| Parameter | Value | Description |
|---|---|---|
| Delay Left/ Right/Center | 0–4000 ms, note | Adjusts the time until the delay sound is heard. |
| Feedback #1 | -98– +98 % | Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings invert the phase. |
| HF Damp | 200–8000 Hz, BY-PASS | 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 #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the delay sound (W) |
| Level | 0–127 | Output level |

## 42: QUADRUPLE TAP DELAY (MFX2 only)

This effect has four delays.



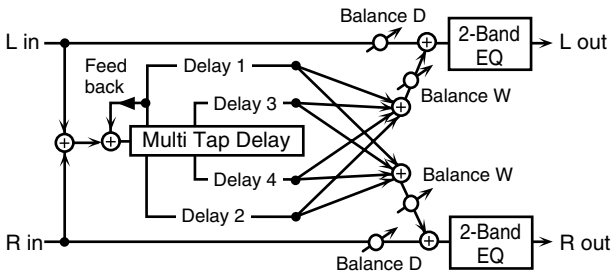




Stereo location of each delay

| Parameter | Value | Description |
|---|---|---|
| Delay 1–4 | 0–4000 ms, note | Adjusts the time until the delay sound is heard. |
| Level 1–4 | 0–127 | Volume of each delay |
| Feedback #1 | -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, BY-PASS | 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. |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the delay sound (W) |
| Level | 0–127 | Output level |

## 43: MULTI TAP DELAY (MFX2 only)

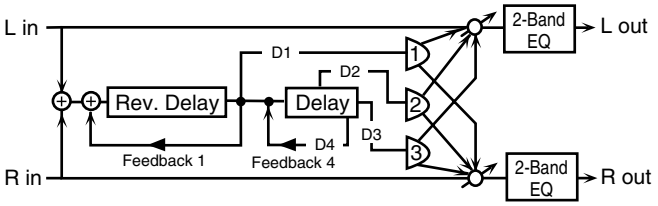
This effect provides four delays. Each of the Delay Time parameters can be set to a note length based on the selected tempo. You can also set the panning and level of each delay sound.




| Parameter | Value | Description |
|---|---|---|
| Delay 1–4 | 0–4000 ms, note | Adjusts the time until Delays 1–4 are heard. |
| Pan 1–4 | L64–63R | Stereo location of Delays 1–4 |
| Level 1–4 | 0–127 | Output level of Delays 1–4 |
| Feedback #1 | -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. |
| Low Gain | -15– +15 dB | Gain of the low frequency range |
| High Gain | -15– +15 dB | Gain of the high frequency range |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| Level | 0–127 | Output level |

## 44: REVERSE DELAY (MFX2 only)

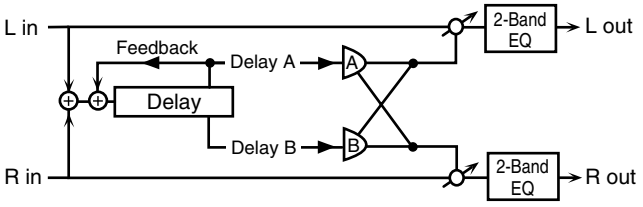
Adds the reverse of the input sound as a delay.




| Parameter | Value | Description |
|---|---|---|
| Threshold | 0–127 | Volume level at which the reverse delay begins |
| Delay 1–4 | 0-2000 ms, note | Adjusts the time until Delays 1–4 are heard. |
| Feedback 1<br>#1<br>Feedback 4 | -98– +98 % | Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings invert the phase. |
| HF Damp 1<br>HF Damp 4 | 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 1–3 | L64–63R | Stereo location of Delays 1–3 sound |
| Level 1–3 | 0–127 | Output level of Delays 1–3 sound |
| Balance #2 | D100:0W–D0:100W | Volume balance between the direct sound (D) and the effect sound (W) |
| 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 |

## 45: SHUFFLE DELAY (MFX2 only)

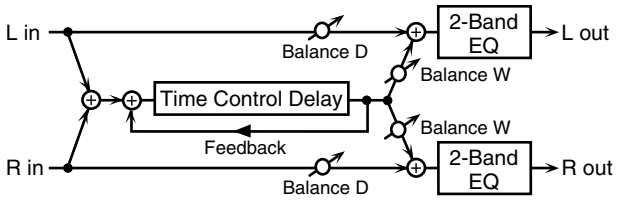
Adds a shuffle to the delay sound, giving the sound a bouncy delay effect with a swing feel.




| Parameter | Value | Description |
|---|---|---|
| Delay #1 | 0–4000 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. |
| Pan A/B | L64–63R | Stereo location of Delay A/B |
| Level Balance | A100:0B–A0:100B | Volume balance between Delay A and Delay B |
| Feedback #2 | -98– +98 % | Adjusts the amount of the delay that's fed back into the effect. Negative (-) settings invert the phase. |
| Acceleration | 0–15 | Adjusts the time over which the Delay Time changes from the current setting to its specified new setting. |
| 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 effect sound (W) |
| Level | 0–127 | Output level |

## 46: TIME CONTROL DELAY (MFX2 only)

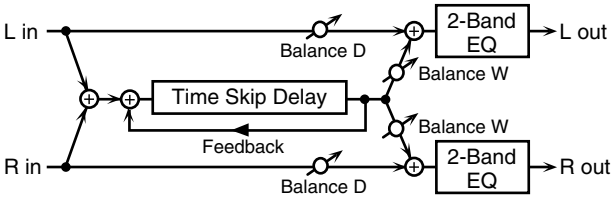
This lets you smoothly vary the delay time. As the delay time is varied, the pitch will change correspondingly; lengthening the delay time will lower the pitch, and shortening it will raise the pitch.




| Parameter | Value | Description |
|---|---|---|
| Delay #1 | 0–4000 ms, note | Adjusts the time until the delay is heard. |
| Feedback #2 | -98– +98 % | Adjusts the amount of the delay that's fed back into the effect. Negative (-) settings invert the phase. |
| Acceleration | 0–15 | Adjusts the time over 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. |
| 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 |

## 47: TIME SKIP DELAY (MFX2 only)

A delay that changes the delay time in stair-step fashion.




| Parameter | Value | Description |
|---|---|---|
| Delay #1 | 0–4000 ms, note | Adjusts the time until the delay is heard. |
| Skip Rate | 0.05–10.0 Hz, note | Frequency at which the delay time will change |
| Feedback #2 | -98– +98 % | Adjusts the amount of the delay sound that's fed back into the effect. Negative (-) settings invert the phase. |
| Acceleration | 0–15 | Adjusts the time over which the Delay Time changes from the current setting to its specified new setting. |
| 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 | 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 |

### note:

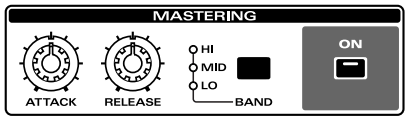
(Sixty-fourth-note triplet), (Sixty-fourth note), (Thirty-second-note triplet), (Thirty-second note), (Sixteenth-note triplet), (Dotted thirty-second note), (Sixteenth note), (Eighth-note triplet), (Dotted sixteenth note), (Eighth note), (Quarter-note triplet), (Dotted eighth note), (Quarter note), (Half-note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

# Mastering effect

This is a stereo compressor (limiter) that is applied to the final output of the MC-909. It has independent high, mid, and low ranges. By compressing sounds that exceed the specified volume level, it can be used to prevent the sound from distorting.


| Parameter | Range | Explanation |
|---|---|---|
| ATTACK | 0–100 ms | Time from when the volume goes up the threshold level until the compressor effect applies |
| RELEASE | 50–5000 ms | Time from when the volume falls below the threshold level until the compressor effect no longer applies |
| THRESHOLD | -36–0 dB | Volume level at which compression begins |
| RATIO | 1.00:1–INF:1 | Compression ratio (INF: infinity) |
| LEVEL | 0–24 dB | Output volume |
| Split Frequency High | 2000–8000 Hz | Frequency at which the high-frequency (HI) and mid-frequency (MID) bands are split |
| Split Frequency Low | 200–800 Hz | Frequency at which the low-frequency (LO) and mid-frequency (MID) bands are split |

You can use the controls of the Mastering section (ATTACK and RELEASE) to adjust the mastering effect parametersin real time.




| | |
|---|---|
| [ON] | Switches the mastering effect on/off |
| [BAND] | Selects the frequency band that you want to adjust |

### Function buttons

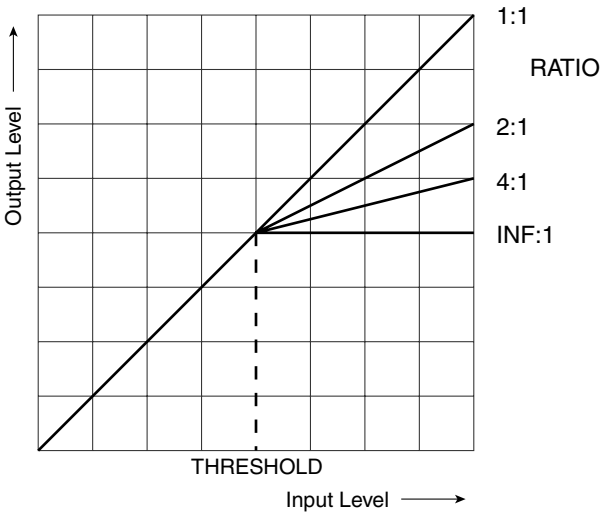
| | |
|---|---|
| [F1 (Techno)] | Recall settings suitable for the corresponding style. |
| [F2 (Hip Hop)] | |
| [F3 (Break Beats)] | |
| [F4 (User)] | Recalls the user settings that you saved. |
| [F5 (Close)] | Returns to the previous screen. |
| [F6 (System Write)] | Saves the current settings as the user settings.<br>Only one set of user settings can be saved. |

**NOTE**

If you press [F1]–[F4], the settings you are editing will be lost. Press [F6] first to save them.

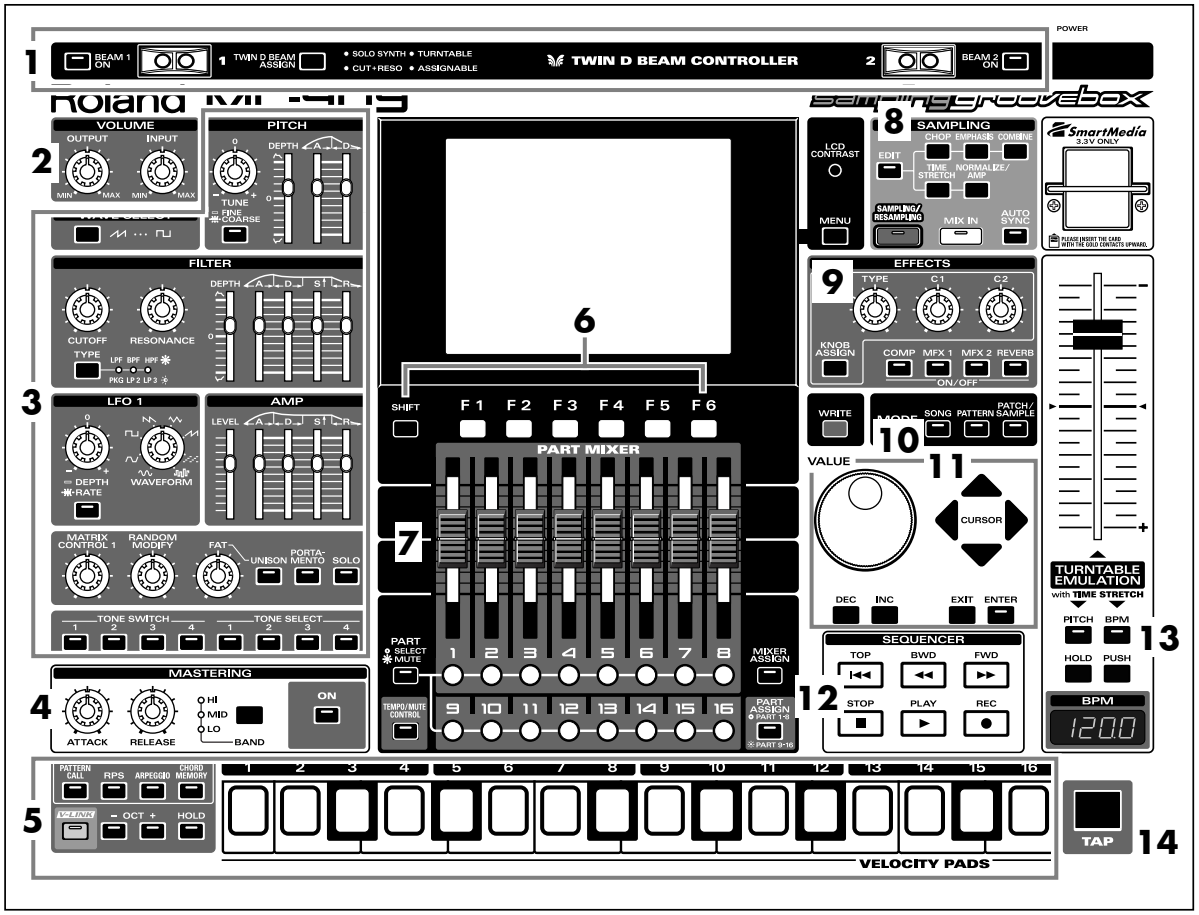
## About THRESHOLD and RATIO

As shown in the diagram below, these parameters determine how the volume is to be compressed.



# Sampling

# How Things Work (in Sampling mode)




In the Sampling section of the panel, press [SAMPLING/ RESAMPLING] so the indicator is lighted. The Sampling Menu screen will appear.

During sampling, the panel controls have the following functions.

## 1. D Beam controllers

Pass your hand over these to modify the pattern (p. 35).

| | |
|---|---|
| [BEAM 1 ON] | Turns the left D Beam controller (BEAM 1) on/off. |
| [BEAM 2 ON] | Turns the right D Beam controller (BEAM 2) on/off. |
| [D BEAM ASSIGN] | Selects the function of the D Beam controller. |

## 2. Volume section

| | |
|---|---|
| [OUTPUT] | Adjusts the output volume of the entire MC-909. |
| [INPUT] | Adjusts the input volume from the INPUT jacks. |

## 3. Realtime Modify section

These controls modify the sound (p. 33).

## 4. Mastering section

| | |
|---|---|
| [ON] | Switches the mastering effect (compressor) on/off. |
| [BAND] | Selects the frequency band to adjust. |
| [ATTACK] | Adjusts the attack time of the input sound. |
| [RELEASE] | Adjusts the time from when the volume falls below the threshold level until the effect disappears. |

## 5. Velocity pads

Use these pads as a keyboard to play sounds or trigger phrases (p. 27).

## 6. Function buttons

These buttons access the function screens indicated in the bottom line of the display.

## 7. Part Mixer section

Here you can adjust the volume, pan, etc., of each part (p. 33).

| | |
|---|---|
| [PART] (SELECT/MUTE) | Selects the function of the Part buttons [1]–[16].<br>The buttons work as Part Select buttons when the indicator is not lighted, and as Mute buttons when the indicator is lit. |
| [TEMPO/MUTE CONTROL] | Switches on/off the Tempo/Mute part (a part that records tempo changes and mute operations, p. 42). |
| [MIXER ASSIGN] | When you press this button so its indicator lights, the Mixer screen will appear. |
| [PART ASSIGN] | Selects the parts that are controlled by the sliders.<br>The sliders will control parts 1–8 if this indicator is not lighted, or parts 9–16 if the indicator is lit. |

## 8. Sampling section

| | |
|---|---|
| [EDIT] | Displays the Sample Edit screen (p. 114). |
| [CHOP] | Divides a sample (p. 118). |
| [EMPHASIS] | Emphasize the sample's upper range (p. 120). |
| [COMBINE] | Combines multiple samples into a single sample (p. 120). |
| [TIME STRETCH] | Stretches or shrinks the sample to change the length or tempo (p. 121). |
| [NORMALIZE/AMP] | Boosts the level of the sample as high as possible (Normalize, p. 121), or boosts/cuts the level as specified (Amp, p. 122). |
| [SAMPLING/RESAMPLING] | Displays the Sampling menu screen (p. 112). |
| [MIX IN] | Mixes the sound from the INPUT jack into the output (p. 34). |
| [AUTO SYNC] | Synchronizes the sample to the pattern (p. 36). |

## 9. Effect section

Applies special effects to the sound (p. 88).

| | |
|---|---|
| [COMP]–[REVERB] | Switch each effect on/off (p. 88). |
| [KNOB ASSIGN] | Selects the effect to be controlled in real time (p. 91). |
| [TYPE] | Selects the type of effect. |
| [C1], [C2] | Modifies the assigned function in real time. |

## 10. Mode section

Press the [PATTERN] button to enter Pattern mode.

Pressing one of the other two buttons will switch you to the corresponding mode.

## 11. Cursor/Value section

Use these buttons and dial to select patterns or input values (p. 18).

## 12. Sequencer section

| | |
|---|---|
| [PLAY] | Plays a pattern (p. 24). |
| [STOP] | Stops playback/recording. |
| [FWD] | Advances to the next measure. |
| [BWD] | Returns to the previous measure. |
| [TOP] | Moves to the beginning of the pattern. |
| [REC] | Used when recording (p. 37). |

## 13. Turntable emulation

Applies an effect that simulates increasing/decreasing the rotational speed of a turntable (p. 36).

## 14. TAP button

Lets you set the BPM (tempo) by pressing the button at the desired timing (p. 25).

# Sampling procedure

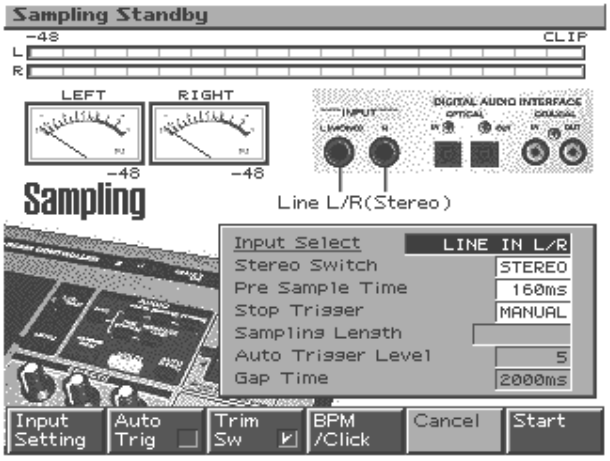
**1. Press [SAMPLING/RESAMPLING] to access the Sampling Menu screen.**


The upper part of the screen will show the amount of free memory. If the free memory reaches 0%, no further sampling is possible.

**2. Press [F1 (Sampling)]–[F5 (Solo)] to select the sampling mode. The sampling-standby screen will appear.**

| | |
|---|---|
| [F1 (Sampling)] | Sample a sound from an external input source.<br>* Operating the velocity pads or D Beam controllers will not play the internal sound generator. |
| [F2 (Re-Sampling)] | Resample the sound of the internal sound generator.<br>* The sound of the external input will not be heard. |
| [F3 (Mix)]<br>(Mix sampling) | Sample the combined sounds of the internal sound generator and an external input source. |
| [F4 (Auto Divide)]<br>(Auto divide sampling) | Sample an extended source, and automatically divide it into several samples at silent regions.<br>* Operating the velocity pads or D Beam controllers will not play the internal sound generator. |
| [F5 (Solo)]<br>(Solo sampling) | While playing the internal sound generator as usual, sample only the sound from the external input.<br>* Effects cannot be applied to the external input sound. |
| [F6 (Cancel)] | Return to the previous screen. |

(Example) Standby screen for Sampling




**3. Make the settings for things such as the input source of the sound to be sampled, and triggering.**

### Function buttons

| | |
|---|---|
| [F1 (Input Setting)] | Make settings for the external input (p. 34). |
| [F2 (Auto Trig)]<br>(Auto Trigger) | If this is on, sampling will begin automatically when the input sound is detected. |
| [F3 (Trim Sw)] | If this is turned on, the Start point and End point settings (p. 115) will be automatically adjusted after sampling is performed, so any silent portions at the beginning or end of the sampled sound are excluded. |
| [F4 (BPM/Click)] | Set the tempo, and turn the metronome on/off (p. 25). |

## Parameters

| Parameter | Range | Explanation |
|---|---|---|
| Input Select | LINE IN L/R, LINE IN L, DIGITAL(OPT), DIGITAL(CO-AX), MICROPHONE | Input source to be sampled<br>**LINE IN L/R:** INPUT jacks L/R (stereo)<br>**LINE IN L:** INPUT jack L (mono)<br>**DIGITAL(OPT):** Digital input (optical)<br>**DIGITAL(CO-AX):** Digital input (coaxial)<br>**MICROPHONE:** INPUT jack L (mono, mic level)<br>* This cannot be set when resampling. |
| Stereo Switch | MONO, STEREO | Stereo/mono setting for sampling<br>**MONO:** The sound will be sampled as one wave. If the sound is stereo, the left and right signals will be mixed.<br>**STEREO:** The sound will be sampled as two waves, L and R.<br>* Mono sampling uses half as much memory space. |
| Pre Sample Time | 0–1000 ms | The length of sound preceding the moment at which sampling was manually or automatically initiated that will be captured in the sample<br>This lets you prevent the attack portion of the sound from being omitted from the sample. |
| Stop Trigger | MANUAL, BEAT, TIME | How sampling will end<br>**MANUAL:** Continue sampling until you press [F5 (STOP)].<br>**BEAT:** Sample the specified number of beats at the current tempo (BPM).<br>**TIME:** Sample the specified length of time. |

| Parameter | Range | Explanation |
|---|---|---|
| Sampling Length | **When Stop Trigger is BEAT** | |
| | 1–20000 | Number of beats to continue sampling |
| | **When Stop Trigger is TIME** | |
| | 00'00"010–50'00"000 | length of time to continue sampling |
| | The maximum value will depend on the amount of memory.<br>* This parameter cannot be specified if Stop Trigger is set to MANUAL. | |
| Auto Trigger Level | 0–7 | Volume level at which sampling will begin when Auto Trig is ON<br>A setting of 0 is the minimum. |
| Gap Time | 500, 1000, 1500, 2000 ms | Length of silence at which the sample will be divided<br>Whenever there is a silent region longer than the specified time, the sample will be divided at that point, and the next sample number will be assigned to the sound that follows.<br>* This parameter is valid only when you are using Auto Divide Sampling. |

**4. In the Volume section of the panel, use [INPUT] to adjust the input level of the external source.**

* *If the input level is excessive, the word "CLIP" will appear at the lower right of the level meter in the screen, and the CLIP indicator at the upper right of the meter will light.*
* *Using a connection cable that contains a resistor can cause the sound level to be low. Use a connection cable that does not contain a resistor.*
* *The level meter shows the level after the signal has passed through the effects (compressor, multi-effects, reverb) and the mastering effect. If you want to see the actual input level, turn off all effects and the mastering effect (p. 88, p. 108).*
*(During Solo sampling, effects cannot be applied to the external input sound.)*

### Cautions when using a microphone

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.

* *If you use a microphone, connect the ground terminal to an electrical ground (p. 15).*

**5. Press [F6 (Start)] to begin sampling.**

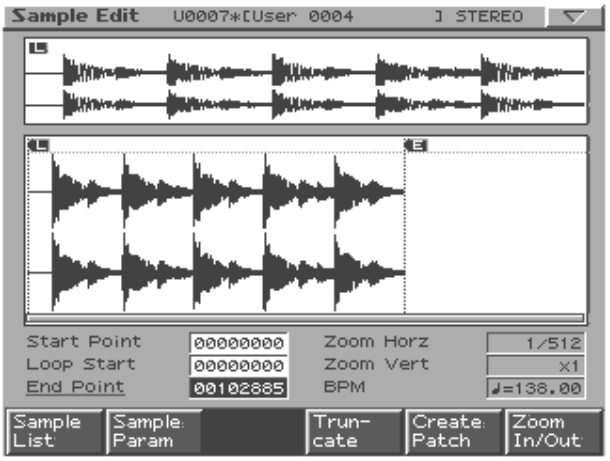
**NOTE**

**You cannot save a sample that is larger than 128 MB (approximately 24 minutes of monaural or 12 minutes of stereo).**
If you are not using a memory card, you cannot save a sample that is larger than 16 MB (approximately 180 seconds of monaural or 90 seconds of stereo).

* *Even if you expand the memory (DIMM), you cannot save a sample that is larger than 128 MB. (However, you can play it.)*

**6. Press [F5 (Stop)] to stop sampling.**

The Sample Edit (p. 114) screen will appear.




**7. Press [EXIT] to go back to where you were before you entered the Sampling screen.**

### About the sample numbers chosen during sampling

The samples created when you execute the sampling operation are placed in an area where there are at least 256 consecutive unused numbers in the sample list.

* *You cannot perform sampling if there are not at least 256 consecutive unused numbers in the sample list. You will need to delete unneeded samples (p. 124) in order to allocate 256 or more consecutive free numbers.*

## Dividing a sample during sampling

**1. During sampling, press [F6 (Divide)].**

The sample will be divided at the point where you pressed the button, and the subsequent material will be sampled as a sample of the next number.

* *When sampling in mono, you can divide the material into a maximum of 256 samples. When sampling in stereo, you can divide the material into a maximum of 128 samples (L/R total 256 samples).*

Samples that you load can be used in patches or rhythm sets in the same way as waves.

**NOTE**

Samples that you load will be lost when you turn off the power. If you want to keep them, you must Save them (p. 123).

## About the volume when resampling

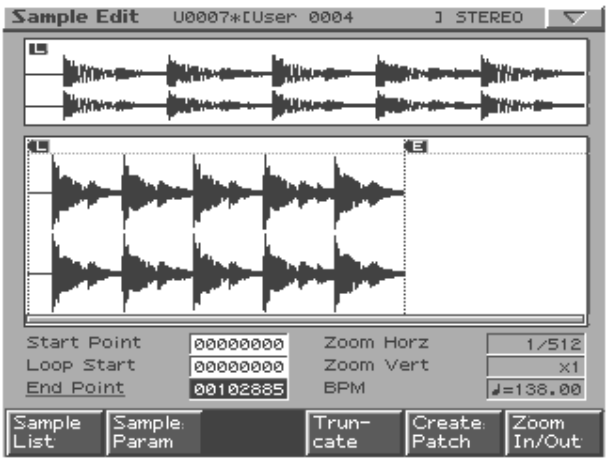
The volume of a phrase that you resample may be less than the volume of the original phrase. If necessary, execute the Normalize command (p. 121) to raise the volume.

# Sample Edit

Use sample edit to modify a waveform (sample) that you sampled/loaded/imported.

## Basic sample editing procedure

**1. When you press [EDIT] in the sampling section, the Sample Edit screen will appear.**




### Function buttons

| | |
|---|---|
| [F1 (Sample List)] | From a list, select the sample to edit (p. 115). |
| [F2 (Sample Param)] | Make various settings for the sample (p. 116). |
| [F4 (Truncate)] | Cut unwanted portions from the beginning/end of the sample (p. 117). |
| [F5 (Create Patch)] | Create a new patch that uses the sample (p. 117). |
| [F6 (Zoom In/Out)] | Change the magnification of the sample display (p. 114). |

### Panel buttons

| | |
|---|---|
| [CHOP] | Divide the sample (p. 118). |
| [EMPHASIS] | Emphasize the sample's upper range (p. 120). |
| [COMBINE] | Combine multiple samples into a single sample (p. 120). |
| [TIME STRETCH] | Stretch or shrink the sample to change the length or tempo (p. 121). |
| [NORMALIZE/AMP] | Boosts the level of the sample as high as possible (Normalize, p. 121), or boosts/cuts the level as specified (Amp, p. 122). |

MEMO

You can access the Chop–Amp screens by holding down [SHIFT] and pressing [F1]–[F6]. Alternatively, you can select these screens by pressing [MENU].

NOTE

Sample edit operations (Chop, Normalize, etc.) apply to the entire sample. Even if you specify a start point or end point, they will be ignored.
If you want to apply the operation only to the region between the start point and end point, use Truncate to delete unwanted portions of the sample, and then perform the sample editing operation.

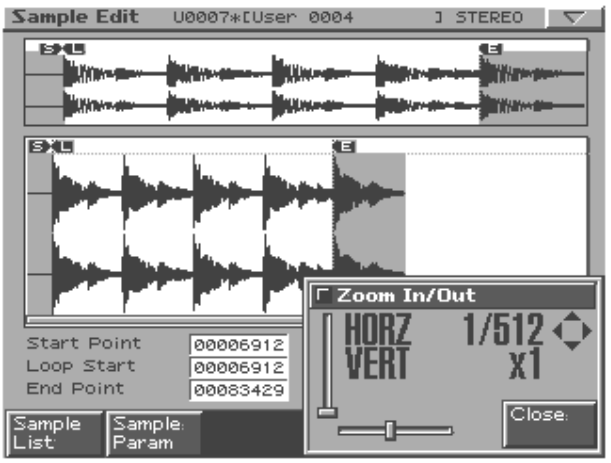
NOTE

## Zoom In/Out

Here's how to change the magnification of the sample display.

**1. In the Sample Edit screen, press [F6 (Zoom In/Out)].**

The Zoom In/Out sub-window will appear.




**2. Use [CURSOR] to change the magnification of the display.**

- **Horizontal axis (time axis):** 1/1--1/65536
  Press [CURSOR (left)] to increase the display magnification.
  Press [CURSOR (right)] to decrease the display magnification.

* *You can also use [VALUE] or [INC/DEC] to adjust this setting.*

- Vertical axis (waveform amplitude axis): x1--x128
  Press [CURSOR (left)] to increase the display magnification.
  Press [CURSOR (right)] to decrease the display magnification.

**3. Press [F6 (Close)] to close the sub-window.**

HINT

Even without displaying the Zoom In/Out sub-window, you can press [CURSOR (right/left) to expand/shrink the horizontal axis, or hold down [SHIFT] and press [CURSOR (up/down)] to expand/shrink the vertical axis.

# Setting the start/end points of the sample

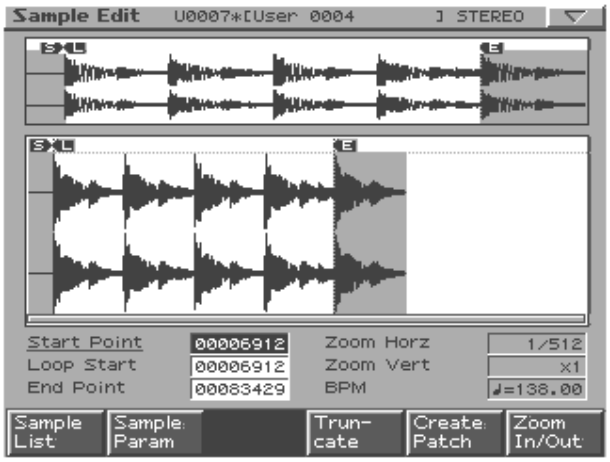
You can specify the portion of the sample that will actually sound. You can also specify the region that is to be looped.

**1. Select the sample that you want to edit.**

For details on how to select a sample, refer to Sample List (p. 115).

**2. Use [CURSOR (up/down)] to select the point that you want to set.**

- **Start Point:**
  This is the point at which playback will start. Set this so that any unwanted portion at the beginning of the sample will be skipped, and the sound will begin at the desired moment.
- **Loop Start:**
  This is the point at which loop playback (second and subsequent times) will start. Set this if you want to loop the sound from a point other than the start point.
- **End Point:**
  This is the point at which playback will end. Set this so that any unwanted portion at the end of the sample will not be heard.




**3. Use [VALUE] or [INC/DEC] to move the point so it's where you want it to be.**

HINT

You'll probably find it convenient to zoom-in when making fine adjustments, and zoom-out when making major adjustments (p. 114).

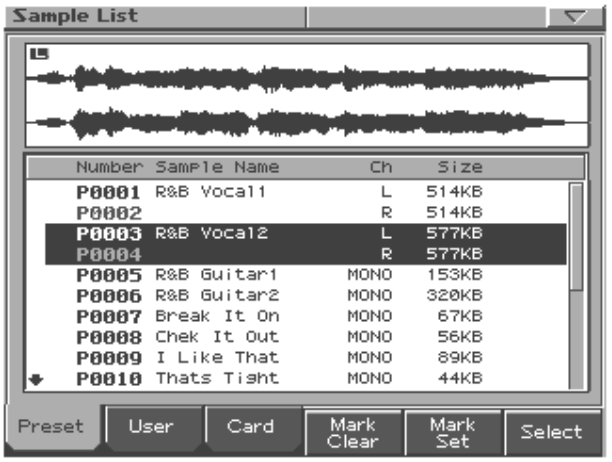
MEMO

After specifying the start point and end point, you can execute Truncate (p. 117) to delete unwanted portions at the beginning and end of the sample.

# Sample List

Here's how to select a sample from a list.

**1. In the Sample Edit screen, press [F1 (Sample List)].**




**2. Use [F1 (Preset)]–[F3 (Card)] to specify the bank from which you want to select a sample.**

**3. Use [VALUE], [INC/DEC], or [CURSOR (up/down)] to select a sample.**

If you hold down [SHIFT] while you operate the above buttons, the sample number will change in steps of ten.

**4. Press [F6 (Select)].**

The edit screen for the selected sample will appear.

## Function buttons

| | |
|---|---|
| [F1 (Preset)] | Select from preset samples. |
| [F2 (User)] | Select from user samples. |
| [F3 (Card)] | Select from memory card samples. |
| [F4 (Mark Clear)] | Remove the check mark from the sample. |
| [F5 (Mark Set)] | Add a check mark to the sample. |
| [F6 (Select)] | Display the edit screen for the selected sample. |
| [SHIFT] + [F1 (Delete Sample)] | Delete all checked samples with their files. (p. 124) (*1) |
| [SHIFT] + [F2 (Erase)] | Erase all checked samples from memory (p. 124). (The files will not be deleted.) (*1) |
| [SHIFT] + [F3 (Load)] | Load the checked samples into memory. (p. 124) (*1) |
| [SHIFT] + [F4 (Mark Clear All)] | Clear the check marks from all samples in the folder. |
| [SHIFT] + [F5 (Mark Set All)] | Add a check mark to all samples in the folder. |
| [SHIFT] + [F6 (Create Rhythm)] | Execute "Create Rhythm" (p. 119) on all checked samples. |

*1: If not even check mark is assigned, the operation will be executed on the sample selected by the cursor.

## The status of each sample in the sample list

| Icon | Sample status |
|---|---|
| NEW | Sample has just been sampled or imported |
| EDIT | Sample has been edited but not yet saved |
| UNLOAD | Sample has not been loaded |
| None | Sample has just been saved or loaded |

# Sample Parameters

Here you can make various settings for the sample.

**1. In the Sample Edit screen, press [F2 (Sample Param)].**


**2. Use [CURSOR (up/down)] to select a parameter.**

**3. Use [VALUE] or [INC/DEC] to edit the value.**

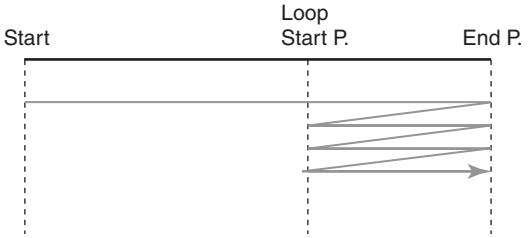
**4. Press [F6 (Close)] when you are finished.**

| Parameter | Values | Explanation |
|---|---|---|
| Loop Mode | FWD, ONE-SHOT, REV, REV-ONE | How the sample will be played<br>Refer to "About the Loop Mode" (p. 116) |
| Loop Tune | -50– +50 | Pitch of the loop region<br>Make fine adjustments in one-cent (1/100 semitone) increments. |
| Original Key | 24 (C1)– 127 (G9) | Note number that will play the sample at the pitch at which it was sampled |
| BPM | 5–300 | Original BPM of the sample<br>* You will need to edit this value when using Auto Sync. |
| Time Stretch Type | TYPE01– TYPE10 | Auto sync method<br>Decreasing this value will optimize the sound for more rapid phrases, and increasing this value will optimize the sound for slower phrases. |
| Start Fine | 0–255 | Fine adjustment of the Start point. |
| Loop Start Fine | 0–255 | Fine adjustment of the Loop Start point. |
| Loop End Fine | 0–255 | Fine adjustment of the End point. |

## About the Loop Mode

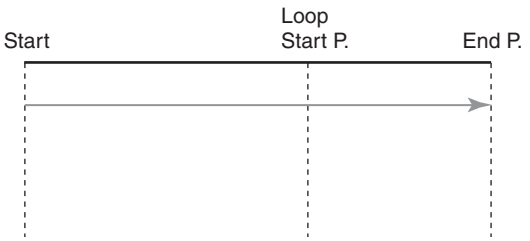
**FWD (Forward)**

After the Sample played back from the Start point to the End point, it will then be repeatedly played back in the forward direction, from the Loop Start point to the End point.



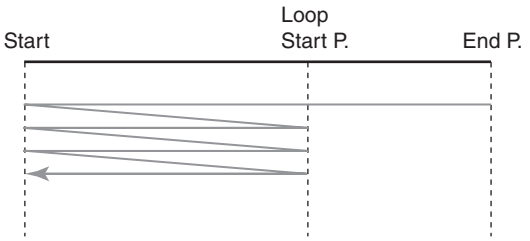

**ONE-SHOT**

The sample will be played back only once, from the Start point to the End point.



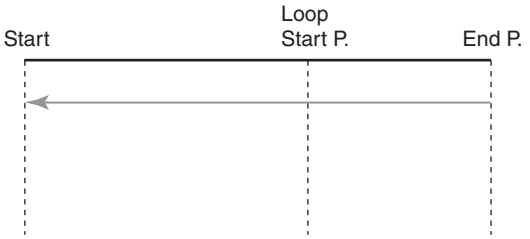

**REV (Reverse)**

When the sample has been played back from the End point to the Start point, it will be repeatedly played back in the reverse direction, from the Loop Start point to the Start point.




**REV-ONE (Reverse One-shot)**

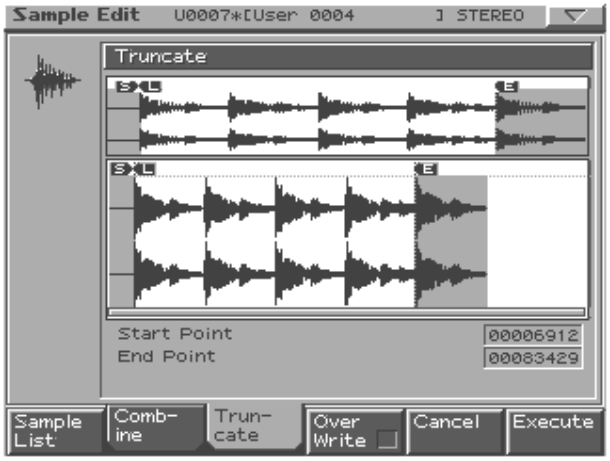
The sample will be played back only once from the End point to the Start point in the reverse direction.



# Truncate

This operation cuts the portions of the sample that are earlier than the Start Point and later than the Loop End Point.

**1. In the Sample Edit screen, press [F4 (Truncate)].**




**2. If you want to replace the current sample with the truncated sample, press [F4 (Over Write)] to display the "✔" symbol.**

**3. Press [F6 (Execute)].**

A message will ask you for confirmation.

**4. To execute the Truncate operation, press [F6 (Execute)].**

* *If you want to cancel without executing, press [F5 (Cancel)].*

# Create Patch

This operation creates a patch that uses the current sample as the wave for Tone 1.

If desired, the created patch can also be assigned to the current part.

**1. In the Sample Edit screen, press [F5 (Create Patch)].**

The patch name entry screen will appear.


**2. Assign a name to the patch, and save it.**

Refer to "Saving a Patch/Rhythm Set" (p. 77).

* *If you decide to cancel the Create Patch operation, press [F5 (Cancel)] to return to the previous screen.*

MEMO

When you execute Create Patch, a sample will be created at the same time.

When saving the patch, a message will ask you whether you want to assign the newly created patch to the current part.

**3. If you want to assign the patch, press [F6 (Execute)].**

The newly created patch will be assigned to the current part, and the Patch Edit screen (p. 56) will appear.

**4. If you do not want to assign the patch, press [F5 (Cancel)].**

You will return to the Sample Edit screen.

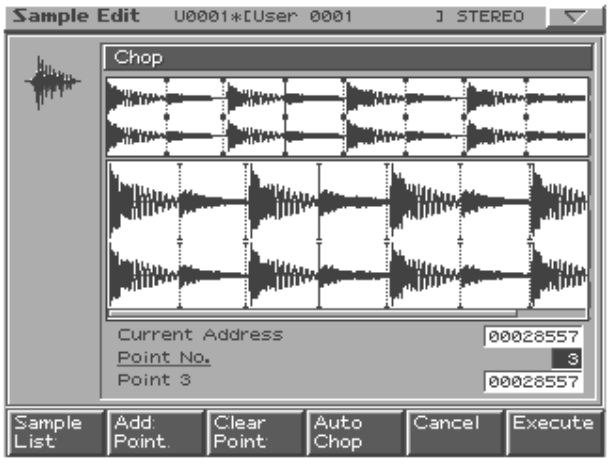
# Chop

This operation divides the sample into two or more samples (a maximum of 16 samples).

**1. In the Sample Edit screen, press [CHOP].**

Alternatively, hold down [SHIFT] and press [F1 (Chop)].

**2. Press [F1 (Sample List)] and select a sample.**




## Procedure for dividing a sample

You can freely specify the point(s) at which the sample is to be divided.

**1. Press [CURSOR (up)] to move the cursor to "Current Address."**

**2. Use [VALUE] or [INC/DEC] to move the point.**

**3. At the location where you want to divide the sample, press [F2 (Add Point)].**

The current location will be the dividing point.

**4. Repeat steps 2 and 3 to specify other dividing points as desired.**

The sample will be divided into a maximum of 16 samples.

**5. Press [F6 (Execute)].**

A message will ask you for confirmation.

**6. To execute, press [F6 (Execute)].**

The Chop operation will be executed, and the divided samples will be saved. (Normally, they will be saved in consecutive sample numbers.)

* *To cancel, press [F5 (Cancel)].*

When you execute the Chop operation, a message will ask whether you want to execute Create Rhythm.

**7. If you want to execute Create Rhythm, press [F6 (Execute)].**

- Create Rhythm -> p. 119

**8. If you don't want to execute Create Rhythm, press [F5 (Cancel)].**

You will return to the Sample Edit screen.

## Automatically dividing a sample (Auto Chop)

Here's how you can automatically specify the points at which the sample is to be divided, and then divide the sample.

**1. Press [F4 (Auto Chop)].**

The Auto Chop sub-window will appear.

**2. Press [CURSOR (up)] to move the cursor to "Chop Type."**

**3. Use [VALUE] or [INC/DEC] to select the method by which the sample is to be divided.**

**4. Press [CURSOR (down)].**

**5. Use [VALUE] or [INC/DEC] to set the value.**

| Parameter | Explanation |
|---|---|
| Chop Type | How the sample is to be divided<br>**Level:** Divide according to volume.<br>**Beat:** Divide at beats based on the BPM (p. 116) of the sample.<br>**Divide x:** Divide into 'x' number of equal lengths. |
| **If Chop Type is Level** | |
| Level | Level at which the sample is to be divided<br>Lower settings of this value will cause the sample to be divided more finely.<br>**Range:** 1–10 |
| **If Chop Type is Beat** | |
| Beat | Beat interval at which the sample is to be divided<br>**Range:** 1/32, 1/16T, 1/16, 1/8T, 1/8, 1/4T, 1/4, 1/2, 1/1, 2/1 |
| **If Chop Type is Divide x** | |
| Times | Number of samples into which the sample is to be divided<br>**Range:** 2–16 |

**6. Press [F6 (Auto Chop)].**

The dividing points will be automatically specified according to the settings you made.

The sample will be divided into a maximum of 16 samples.

* *To cancel Auto Chop, press [F5 (Close)].*

**7. Press [F6 (Execute)].**

A message will ask you for confirmation.

**8. To execute, press [F6 (Execute)].**

The Chop operation will be executed, and the divided samples will be saved. (Normally, they will be saved in consecutive sample numbers.)

* *To cancel, press [F5 (Cancel)].*

When you execute the Auto Chop, a message will ask whether you want to execute Create Rhythm.

**9. If you want to execute Create Rhythm, press [F6 (Execute)].**

- Create Rhythm -> p. 119

**10. If you don't want to execute Create Rhythm, press [F5 (Cancel)].**

You will return to the Sample Edit screen.

## Auditioning the divided samples

After dividing the sample, you can press the velocity pads to audition each of the divided samples.
From the sample nearest to the start point, the samples will be played by pads [1], [2], ...

### Moving a dividing point

1. **Use [CURSOR (up/down)] to move the cursor to "Point No."**
2. **Turn [VALUE] to select the point that you want to move.**
   In order from the start point, the points are numbered 1, 2, ...15.
3. **Press [CURSOR (down)].**
4. **Turn [VALUE] to move the dividing point.**

### Deleting a dividing point

1. **Use [CURSOR (up/down)] to move the cursor to "Point No."**
2. **Turn [VALUE] to select the point that you want to delete.**
3. **Press [F3 (Clear Point)].**
   The dividing point will be deleted, and the waveforms before and after that point will be connected.

# Create Rhythm

This operation lets you create a rhythm set using the samples selected from the sample list, or the samples you created by the Chop operation.
Each of the divided samples will become a separate rhythm tone.

### Create a Rhythm Set using the samples selected from the Sample List

1. **In the sample list, add a check mark to the samples that you want to use as a rhythm tone.**
   You can select up to sixteen samples. If you select seventeen or more samples, the rhythm set will be created from the sixteen lowest-numbered samples.
2. **Hold down [SHIFT] and press [F6 (Create Rhythm)].**
   A message will ask whether you want to execute Create Rhythm.
3. **To execute, press [F6 (Execute)].**
   The Rhythm Set Name input screen will appear.
4. **Assign a name to the rhythm set, and save it.**
   For details, refer to "Saving a Patch/Rhythm Set" (p. 77).

* *To cancel the Create Rhythm operation, press [F5 (Cancel)] to return to the previous screen.*

When you save a rhythm set, you will be asked whether you want to assign the newly created rhythm set to the current part.

5. **If you want to assign it, press [F6 (Execute)].**
   The newly created rhythm set will be assigned to the current part, and the Rhythm Edit screen (p. 70) will appear.
6. **If you don't want to assign it, press [F5 (Cancel)].**
   You will return to the sample edit screen.

### Create a Rhythm Set using the samples created by the Chop operation

When the sample chop operation is completed (p. 118), you will be asked whether you want to execute Create Rhythm.

1. **If you want to execute Create Rhythm, press [F6 (Execute)].**
   The Rhythm Set Name input screen will appear.
2. **Assign a name to the rhythm set, and save it.**
   For details, refer to "Saving a Patch/Rhythm Set" (p. 77).

* *To cancel the Create Rhythm operation, press [F5 (Cancel)] to return to the previous screen.*

When you save a rhythm set, you will be asked whether you want to assign the newly created rhythm set to the current part.

3. **If you want to assign it, press [F6 (Execute)].**
   The newly created rhythm set will be assigned to the current part, and the Rhythm Edit screen (p. 70) will appear.
4. **If you don't want to assign it, press [F5 (Cancel)].**
   You will return to the sample edit screen.

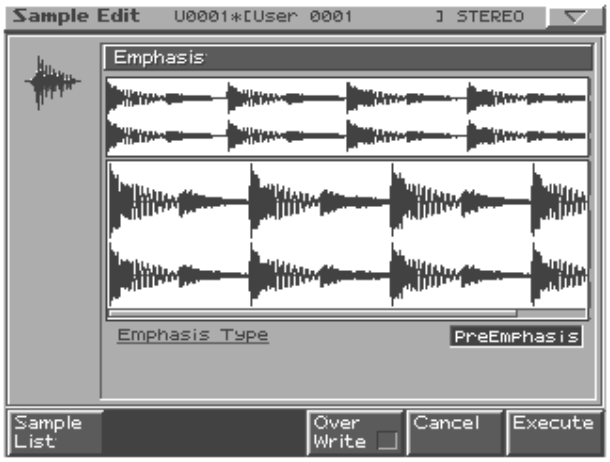
# Emphasis

In some cases, the audio quality will be improved if you boost the high-frequency range of an imported sample. Also, the high-frequency range of the sample may be emphasized when you use a sampler made by another manufacturer. In this case, you can minimize the change in tonal character by attenuating the high-frequency range.

**1. Press [EMPHASIS].**

Alternatively, hold down [SHIFT] and press [F2 (Emphasis)].

**2. Press [F1 (Sample List)] and select a sample.**




**3. Use [VALUE] or [INC/DEC] to select the emphasis type.**

**PreEmphasis:** Emphasizes the high-frequency range.
**DeEmphasis:** Attenuates the high-frequency range.

**4. If you want to replace the current sample with the emphasized sample, press [F4 (Over Write)] to display the "✔" symbol.**

**5. Press [F6 (Execute)].**

A message will ask you for confirmation.

**6. To execute, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

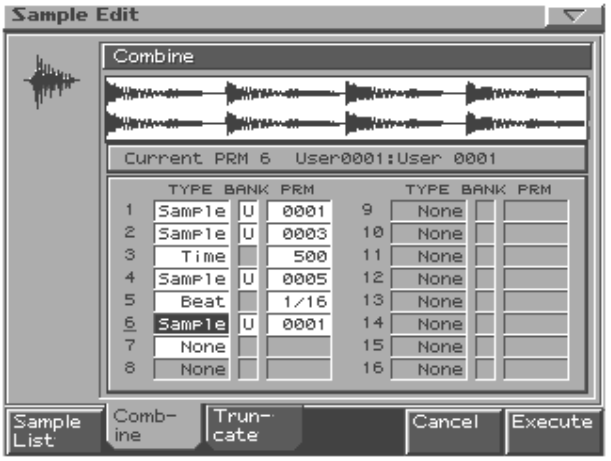
# Combine

This operation combines multiple samples into a single sample. You can combine as many as sixteen samples. You can also place silent spaces between the samples.

**1. Press [COMBINE].**

Alternatively, hold down [SHIFT] and press [F3 (Combine)].

**2. Press [F1 (Sample List)] and select a sample.**




**3. Use [CURSOR] to select a parameter.**

**4. Use [VALUE] or [INC/DEC] to set the value.**

| Parameter | Range | Explanation |
|---|---|---|
| 1–16 | The sample or silence to be combined | |
| TYPE | Sample, Time, Beat | **Sample:** sample<br>**Time:** silent region (specified as time)<br>**Beat:** silent region (specified as a note value) |
| BANK | U, C | Bank that contains the sample<br>**U:** user<br>**C:** card<br>* This will be displayed only if TYPE is set to Sample. |
| PRM | 1–10000 ms<br><br>note value: 1/32,1/16T, 1/16, 1/8T, 1/8, 1/4T, 1/4, 1/2, 1/1, 2/1 | Sample number, or the duration/ note value of the silent region<br>The note value is based on the BPM of the sample immediately before the silent region.<br>* If there is no sample immediately before the silent region, the current BPM will be used. |

**5. Press [F6 (Execute)]**

A message will ask you for confirmation.

**6. To execute, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# Edit Time Stretch

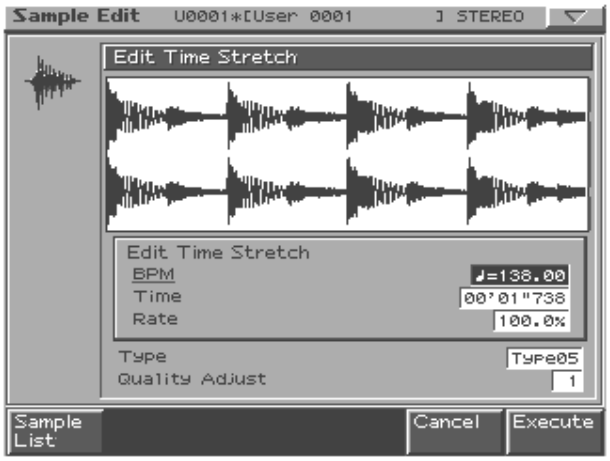
This operation stretches or shrinks the sample to modify the length or tempo.

You can stretch or shrink the sample by a factor of one half to double the original length.

**1. Press [TIME STRETCH].**

Alternatively, hold down [SHIFT] and press [F4 (Time Stretch)].

**2. Press [F1 (Sample List)] and select a sample.**




**3. Press [CURSOR (up/down)] to select how you want to specify the tempo/length.**

| | | |
|---|---|---|
| Edit Time Stretch | **BPM:** Change the BPM (p. 116) of the sample to the BPM you specify.<br>**Time:** Specify the length of the sample as a time value.<br>**Rate:** Specify the length relative to the current length of the sample.<br>**Range:** 50.0–200.0% | |
| Type | TYPE01–TYPE10 | Lower settings of this value will make the sound more suitable for faster phrases, and higher settings will make the sound more suitable for slower phrases. |
| Quality Adjust | 1–10 | Make fine adjustments to the tonal quality of the Time Stretch. |

**4. Use [VALUE] or [INC/DEC] to specify the tempo/length.**

**5. Press [F6 (Execute)].**

The length of the sample will be changed as specified.

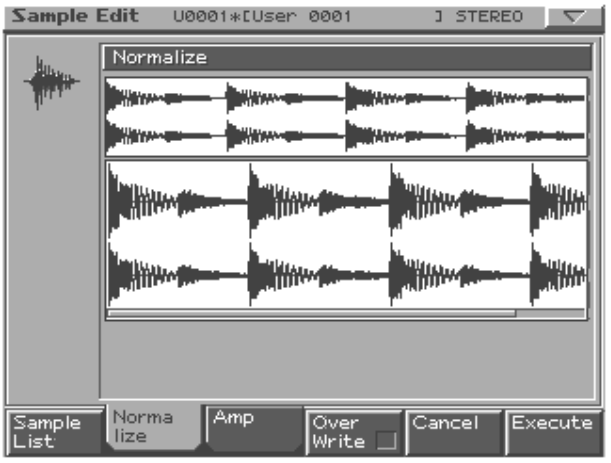
* *To cancel, press [F5 (Close)].*

# Normalize

This operation raises the level of the entire sample as much as possible without exceeding the maximum level.

**1. Press [NORMALIZE/AMP].**

**2. Press [F1 (Sample List)] and select a sample.**




**3. If you want to replace the current sample with the normalized sample, press [F4 (Over Write)] to display the "✔" symbol.**

**4. Press [F6 (Execute)].**

A message will ask you for confirmation.

**5. To execute, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

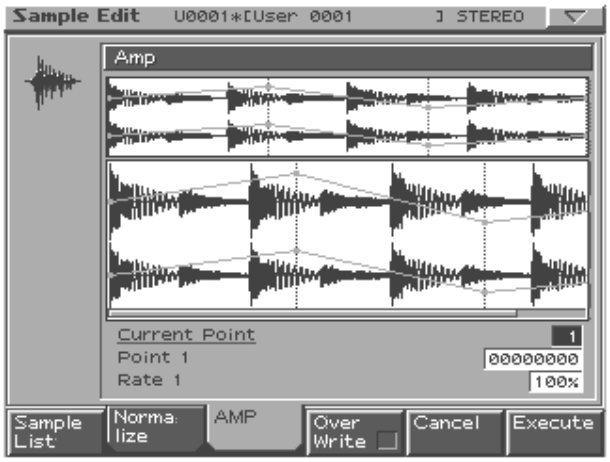
# Amp

This operation applies an envelope (time-variant change) to the volume of the sample.

**1. Press [NORMALIZE/AMP] and then press [F3 (Amp)].**

Alternatively, hold down [SHIFT] and press [F6 (Amp)]).

**2. Press [F1 (Sample List)] and select a sample.**




**3. Use [CURSOR (up/down)] to select a parameter.**

**4. Use [VALUE] or [INC/DEC] to set the value.**

| | |
|---|---|
| Current Point | Currently selected point<br>Beginning near the start point, the points will be numbered 1, 2, 3, or 4. |
| Point 1–4 | Location of the current point |
| Rate 1–4 | Amplification ratio of the current point<br>Specifies how the volume of each point is to be boosted relative to the current value.<br>**Range:** 0–400% |

**5. If you want the edited sample to replace the current sample, press [F4 (Over Write)] to display the "✔" mark.**

**6. Press [F6 (Execute)].**

A message will ask you for confirmation.

**7. To execute, press [F6 (Execute)].**

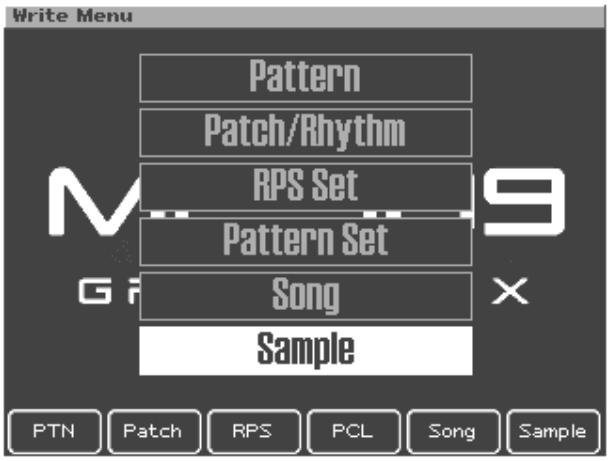
* *To cancel, press [F5 (Cancel)].*

# Saving a sample

A newly loaded sample, as well as any changes you've made in the settings for a sample will be lost as soon as you turn off the power. If you want to keep such data, you must save it as follows.

**1. Press [SAMPLING/RESAMPLING] to access the Sample Edit screen.**

**2. Select the sample that you want to save.**



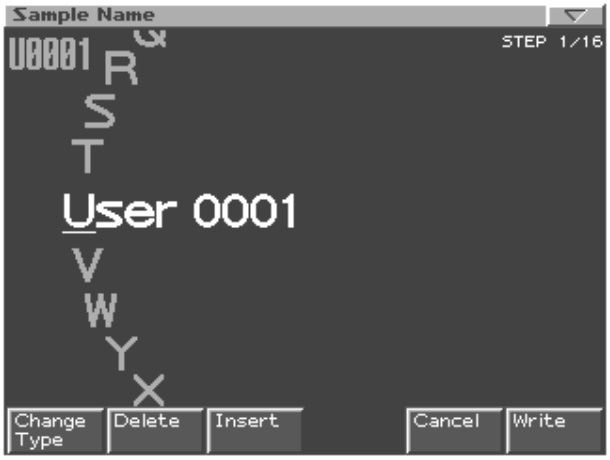

**3. Press [WRITE].**

The Write Menu screen will appear.

Make sure that "Sample" is highlighted.

**4. Press [ENTER].**

The Sample Name input screen will appear.

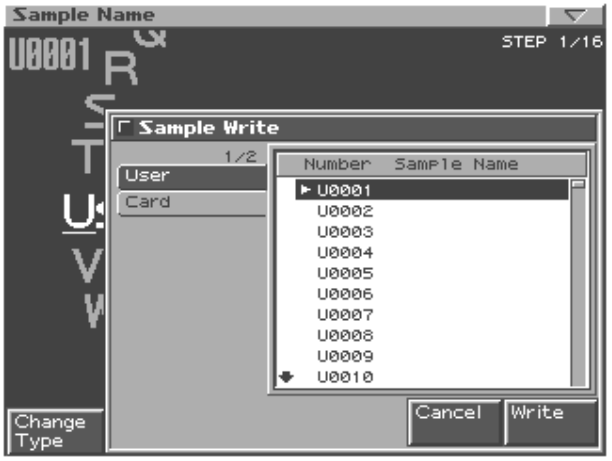



**5. Assign a name to the sample.**

| | |
|---|---|
| [CURSOR (left/right)] | Moves the cursor (the location at which to enter/edit a character). |
| [CURSOR (up/down)] | Switches letters between uppercase and lowercase. |
| [VALUE] [INC/DEC] | Selects characters. |
| [F1 (Change Type)] | Selects the type of character.<br>Each time you press this, you will alternately select the first character of the uppercase alphabet (A), lowercase alphabet (a), or numerals and symbols (0). |
| [F2 (Delete)] | Deletes the character at the cursor location, while shifting the following characters to the left, closing the gap. |
| [F3 (Insert)] | Inserts a space at the cursor location. |

* *If you decide to discard your changes, press [F1 (Cancel)].*

**6. When you have finished inputting the name, press [F6 (Write)].**




**7. Use [VALUE] or [INC/DEC] to select the write-destination sample.**

Use [CURSOR (left/right)] to select the bank (User or Card).

**8. Press [F6 (Write)].**

A message will ask you for confirmation.

**9. To write the sample, press [F6 (Execute)].**

* *If you decide to cancel without writing, press [F5 (Cancel)].*

**NOTE**

- You cannot overwrite onto another sample.
- When saving a stereo sample, two consecutive sample numbers must be available.

# Menu (in Sample Edit)

## Using the menu

1. **In the Sample Edit screen, press [MENU].**
2. **Use [CURSOR (up/down)] or turn [VALUE] to select the function that you want to execute.**
3. **Press [ENTER].**
   A message will ask you for confirmation.
4. **To execute, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

| | |
|---|---|
| Sample List | View a list of samples (p. 115). |
| Sample Parameter | Make various settings for a sample (p. 116). |
| Load Sample | Load a sample. |
| Load All Sample | Load all samples from the user bank and card bank. |
| Import WAV/AIFF | Import WAV/AIFF files from an external device. |
| Create Patch | Create a patch using a sample (p. 117). |
| Delete Sample File | Completely delete a sample. |
| Erase Sample | Erase a sample from memory. |

## Loading a sample

Here's how a sample that you specify in the sample list (p. 115) can be loaded into memory.

1. **From the menu, choose "Load Sample."**
2. **Press [ENTER].**
   A message will ask you for confirmation.
3. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

## Loading all samples

Here's how all samples in the user bank and card bank can be loaded.

**NOTE**

When you execute Load All Samples, all unsaved samples will be erased.

**NOTE**

If the total size of the data in the user bank and card bank exceeds the size of memory, the samples of the user bank will be loaded first. At this time, as many card bank samples as possible will be loaded, starting from the lowest-numbered sample.

1. **From the menu, choose "Load All Sample."**
2. **Press [ENTER].**
   A message will ask you for confirmation.
3. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

## Importing WAV/AIFF data

Here's how to import an audio file (WAV/AIFF) as a sample.

1. **From the menu, choose "Import WAV/AIFF."**
2. **Press [ENTER].**
3. **Select the sample that you want to import.**

| | |
|---|---|
| [CURSOR (right)] | Display the contents of a folder. |
| [CURSOR (left)] | Return to the folder above. |
| [VALUE] [INC/DEC] [CURSOR (up/down)] | Move the cursor upward or downward. |
| [F1 (User)] | Display the contents of the user area. |
| [F2 (Card)] | Display the contents of the memory card. |
| [F3 (Mark Clear)] | Remove the check mark from the file. |
| [F4 (Mark Set)] | Add a check mark to the file. |
| [F5 (Cancel)] | Return to the previous screen. |
| [F6 (Import)] | Import the checked files. (*1) |
| [SHIFT] + [F3 (Mark Clear All)] | Clear the check marks from all files in the folder. |
| [SHIFT] + [F4 (Mark Set All)] | Add a check mark to all files in the folder. |

*1: If not even check mark is assigned, the operation will be executed on the file selected by the cursor.

4. **Press [F6 (Import Sample)].**
   A message will ask you for confirmation.
5. **To import, press [F6 (Execute)].**
   The file will be loaded as a sample.

* *To cancel, press [F5 (Cancel)].*

## Deleting a sample

Here's how to completely delete a sample file.

1. **From the menu, choose "Delete Sample File."**
2. **Press [ENTER].**
   A message will ask you for confirmation.
3. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

## Erasing a sample

Here's how to erase a sample from memory. The file will not be erased.

1. **From the menu, choose "Erase Sample."**
2. **Press [ENTER].**
   A message will ask you for confirmation.
3. **Press [F6 (Execute)] to execute.**

* *To cancel, press [F5 (Cancel)].*

**MEMO**

In the case of stereo samples, L and R will be loaded/deleted/erased simultaneously.

# Menu

**This section explains the system settings and the utility menu.**

# System

Here you can make settings that affect the entire system, such as those for tuning and synchronization.

1. **Press [MENU].**

2. **Press [CURSOR (up/down)] to select "System."**

   In Pattern mode/Song mode, you can also access this by holding down [SHIFT] and pressing [F5 (System)].


3. **Press [ENTER].**

   The System menu will appear.


4. **Press [F1]–[F6] to select the item that you want to set.**

| | |
|---|---|
| [F1 (Panel/Control)] (Panel/Controller) | Make settings for the panel controllers and the screen. |
| [F2 (Seq/MIDI)] (Sequencer/MIDI) | Make sequencer and MIDI-related settings. |
| [F3 (Sound)] | Specify the tuning and how the sounds are to be produced. |
| [F4 (Sampling)] | Make sampling-related settings. |
| [F5 (D Beam)] | Make D Beam settings. |
| [F6 (System Info)] (System Information) | View the state of the MC-909. |

5. **Press a function button to make further selections.**

6. **Use [CURSOR (up/down)] to select a parameter.**

7. **Use [VALUE] or [INC/DEC] to edit the value.**

   * *Settings made here will revert to their original value as soon as you turn off the power. If you want to keep your settings, press* ***[F6 (System Write)]****.*

8. **When you are finished making settings, press [EXIT].**

   You will return to the System menu.

9. **Press [EXIT] once again to exit the System menu.**

# Panel/Controller

Here you can make settings for the panel controllers and the screen.

| Parameter | Range | Explanation |
|---|---|---|
| **[F1 (Pad Velocity)]** | | |
| Pad Velocity | REAL, 1–127 | Strength of the note when you press a velocity pad<br>If you set this to REAL, you can vary the dynamics of the sound by varying the strength with which you press the pad. |
| **[F2 (TTE/Tap/DB)]** | | |
| TTE Slider Type | TTE, PITCH BEND, MODULATION | Function of the turntable emulation slider<br>**TTE:** Standard turntable emulation<br>**PITCH BEND:** Pitch bender<br>**MODULATION:** Modulation |
| TTE Magnify | -1– +1 – -200– +200 | Variable range of the turntable emulation slider |
| Tap Switch | OFF, ON | Tap button on/off |
| Tap Resolution | QUARTER, 8TH, 16TH | Tap tempo resolution<br>The resolution (note value) to be used when using [TAP] to change the tempo<br>**QUARTER:** Quarter note<br>**8TH:** Eighth note<br>**16TH:** Sixteenth note |
| D Beam ID | 0–3 | When using two or more MC-909 units together, you can specify a different ID for each unit so that the D Beam controllers of the units will not interfere with each other. |
| D Beam Sens L<br>D Beam Sens R | 0–127 | Sensitivity of the D Beam controllers<br>The sensitivity of the D Beam controller will change depending on the amount of light in the vicinity of the unit. If it does not function as you expect, adjust the sensitivity as appropriate for the brightness of your location. Increasing this value will raise the sensitivity. |
| **[F3 (Screen Saver)]** | | |
| Screen Saver Type | 1–10 | Type of screen saver |
| Screen Saver Time | OFF, 5–60 min | Time (minutes) until the screen saver begins working<br>If this is OFF, the screen saver will not appear. |
| **[F4 (Back Ground)]** | | |
| Back Ground Picture | 1–10 | File that is to be displayed as the screen background<br>Press [F5 (Import BMP)], and load a bitmap file from the TMP/BMP folder within USER/CARD. |

# Sequencer/MIDI

Here you can specify how the sequencer will operate, and make MIDI-related settings.

| Parameter | Range | Explanation |
|---|---|---|
| **[F1 (Seq Sync)]** | | |
| Sync Mode | MASTER, REMOTE, SLAVE | Specifies how the internal sequencer will operate and how MIDI Clock messages will be transmitted and received.<br>**MASTER:** The internal sequencer will synchronize to the internal tempo clock. Any MIDI Clock messages received from an external device will be ignored.<br>**REMOTE:** Operation will be essentially the same as "MASTER." However, Start/Stop messages from the external MIDI device will control playback/stop for the internal sequencer.<br>**SLAVE:** The internal sequencer will synchronize to MIDI Clock messages received from an external device. If no MIDI Clock messages are being received, pattern/song playback will not occur even if you press the [PLAY] button. |
| Sync Output | OFF, ON | Determines whether synchronization-related MIDI messages will be transmitted.<br>**OFF:** Messages will not be transmitted.<br>**ON:** The following messages will be transmitted from the MIDI OUT connector.<br>• Timing Clock: F8<br>• Start: FA<br>• Continue: FB<br>• Stop: FC<br>• Song Position Pointer: F2 |
| Arpeggio Sync Mode | OFF, MODE1, MODE2 | Specifies how the arpeggio start timing will be synchronized to the pattern.<br>**OFF:** The start timing will not synchronize.<br>**MODE1:** When a pattern plays, the arpeggio will start in synchronization. When the pattern stops, the arpeggio will also stop.<br>**MODE2:** In addition to the operation of MODE1, the arpeggio will start at the beginning of the next measure of the currently-playing pattern.<br>* If the pattern is stopped, the arpeggio will start immediately, regardless of which of the above settings is selected. |

| Parameter | Range | Explanation |
|---|---|---|
| RPS Trigger Quantize | REAL, 16TH, 8TH, QUARTER, MEASURE | When using RPS during pattern playback, patterns and phrases may not play back in precise alignment, depending on the timing at which you press the velocity pads. On the MC-909 you can specify the playback timing of the phrase, so it will play back in precise synchronization with the pattern.<br>**REAL:** The phrase will play back immediately, at the timing at which you pressed velocity pads.<br>**16TH, 8TH, QUARTER:** The pattern will be divided into selected note units, and when you press the velocity pads, the phrase will begin playing at the beginning of the next note unit.<br>**MEASURE:** The pattern will be divided into one-measure units, and when you press the velocity pads, the phrase will begin playing at the beginning of the next measure. |
| BPM Lock | OFF, ON | Specifies how the tempo will change when patterns are played back consecutively.<br>**OFF:** When the pattern changes, the tempo will change at the same time.<br>**ON:** The tempo of the first-played pattern will continue even when the pattern changes. |
| **[F2 (Song/Pattern)]** | | |
| Song Loop Mode | OFF, LOOP1, LOOP2 | Specifies how songs will be played back.<br>**OFF:** The currently selected song will be played back only once.<br>**LOOP1:** The currently selected song will be played back repeatedly.<br>**LOOP2:** All songs will be played back repeatedly in sequence.<br>* When using "LOOP2" to playback a song, we recommend that a pattern which mutes all parts (i.e., a silent pattern) be inserted at the end of the song, so that songs are joined smoothly. |
| Song Play Mode | MODE1, MODE2 | Specifies whether or not the pattern setup parameters will be loaded when you move to the next step of the song.<br>**MODE1:** The setup parameters, mute, and realtime modify settings will be loaded each time you move to the next step.<br>**MODE2:** Setup parameters, mute, and realtime modify will be maintained during playback only if the next step plays a pattern that is the same as the currently playing pattern. |
| Song Step Switch | AUTO, MANUAL | Specifies whether playback will automatically advance to the next step of the song.<br>**AUTO:** Automatically advance to the next step.<br>**MANUAL:** Advance to the next step if in Song mode you press [F1 (Next Step)] to display the "✔" mark. |
| Startup Ptn Mode | LAST WRITTEN, USER DEFINABLE | Specifies how the pattern will be selected at power-on.<br>**LAST WRITTEN:** The pattern that was most recently written prior to the last power-off will be selected.<br>**USER DEFINABLE:** The pattern specified by the following parameters will be selected. |
| Startup Ptn Bank | Preset, User, Card | The pattern that will be selected at power-on |
| Startup Ptn Number | 001–***<br>* Depends on the bank. | |
| **[F3 (MIDI Tx)]** | | |
| Transmit Program Change | OFF, ON | Specifies whether or not program changes will be transmitted from MIDI OUT when the patch of each part is changed. When this setting is "OFF," program changes will not be transmitted. |
| Transmit Bank Select | OFF, ON | Specifies whether or not bank select messages will be transmitted from MIDI OUT when the patch of each part is changed. When this setting is "OFF," bank select messages will not be transmitted. |
| Transmit Active Sensing | OFF, ON | Specifies whether or not bank select messages will be transmitted from MIDI OUT when the patch of each part is changed. When this setting is "OFF," bank select messages will not be transmitted. |
| Transmit Patch Edit Type | TYPE-QUICK, TYPE-CC | Specifies the type of MIDI message that will be used to communicate with external devices when the panel knobs are moved.<br>**TYPE-QUICK:** Knob/slider data will be transmitted and received as control changes and as system exclusive data.<br>**TYPE-CC:** Knob/slider data will be transmitted and received as control changes. The amount of data will be smaller than for TYPE-QUICK. |
| Transmit Edit Data | OFF, ON | Specifies whether the modified settings will be transmitted as System Exclusive data (ON), or not (OFF). |
| Soft Through | OFF, ON | Specifies whether or not MIDI messages received at the MIDI IN will be re-transmitted without change from the MIDI OUT.When this setting is "OFF," MIDI messages received at the MIDI IN will not be re-transmitted. |
| **[F4 (MIDI Rx)]** | | |
| Remote Keyboard Switch | OFF, ON | Set this parameter "ON" when you want to use an external MIDI keyboard instead of the MC-909's velocity pads.<br>* This parameter is set to "ON' with the factory settings, enabling patches in the part selected on the MC-909 to be played back regardless of the transmission channels of the external MIDI keyboard.<br>* Set it to "OFF" to control the MC-909 from an external sequencer, as a multi-timbre sound generator with sixteen parts. Patches can be played back by part, according to the channel used for sending MIDI data from the external sequencer. |

| Parameter | Range | Explanation |
|---|---|---|
| Device ID | 17–32 | Device ID number of a systemexclusive message on the MC-909<br>A system exclusive message can only be received if the device number included in the message matches the device ID number set up on the receiving MIDI equipment. Using this function enables different System Exclusive messages to be received by more than one MC-909 unit at the same time.<br>* At the factory settings, the device ID number is set to "17." |
| Receive Program Change | OFF, ON | Specifies whether or not each part will receive program changes. When this is "OFF," program changes will not be received. |
| Receive Bank Select | OFF, ON | Specifies whether or not each part will receive bank select messages. When this is "OFF," bank select messages will not be received. |
| Receive Exclusive | OFF, ON | Specifies whether or not each part will receive system exclusive messages. When this setting is "OFF," system exclusive messages will not be received. |

# Sound

Here you can specify the tuning and how the sound is to be produced.

| Parameter | Range | Explanation |
|---|---|---|
| **[F1 (Sound/Tune)]** | | |
| Master Tune | 415.3–466.2 Hz | Adjusts the overall tuning of the MC-909.<br>The setting expressed as the frequency played by the A4. |
| Master Level | 0–127 | Adjusts the volume of the entire MC-909. |
| Output Gain | -12– +12 dB | Adjusts the output gain from the MC-909's Analog Out and Digital Out. |
| Metronome Level | 0–10 | Adjusts the volume of the metronome. |
| Master Key Shift | -24– +24 | Shifts the overall pitch of the MC-909. |
| Patch Remain | OFF, ON | Specifies whether currently sounding notes will continue sounding when another patch or rhythm set is selected (ON), or not (OFF). |
| **[F2 (Sound Control)]** | | |
| Rhythm Octave Switch | OFF, ON | Specifies the [OCT +/-] buttons will have effect when a rhythm set is assigned to current part (ON), or not (OFF). |
| Resonance Limiter | 50–127 | Specifies the range in which the [RESONANCE] knob can be adjusted.<br>As this setting is increased, the variable range of the [RESNANCE] knob will increase. |
| LFO Morphing Switch | OFF, ON | Specifies whether LFO1 Waveform will be modified smoothly by the knob (ON) or not (OFF). |

# Sampling

Here you can make sampling-related settings.

| Parameter | Range | Explanation |
|---|---|---|
| **[F1 (Sampling)]** | | |
| Default File Type | WAV, AIFF | File format used when saving a sample |
| Preset Default Load | OFF, ON | Specifies whether the preset samples will be loaded into memory at power-on (ON) or not (OFF). |
| Sample Default Load | OFF, ON | Specifies whether the samples of the user area and memory card will be loaded into memory at power-on (ON) or not (OFF). |
| Pre Sample Time | 0–1000 ms | The length of sound preceding the moment at which sampling was manually or automatically initiated that will be captured in the sample<br>This lets you prevent the attack portion of the sound from being omitted from the sample. |
| Trigger Level | 0–7 | Volume level at which sampling will begin when Auto Trig is ON<br>A setting of 0 is the minimum. |
| Gap Time | 500, 1000, 1500, 2000 ms | Length of silence at which the sample will be divided<br>Whenever there is a silent region longer than the specified time, the sample will be divided at that point, and the next sample number will be assigned to the sound that follows.<br>* This parameter is valid only when you are using Auto Divide Sampling. |
| External Source Select | LINE-L-R, LINE-L, DIGI-OPT, DIGI-COAX, MIC | Input source of the external input sound<br>**LINE-L-R:** INPUT jacks L/R (stereo)<br>**LINE-L:** INPUT jack L (mono)<br>**DIGI-OPT:** Digital Input (Optical)<br>**DIGI-COAX:** Digital Input (Coaxial)<br>**MIC:** INPUT jack (mono, mic level) |
| Trimming Switch | OFF, ON | If this is turned on, the Start point and End point settings will be automatically adjusted after sampling is performed, so any silent portions at the beginning or end of the sampled sound are excluded. |

# D Beam

Here you can make settings for the D Beam controller.

| Parameter | Range | Explanation |
|---|---|---|
| **[F1 (Solo Synth)]** | | |
| Solo Synth Patch Bank<br>Solo Synth Patch No. | Refer to Patch List (p. 151) | Patch played by the solo synth |
| Solo Synth Note | 0 (C-1)–127 (G9) | Reference note for the solo synth |
| Solo Synth Scale | FREE, CHROMATIC | Scale on/off<br>**FREE:** Continuous (no steps)<br>**CHROMATIC:** Semitone steps |
| Solo Synth Range | 2OCTAVE, 4OCTAVE | Range of the solo synth |
| **[F2 (Cut+Reso)]** | | |
| Cutoff Range Lower | 0–127 | Filter cutoff frequency when you move your hand away from the D Beam |
| Cutoff Range Upper | 0–127 | Filter cutoff frequency when you move your hand near the D Beam |
| Resonance Range Lower | 0–127 | Filter resonance when you move your hand away from the D Beam |
| Resonance Range Upper | 0–127 | Filter resonance when you move your hand near the D Beam |
| **[F3 (Turntable)]** | | |
| Turntable BPM Type | DOWN, UP | How the tempo will change when you move your hand near the D Beam<br>**DOWN:** The tempo will slow down as you move your hand nearer.<br>**UP:** The tempo will speed up as you move your hand nearer. |
| Turntable Pitch Type | DOWN, UP | How the pitch will change when you move your hand near the D Beam<br>**DOWN:** The pitch will fall as you move your hand nearer.<br>**UP:** The pitch will rise as you move your hand nearer. |
| **[F4 (User Assign)]** | | |
| Type | Control Change, Bend Up, Bend Down, Bend Up/Down, Ch Aftertouch, Start/Stop, Glissando, Adlib, Arp Octave Up, Arp Octave Down, Arp Octave Both, Arp Duration, BPM Up, BPM Down, Pitch UP, Pitch Down, Effects C1, Effects C2, All Mute | Parameter that will be controlled by the D Beam |
| Number | CC#1–CC#31, CC#33–CC#95 | Control change number<br>This can be set only if Type is set to "Control Change." |
| Range Lower | 0–127 | Value of the parameter when you move your hand away |
| Range Upper | 0–127 | Value of the parameter when you move your hand nearer |

# System Information

Here you can view the state of the MC-909.

Press [F6 (Close)] to return to the System menu screen.

- [F1 (Features)]
  Displays the main features of the MC-909.
- [F2 (Memory Info)]
  Displays the amount of memory installed.
- [F3 (SRX Exp Info)]
  Displays the name of the wave expansion board that is installed.
- [F4 (Version)]
  Displays the version of the internal program.

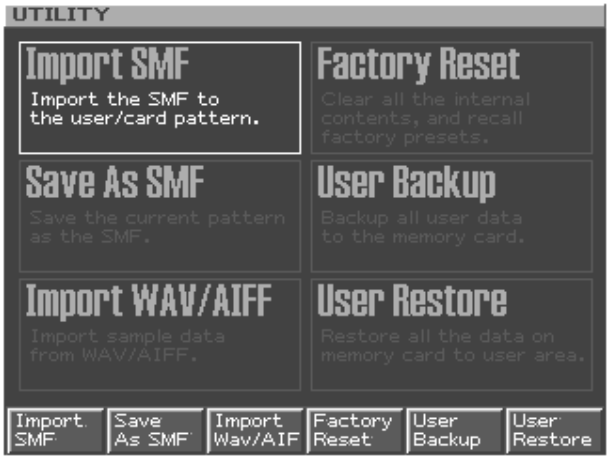
# Utility

Here you can manage various types of data.

1. **Press [MENU].**
2. **Use [CURSOR (up/down)] to select "Utility."**


3. **Press [ENTER].**

   The Utility menu screen will appear.




4. **Press [F1]–[F6] to select the operation that you want to execute.**

| | |
|---|---|
| [F1 (Import SMF)] | Load SMF data into a user pattern or memory card (p. 131). |
| [F2 (Save As SMF)] | Save the data of the current pattern in SMF format (p. 132). |
| [F3 (Import WAV/AIFF)] | Import sample data from a WAV/AIFF file (p. 132). |
| [F4 (Factory Reset)] | Restore the factory settings (p. 20). |
| [F5 (User Backup)] | Save user data to a memory card (p. 132). |
| [F6 (User Restore)] | Load user data from a memory card (p. 132). |

## Import SMF

Here's how to load SMF pattern data, and write it to a user pattern or memory card.

The MC-909 supports SMF formats 0 and 1.

NOTE

If the write-destination user pattern contains data, that data will be replaced by the data that is written.

1. **In the Utility menu screen, press [F1 (Import SMF)].**
2. **Select the SMF that you want to import.**

| | |
|---|---|
| [F1 (User)] | Display the contents of the user area. |
| [F2 (Card)] | Display the contents of the memory card. |
| [F5 (Cancel)] | Return to the previous screen. |
| [F6 (Import)] | Import the selected file. |
| [CURSOR (right)] | Display the contents of a folder. |
| [CURSOR (left)] | Return to the folder above. |
| [VALUE] [INC/DEC] [CURSOR (up/down)] | Move the cursor upward or downward. |

3. **Press [F6 (Import)].**

   A screen in which you can specify the write destination will appear.

4. **Use [CURSOR (left/right)] to specify the type of destination—either a user pattern or a memory card.**
5. **Use the [VALUE] dial, [INC/DEC], or [CURSOR (up/down)] to select the write-destination pattern.**
6. **Press [F6 (Write)].**

   A message will ask you for confirmation.

7. **To write the data, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

### Cautions when importing SMF

- Files with settings not supported by the MC-909's sequencer cannot be imported.
- SMF data created with multiple channels can not be imported correctly in some cases.
- Level data and program changes located earlier than the note data will be imported as setup data.
- On the MC-909, the channel number corresponds to the part number; e.g., channel 1 = part 1. Thus, data created on channel 1 will be imported into part 1.
- Setup data located earlier than the note data will be reflected in the Mixer screen as pattern setup data. Also, the first note message will be imported as the first beat of the first measure. If you import data that does not begin at the beginning of the first measure, use the pattern edit operation Shift Clock to move it.

**<Setup Data>**

- Program Change (PC)
- Bank Select (CC#0, CC#32)
- Level (CC#7)
- Pan (CC#10)
- Key Shift (CC#85)
- Reverb Send Level (CC#91)
- Various Effects (System Exclusive)

# Save As SMF

Here's how to write the data of the current pattern to user memory or memory card as SMF data.
Format 1 SMF data will be created.

1. **In Pattern mode, select the pattern that you want to save as SMF data.**
2. **In the Utility menu screen, press [F2 (Save As SMF)].**
3. **Select the destination in which the SMF data is to be saved.**
   For details on the selection procedure, refer to "Import SMF" (p. 131).
4. **Press [F6 (Save As SMF)].**
   A message will ask you for confirmation.
5. **To save the data, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# Import WAV/AIFF

Here's how to import a sample file (WAV/AIFF) as a user sample.

1. **In the Utility screen, press [F3 (Import WAV/AIF)].**
2. **Select the sample that you want to import.**

| | |
|---|---|
| [CURSOR (right)] | Display the contents of a folder. |
| [CURSOR (left)] | Return to the folder above. |
| [VALUE] [INC/DEC]<br>[CURSOR (up/down)] | Move the cursor upward or downward. |
| [F1 (User)] | Display the contents of the user area. |
| [F2 (Card)] | Display the contents of the memory card. |
| [F3 (Mark Clear)] | Remove the check mark from the file. |
| [F4 (Mark Set)] | Add a check mark to the file. |
| [F5 (Cancel)] | Return to the previous screen. |
| [F6 (Import)] | Import the checked files. (*1) |
| [SHIFT] +<br>[F3 (Mark Clear All)] | Clear the check marks from all files in the folder. |
| [SHIFT] +<br>[F4 (Mark Set All)] | Add a check mark to all files in the folder. |

*1: If not even check mark is assigned, the operation will be executed on the file selected by the cursor.

3. **Press [F6 (Import)].**
   A message will ask you for confirmation.
4. **To import the sample, press [F6 (Execute)].**
   The data will be loaded into a user sample.

* *To cancel, press [F5 (Cancel)].*

# Factory Reset

You can restore the settings of the MC-909 to their factory-set condition.
Refer to p. 20.

# User Backup

Here's how all user data in the user area can be saved on a memory card.
The following user data will be saved.

- User Patterns
- User Patches
- User Rhythm sets
- Songs
- Samples
- Pattern sets
- RPS sets
- Arpeggio styles
- Chord forms
- System settings

MEMO
In order to execute User Backup, the memory card must have approximately 16 MB or more free area.

1. **Insert a memory card into the slot.**
2. **In the Utility screen, press [F5 (User Backup)].**
   A message will ask you for confirmation.
3. **To execute the backup, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# User Restore

Here's how user data saved on a memory card by the User Backup operation can be reloaded back into the user memory of the MC-909.

NOTE
When you execute User Restore, the current contents of the user area will be completely erased.

1. **Into the slot, insert the memory card on which user data has been saved.**
2. **In the Utility screen, press [F6 (User Restore)].**
   A message will ask you for confirmation.
3. **To proceed with the restoration, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# MIDI

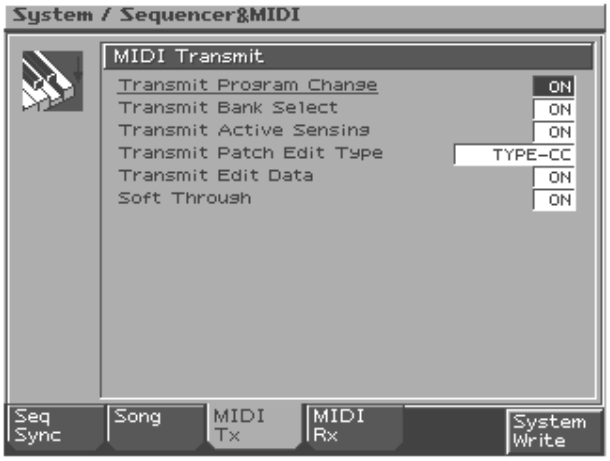
Here you can make MIDI-related settings.

1. **Press [MENU].**
2. **Use [CURSOR (up/down)] to select “MIDI.”**


3. **Press [ENTER].**

   The MIDI Tx screen will appear.

   For details on the settings, refer to p. 128.



# File Utility

Here you can perform file-handling operations.

1. **Press [MENU].**
2. **Use [CURSOR (up/down)] to select "File Utility."**


3. **Press [ENTER].**

   The File Utility screen will appear.


4. **Use [F3]–[F6] to select the operation you want to carry out.**

| | |
|---|---|
| [CURSOR (right)] | Display the contents of a folder. |
| [CURSOR (left)] | Return to the folder above. |
| [VALUE] [INC/DEC] [CURSOR (up/down)] | Move the cursor upward or downward. |
| [F1 (User)] | Display the contents of the user area. |
| [F2 (Card)] | Display the contents of the memory card. |
| [F3 (Card Format)] | Format (initialize) a memory card. |
| [F4 (Mark Clear)] | Remove the check mark from the file. |
| [F5 (Mark Set)] | Add a check mark to the file. |
| [F6 (Move)] | Move the checked files to another folder. (*1) |
| [SHIFT] + [F3 (Delete)] | Delete the checked files. (*1) |
| [SHIFT] + [F4 (Mark Clear All)] | Clear the check marks from all files in the folder. |
| [SHIFT] + [F5 (Mark Set All)] | Add a check mark to all files in the folder. |
| [SHIFT] + [F6 (Copy)] | Copy the checked files to another folder. (*1) |

*1: If not even check mark is assigned, the operation will be executed on the file selected by the cursor.

* *About the folder structure, refer to p. 135*

## Initializing a memory card (Format)

Here's how to initialize a memory card.

**NOTE**

When you execute the Format operation, the contents of the memory card will be completely erased.

1. **Press [F3 (Format)].**

   A message will ask you for confirmation.

2. **To format the card, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

## Deleting a file (Delete)

Here's how you can delete an unwanted file from a folder.

1. **Select the file that you want to delete.**
2. **Press [F4 (Delete)].**

   A message will ask you for confirmation.

3. **To delete the file, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

## Moving a file (Move)

Here's how you can move a file to a different folder.

1. **Select the file that you want to move.**
2. **Press [F5 (Move)].**

   A screen will appear, allowing you to select the folder to which the file is to be moved.

3. **View the contents of the move-destination folder.**
4. **To move the file, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

## Copying a file

Here's how you can copy a file to a different folder.

1. **Select the file that you want to copy.**
2. **Press [F6 (Copy)].**

   A screen will appear, allowing you to select the folder to which the file is to be copied.

3. **View the contents of the copy-destination folder.**
4. **To copy the file, press [F6 (Execute)].**

* *To cancel, press [F5 (Cancel)].*

# USB

Here's how USB communication with your computer can be switched on/off.

USB communication allows files in the user area or memory card of the MC-909 to be handled by your computer.

**NOTE**

USB communication with the MC-909 is possible only for Windows Me/2000/XP or later (Windows users), or Mac OS 9.04 or later (Macintosh users).

**NOTE**

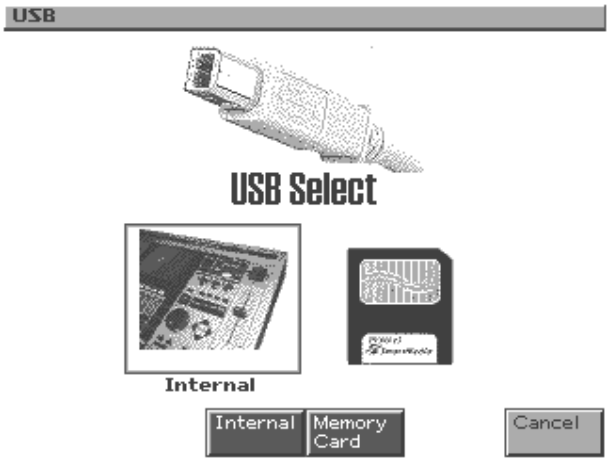
Connect or disconnect the USB cable only when the MC-909 is powered-off. Never connect or disconnect the USB cable or turn off the power while in USB mode or while data is being transferred.

## USB communication procedure

* *Before you continue, you must use a USB cable to connect the MC-909 with your computer.*

1. **Press [MENU].**
2. **Press [CURSOR (up/down)] to select "USB."**
3. **Press [ENTER].**

   The USB screen will appear.




4. **Press [F3 (Internal)] or [F4 (Memory Card)] to establish the connection with your computer.**

- [F3 (Internal)]: Connect to the user memory.
- [F4 (Memory Card)]: Connect to the memory card.

* *To cancel the connection, press [F6 (Cancel)].*

### Windows Me/2000/XP users

A drive named "Removable disk" will be displayed within My Computer.

This drive will contain a folder named "ROLAND."

### Macintosh users

A drive icon named "MC-909 USER" will appear on the desktop.

This will contain a folder named "ROLAND."

## Canceling USB communication

### Windows Me/2000/XP users

1. **Use the device eject button shown in the taskbar at the lower right of the screen to cancel the connection with the MC-909.**
2. **Then press [F6 (Exit)] on the MC-909.**

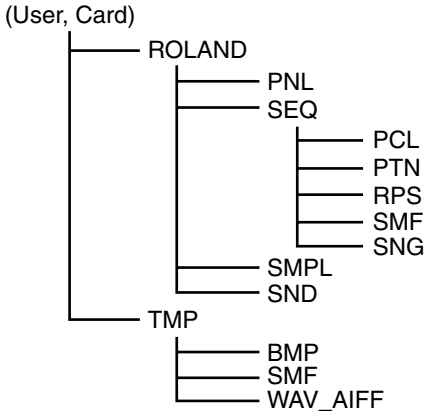
### Macintosh users

1. **Drag the MC-909 drive icon into the trash.**
2. **Then press [F6 (Exit)] on the MC-909.**

**IMPORTANT!**

## Cautions Regarding Folders and Files

The folder structure of the user area and memory card is as follows.




**NOTE**

Do not modify the folder structure from a computer that is connected to the MC-909 via USB.

The only files that can be transferred between the MC-909 and your computer are audio files (WAV/AIFF formats), Standard MIDI Files (SMF format 1), and bitmaps (320 x 240 pixels). Do not place any other format of file in the user area or memory card.

* *The MC-909 can only handle filenames that consist of single-byte, alphanumeric characters.*

When placing files from a USB-connected computer into the MC-909's user area or memory card, make sure to place them in the relevant folders inside the TMP folder.

- Bitmaps BMP folder
- SMFs SMF folder
- Audio files WAV_AIFF folder

**NOTE**

Do not use your computer to move/delete the files located within the ROLAND folder of the user area. Also, do not use your computer to format or optimize the user area.

# Undo/Redo

Here's how you can cancel the results of editing or recording a pattern or song.

1. **Press [MENU].**
2. **Use [CURSOR (up/down)] to select "Undo/Redo."**
   The object of the Undo command will be displayed. For example if you are undoing a Microscope operation, the display will indicate "Undo Microscope."
3. **To execute, press [F6 (Execute)].**

* *To cancel, press [F6 (Cancel)].*

**NOTE**

Undo can be executed for a pattern (pattern editing, microscope, and recording) or a song (song editing and song recording). Undo cannot be used for sample editing or patch editing.

**MEMO**

After executing Undo, you can use Redo to revert to the previous state. After executing Undo, you can execute Redo by performing the above procedure once again.

# V-LINK

# About V-LINK

## What is V-LINK?

V-LINK ( V-LINK ) is a function that provides for the play of music and visual material. By using V-LINK-compatible video equipment, visual effects can be easily linked to, and made part of the expressive elements of a performance.

**(Examples)**

By using the MC-909 and Edirol DV-7PR together, you can:

- Make Edirol DV-7PR playback settings remotely from the MC-909.
- Use the MC-909's sequencer to enjoy synchronized music and video.
- Use the MC-909's velocity pads to switch the Edirol DV-7PR's images (clips/palettes).
- Use the MC-909's knobs to adjust the brightness or color of the image.
- Use the MC-909's turntable emulation to control the video playback speed along with the music playback speed.

* *In order to use V-LINK with the MC-909 and Edirol DV-7PR, you will need to make connections using an Edirol UM1/UM-1S (sold separately).*

By using the MC-909 and Edirol V-4 together, you can:

- Make settings for remotely controlling the V-4 from the MC-909.
- Use the MC-909's sequencer to switch images on the V-4, creating video performances with synchronized music.
- Use the MC-909's velocity pads to control the V-4's input selector, switching between images from various source devices.
- Use the MC-909's knobs to specify the time for transition effects (e.g., overlap or wipe).

* *In order to use V-LINK with the MC-909 and Edirol V-4, you will need a commercially-available MIDI cable.*

## Connection examples

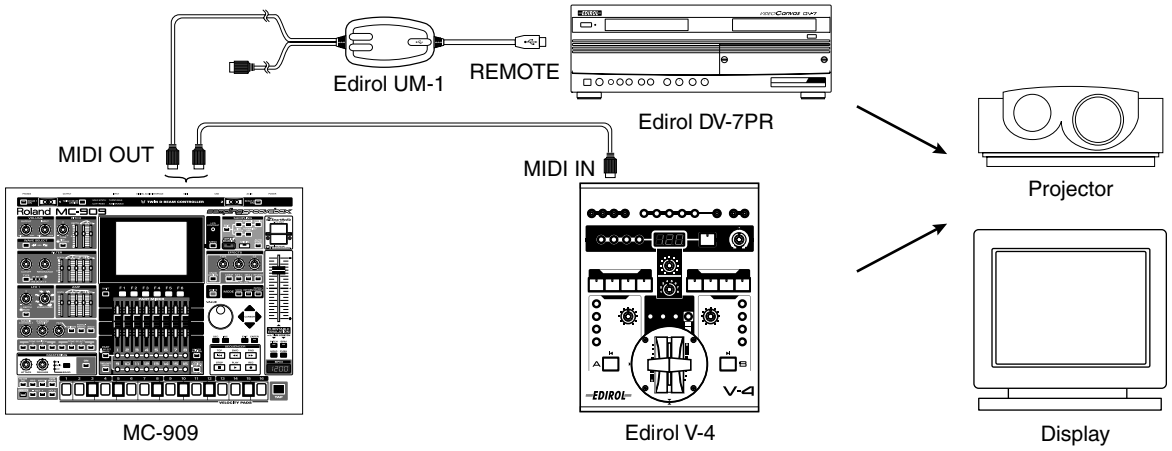
* *Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.*

**Connection to Edirol DV-7PR**

Use a UM-1 to connect the MC-909's MIDI OUT connector to the DV-7PR's remote jack.

**Connection to Edirol V-4**

Use a commercially-available MIDI cable to connect the MC-909's MIDI OUT connector to the Edirol V-4's MIDI IN connector.




## Using V-LINK

### Turning V-LINK on

1. **In the lower left of the panel, press [V-LINK] so the indicator is lighted.**

   The V-LINK SETUP screen will appear.

2. **Press [F6 (Close)] or [EXIT].**

   The [V-LINK] indicator will remain lit, and you're returned to the previous screen.

In this state, you can operate the velocity pads and turntable emulation slider to manipulate images in sync with the playback of the MC-909.

MEMO

Even when V-LINK is on, the panel will operate in the same way as usual for Pattern mode (p. 22), Patch/Sample mode (p. 52), and Song mode (p. 80).

### Turning V-LINK off

1. **Press [V-LINK] to access the V-LINK SETUP screen.**

2. **Press [V-LINK] again.**

   The [V-LINK] indicator goes out, and you're returned to the previous screen.

NOTE

You cannot turn V-LINK off from a screen other than the V-LINK SETUP screen.

# V-LINK settings

| Parameter | Range | Explanation |
|---|---|---|
| Note Tx Ch | 1–16 | MIDI channel that will switch Edirol DV-7PR clips/palettes and will control dissolve time. |
| Clip 1 Note No. | 0(C-1)–127(G9) | Note number (velocity pad) that corresponds to Edirol DV-7PR clip 1<br>If this is set to 59 (B3), velocity pads 1–16 will correspond to clips 1–16. |
| Play Speed Ctrl | 0.0–1.0–2.0, 0.5–1.0–2.0, 0.0–1.0–4.0, 0.5–1.0–4.0, 0.0–1.0–8.0, 0.5–1.0–8.0, 0.0–1.0–16.0, 0.5–1.0–16.0, 0.0–1.0–32.0, 0.5–1.0–32.0, 0.0–2.0–4.0, 0.0–4.0–8.0, 0.0–8.0–16.0, 0.0–16.0–32.0, -2.0–1.0–4.0, -6.0–1.0–8.0 | Range of video playback speed<br>The three values are the playback speeds (multiples of normal speed) at the negative, center, and positive positions of the turntable emulation slider. |
| Dissolve Time | OFF, CC1, CC5, CC7, CC10, CC11, CC71–74, CC91–93, Channel Aftertouch | Control change number that controls the dissolve time (time over which the image switches) |
| Ctrl Tx Ch | 1–16 | MIDI channel that will control the Edirol DV-7PR color Cb/Cr, brightness, and video effect switching |
| Color Cb Ctrl | OFF, CC1, CC5, CC7, CC10, CC11, CC71–74, CC91–93, Channel Aftertouch | Control change number that controls the Cb color of the image |
| Color Cr Ctrl | | Control change number that controls the Cr color of the image |
| Brightness Ctrl | | Control change number that controls the brightness of the image |
| VFX1–4 Ctrl | | Control change number that controls the video effect<br>* VFX2–4 are not supported by the Edirol DV-7PR. |
| Fade Ctrl | | Control change number that controls the output fade |
| PAD MODE | CLIP, PALETTE | Selects whether the velocity pads will switch clips or palettes.<br>**Press [F1 (Clip mode)]:** switch clips<br>**Press [F2 (Palette)]:** switch palettes |
| Local Sw | OFF, ON | Specifies whether the internal sound generator is disconnected (OFF) from the velocity pads, or not (OFF). |
| Clip filter (check boxes 1–32) | (OFF), ✔ (ON) | Enable/disable switching for each clip<br>Clips that are checked can be switched (see explanatory box below) |

## Using the Clip Filter

For example, suppose that of the rhythm set you input in the part used for V-LINK (i.e., the part of the same number as the Note Tx Channel), you want only the kick and snare to switch clips. In this case, check only the clips that correspond to the note numbers of the kick and snare. The clips will switch when the kick or snare plays.

## Resetting the image

| | |
|---|---|
| [F3 (Clip Reset)] | Turn off the image (solid black). |
| [F4 (All Reset)] | The effect applied to the image will be reset, and brightness, color difference, etc. will all return to the default value. |

* *For details on clips/palettes, dissolve time, color difference signals (Cb/Cr), refer to the Edirol DV-7PR manual.*

**NOTE**

The MC-909 does not support the Edirol DV-7PR's dual stream mode.

# MEMO

# Appendices

# Installing the Wave Expansion Board

An optional Wave Expansion Board (SRX series) can be installed in the MC-909.

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 MC-909.

## Cautions When Installing a 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.
  - Save the bag in which the board was originally shipped, and put the board back into it whenever you need to store or transport it.
- Use a Philips screwdriver that is suitable for the size of the screw (a number 2 screwdriver). If an unsuitable screwdriver is used, the head of the screw may be stripped.
- To remove a screw, rotate the screwdriver counter-clockwise. To tighten the screws, rotate the screwdriver clockwise.

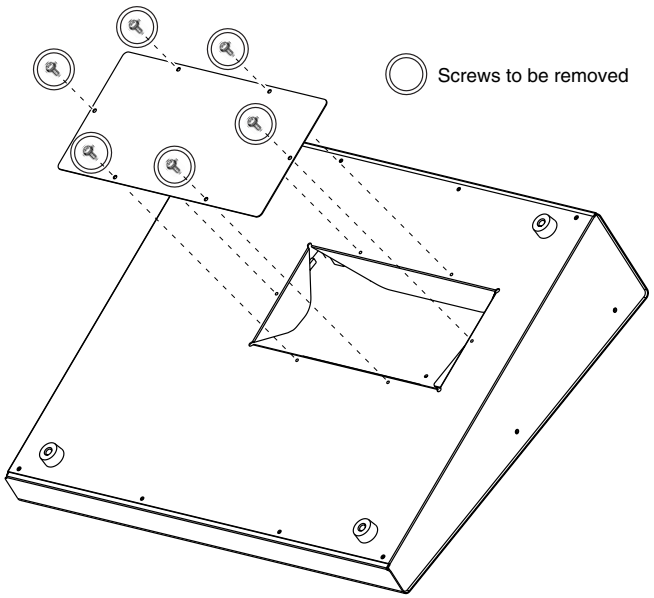

- Be careful that the screws you remove do not drop into the interior of the MC-909.
- Be careful not to cut your hand on the edge of the cover or the opening edge while removing the cover.
- Do not touch any of the printed circuit pathways or connection terminals.
- Never use excessive force when installing 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.
- Always turn the unit off and unplug the power cord before attempting installation of the circuit board (SRX series; Quick Start p. 2).
- Install only the specified circuit board (SRX series). Remove only the specified screws (p. 142).
- 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.
- Do not leave the bottom cover removed. After installation of the Wave Expansion Board is complete, be sure to replace the cover.

## How to Install a Wave Expansion Board

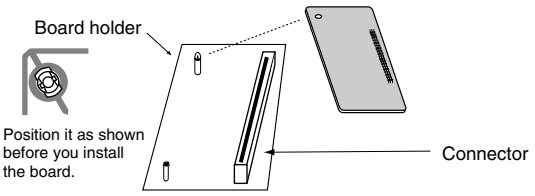
Install the Wave Expansion Board after removing the bottom panel cover.

**1.** Before installing the Wave Expansion Board, turn off the power of the MC-909 and all connected devices, and disconnect all cables, including the Power cable, from the MC-909.

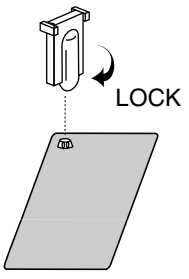
**2.** Turn the MC-909 over, remove the screws indicated in the following diagram, and remove the cover.




**3.** Plug the connector of the Wave Expansion Board into the connector on the unit, and at the same time insert the board holder through the hole of the Wave Expansion Board.




**4.** Use the Installation Tool supplied with the Wave Expansion Board to turn the holder 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 that a wave expansion board is installed correctly

1. Turn on the power as described in "Turning On/Off the Power" (p. 16).
2. Press [MENU].
3. Use [CURSOR] to select [System].
4. Press [ENTER] to access the System Menu screen.


5. Press [F6 (System Info)].
6. Press [F3 (SRX Exp Info)].
   Verify that the screen shows the model number of the wave expansion board you installed.
7. Press [F6 (Close)] to return to the System Menu screen.
8. Press [EXIT] to exit the System Menu screen.

**NOTE**

If the model number of the board does not appear, it is possible that the wave expansion board is not being recognized properly. Turn off the power as described in "Turning On/Off the Power" (p. 16), and re-install the wave expansion board correctly.

**NOTE**

- If SRX-01 "Dynamic Drum Kits" or SRX-02 "Concert Piano" is installed, only the waves can be used. The patches/rhythm sets cannot be used.
- When using the rhythm sets included on an expansion board, the rhythm tones for the sixteen keys from note numbers 35 (B1) through 50 (D3) will correspond to velocity pad 1 (59: B3) through pad 16 (74: D5).
- For some of the patches/rhythm sets included on an expansion board, pitch-related settings and FXM-related settings (p. 57, p. 71) will be ignored.

# Installation de la carte d'extension Wave

**(French Language for Canadian Safety Standard)**

French language
for Canadian Safety Standard

Une carte d'expansion Wave (modèle SRX) optionnelle peut être installée dans le MC-909.

Les données Waveform, les retouches et les groupes de rythme sont stockés sur la carte d'expansion Wave; vous pouvez donc augmenter le nombre de sons disponibles en installant la carte dans le MC-909.

## Précautions à prendre lors de l'installation d'une carte d'expansion Wave

- Veuillez suivre attentivement les instructions suivantes quand vous manipulez la carte afin d'éviter tout risque d'endommagement des pièces internes par l'électricité statique.
  - Toujours toucher un objet métallique relié à la terre (comme un tuyau par exemple) avant de manipuler la carte pour vous décharger de l'électricité statique que vous auriez pu accumuler.
  - Lorsque vous manipulez la carte, la tenir par les côtés. Évitez de toucher aux composants ou aux connecteurs.
  - Conservez le sachet d'origine dans lequel était la carte lors de l'envoi et remettez la carte dedans si vous devez la ranger ou la transporter.
- Utilisez un tournevis de type Philips de la taille adaptée à celle des vis (tournevis numéro 2). Un tournevis inadéquat peut endommager la tête de la vis.
- Pour retirer une vis, tourner le tournevis dans le sens contraire des aiguilles d'une montre. Pour serrer les vis, tourner le tournevis dans le sens des aiguilles d'une montre.

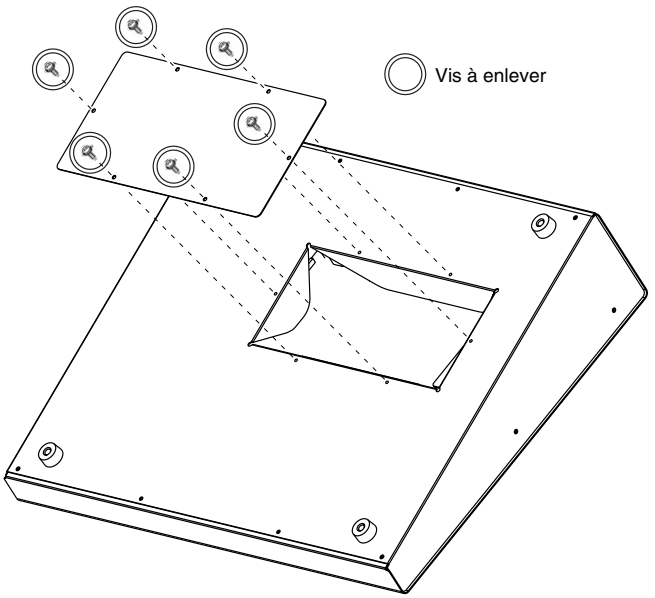

- Assurez-vous que les vis que vous retirez ne tombent pas à l'intérieur du MC-909.
- Faites attention de ne pas vous couper sur le bord du couvercle ou de l'ouverture lorsque vous retirez le couvercle.
- Ne pas toucher aux circuits imprimés ou aux connecteurs.
- Ne jamais forcer lors de l'installation de la carte de circuits imprimés. Si la carte s'ajuste mal au premier essai, enlevez la carte et recommencez l'installation.
- Quand l'installation de la carte de circuits imprimés est terminée, revérifiez si tout est bien installé.
- Toujours éteindre et débrancher l'appareil avant de commencer l'installation de la carte. (modèle SRX; Quick Start p. 2).
- N'installez que les cartes de circuits imprimes spécifiées (modèle SRX). Enlevez seulement les vis indiquées (p. 144).
- Lorsque vous déposez le MC-909 face vers le bas, placez des piles de journaux ou de magazines sous les quatre coins (ou des deux côtés) pour le soutenir. Ainsi, les boutons, manettes et autres pièces ne seront pas endommagés.
- En plaçant l'appareil sens dessus dessous, manipulez-le avec soin pour éviter de l'échapper, de le laisser tomber ou de se renverser.
- Ne pas laisser le panneau de protection avant detache. S'assurer de l'avoir rattacher apres avoir installe le disque dur.

## Installation d'une carte d'expansion Wave

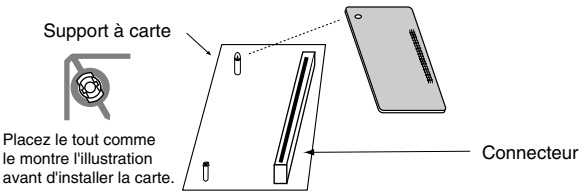
Avant d'installer la carte d'expansion Wave, retirez le panneau inférieur.

**1.** Avant d'installer la carte d'expansion Wave, coupez l'alimentation du MC-909 et de tous les appareils branchés, et débranchez tous les câbles du MC-909, y compris le cable d'alimentation.

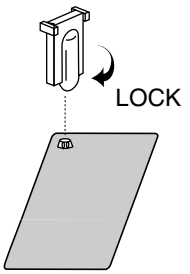
**2.** Tournez le MC-909 sens dessous dessus, retirez les vis indiquées dans le diagramme ci-dessous et retirez le couvercle.




**3.** Enfichez le connecteur de la carte d'expansion Wave dans le connecteur de l'unité et, en même temps, insérez le support de carte par l'ouverture de la carte d'expansion Wave.




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




**5.** Remettez le couvercle en place à l'aide des vis retirées à l'étape **2**.

# Vérifier que la carte d'expansion Wave est installée correctement

1. Mettre en marche tel que décrit sous « Turning On/Off the Power » (p. 16)
2. Appuyer sur [MENU].
3. Utiliser [CURSOR] pour choisir [System].
4. Appuyer sur [ENTER] pour atteindre la fenêtre du menu du système.


5. Appuyer sur [F6 (System Info)].
6. Appuyer sur [F3 (SRX Exp Info)].
   Le numéro du modèle de la carte d'expansion Wave que vous avez installée devrait apparaître dans la fenêtre.
7. Appuyer sur [F6 (Close)] pour revenir dans la fenêtre du menu du système.
8. Appuyer sur [EXIT] pour quitter la fenêtre du menu du système.

**NOTE**

Si le numéro du modèle de la carte n'apparaît pas, il est possible qu'elle n'ait pas été détectée correctement. Fermer tel que décrit sous « Turning On/Off the Power » (p. 16), et réinstaller la carte d'expansion Wave conformément aux instructions.

**NOTE**

- Si SRX-01 «Dynamic Drum Kits» ou SRX-02 «Concert Piano» est installé, seules les ondulations peuvent être utilisées. Il n'est pas possible d'utiliser les groupes patch/rythme.
- Lorsque les groupes de rythme inclus sur une carte d'expansion sont utilisés, les rythmes d'accompagnement des seize touches allant de la note 35 (B1) à 50 (D3) correspondent aux touches de vélocité 1 (59: B3) à 16 (74: D5).
- Pour certains des groupes patch/rythme inclus sur une carte d'expansion, les réglages de tonie et FXM (p. 57, p. 71) ne sont pas pris en compte.

# Expanding the Memory

The MC-909 comes with 16 MB of memory into which audio samples can be loaded. However, in some cases, 16 MB of memory will be insufficient for loading large amounts of data. In such a case, you will have to add separately sold memory (DIMM). Memory can be expanded up to 256 MB.

Before expanding the memory, consult with your retailer, the nearest Roland Service Center, or an authorized Roland distributor.

## Precautions for Expanding Memory

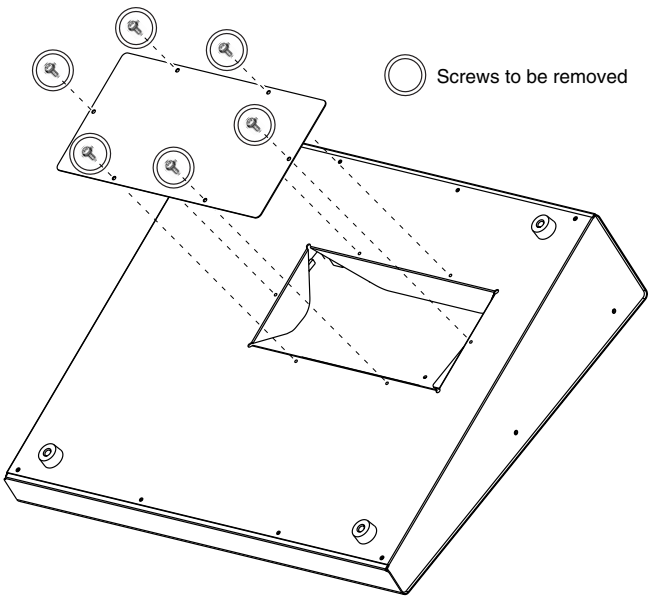
- To avoid the risk of damage to internal components that can be caused by static electricity, please carefully observe the following whenever you handle the board.
  - Before you touch the board, always first grasp a metal object (such as a water pipe), so you are sure that any static electricity you 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.
  - Save the bag in which the board was originally shipped, and put the board back into it whenever you need to store or transport it.
- Use a Philips screwdriver that is suitable for the size of the screw (a number 2 screwdriver). If an unsuitable screwdriver is used, the head of the screw may be stripped.
- To remove a screw, rotate the screwdriver counter-clockwise. To tighten the screws, rotate the screwdriver clockwise.


- Be careful that the screws you remove do not drop into the interior of the MC-909.
- Be careful not to cut your hand on the edge of the cover or the opening edge while removing the cover.
- 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.
- Always turn the unit off and unplug the power cord before attempting installation of the memory DIMM board.
- Install only the specified memory DIMM board. Remove only the specified screws (p. 146).
- 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.
- Do not leave the bottom cover removed. After installation of the memory module is complete, be sure to replace the cover.

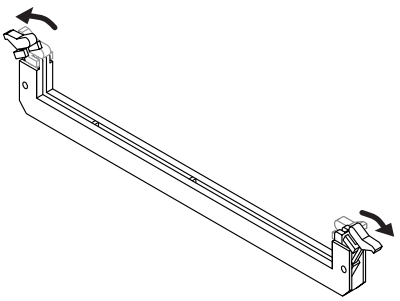
## How to Expand the Memory

Install the memory module after removing the bottom panel cover.

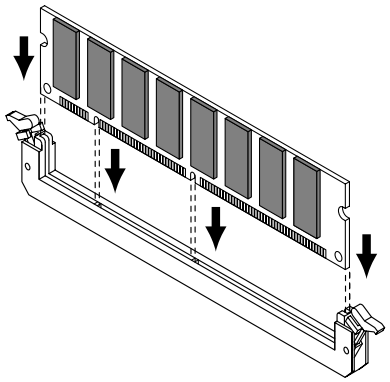
1. Before expanding the memory, turn off the power of the MC-909 and all connected devices, and disconnect all cables, including the Power cable, from the MC-909.
2. Turn the MC-909 over, remove the screws indicated in the following diagram, and remove the cover.




3. Press outward the white clips at either end of the socket should be in the downward position.



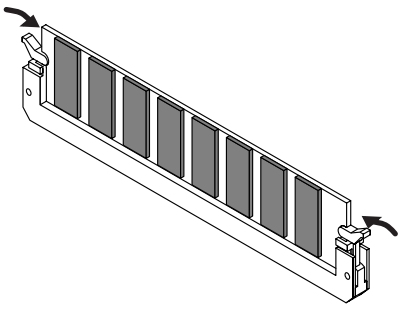
4. Paying attention to the location of the notch on the memory module and the orientation, insert it vertically within the guides at either side of the socket.



HINT

If you have difficulty inserting the memory module, try tilting it a bit and inserting one end at a time.

5. Move the white clips upward, and press them until the memory module is locked in place.

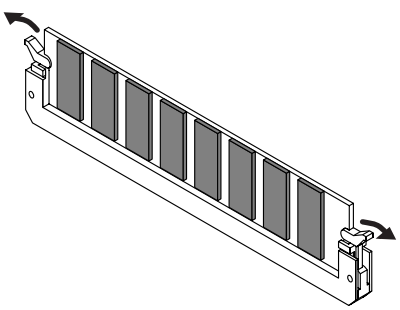


6. Use the screws that you removed in step **2** to fasten the cover back in place.

## Removing the Memory

To remove the memory module, reverse the installation procedure.

1. Simultaneously press outward the white clips located at either end of the socket.



2. Remove the memory module from the socket.

## Checking that memory is installed correctly

1. Turn on the power as described in "Turning On/Off the Power" (p. 16).
2. Press [MENU].
3. Use [CURSOR] to select [System].
4. Press [ENTER] to access the System Menu screen.


5. Press [F6 (System Info)].
6. Press [F2 (Memory Info)].
   Verify that the screen correctly shows the amount of memory you installed.
7. Press [F6 (Close)] to return to the System Menu screen.
8. Press [EXIT] to exit the System Menu screen.

* *If the correct amount of memory is not shown, it is possible that the memory is not being recognized properly. Turn off the power as described in "Turning On/Off the Power" (p. 16), and re-install the memory correctly.*

### Specifications of the expansion memory (DIMM) that can be used

| | |
|---|---|
| Number of pins: | 168-pin |
| Speed: | 100 MHz (PC100 CL=2) |
| | 133 MHz (PC133 CL=3) |
| Voltage: | 3.3 V |
| Capacity: | 128 MB |
| | 256 MB |
| Board height: | 38 mm or less |

NOTE

The MC-909 has been confirmed to work with standard memory that meets the above specifications. However, we cannot guarantee that all memory of these specifications will work correctly. Please be aware that even with identical specifications, differences in the design of the memory module or the conditions of use may mean that a memory module may not be usable.

# Ajouter de la mémoire

French language
for Canadian Safety Standard

**(French Language for Canadian Safety Standard)**

## Précautions à prendre lors de l'ajout de mémoire

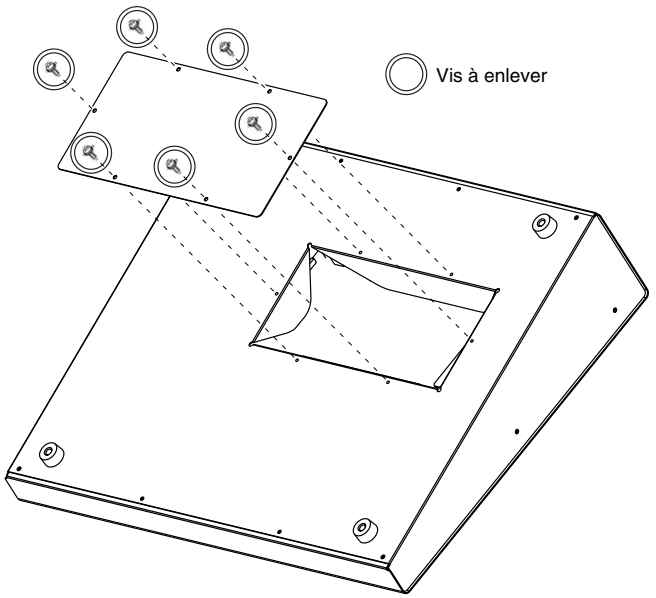
- Veuillez suivre attentivement les instructions suivantes quand vous manipulez la carte afin d'éviter tout risque d'endommagement des pièces internes par l'électricité statique.
  - Toujours toucher un objet métallique relié à la terre (comme un tuyau par exemple) avant de manipuler la carte pour vous décharger de l'électricité statique que vous auriez pu accumuler.
  - Lorsque vous manipulez la carte, la tenir par les côtés. Évitez de toucher aux composants ou aux connecteurs.
  - Conservez le sachet d'origine dans lequel était la carte lors de l'envoi et remettez la carte dedans si vous devez la ranger ou la transporter.
- Utilisez un tournevis de type Philips de la taille adaptée à celle des vis (tournevis numéro 2). Un tournevis inadéquat peut endommager la tête de la vis.
- Pour retirer une vis, tourner le tournevis dans le sens contraire des aiguilles d'une montre. Pour serrer les vis, tourner le tournevis dans le sens des aiguilles d'une montre.


- Assurez-vous que les vis que vous retirez ne tombent pas à l'intérieur du MC-909.
- Faites attention de ne pas vous couper sur le bord du couvercle ou de l'ouverture lorsque vous retirez le couvercle.
- Ne pas toucher aux circuits imprimés ou aux connecteurs.
- Ne jamais forcer lors de l'installation de la carte de circuits imprimés. Si la carte s'ajuste mal au premier essai, enlevez la carte et recommencez l'installation.
- Quand l'installation de la carte de circuits imprimés est terminée, revérifiez si tout est bien installé.
- Avant de procéder à l'installation d'un module DIMM, il faut toujours mettre l'unité hors tension et débrancher le câble d'alimentation.
- Installez uniquement le module DIMM spécifié. Retirez uniquement les vis spécifiées (p. 148).
- Lorsque vous déposez le MC-909 face vers le bas, placez des piles de journaux ou de magazines sous les quatre coins (ou des deux côtés) pour le soutenir. Ainsi, les boutons, manettes et autres pièces ne seront pas endommagés.
- En plaçant l'appareil sens dessus dessous, manipulez-le avec soin pour éviter de l'échapper, de le laisser tomber ou de se renverser.
- Une fois l'installation du module terminée, remettez le couvercle en place.

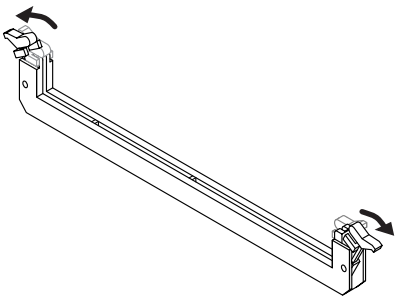
## Installation du module de mémoire

Installez le module de mémoire après avoir retiré le couvercle inférieur.

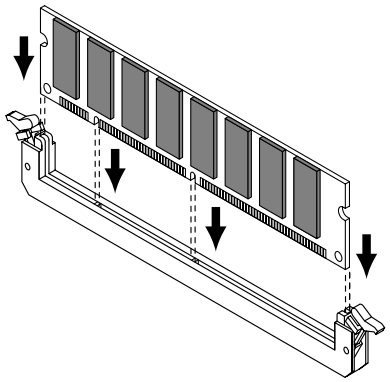
1. Avant d'installer la mémoire additionnelle, mettez hors tension le MC-909 et tous les périphériques connectés et débranchez tous les câbles, y compris le câble d'alimentation du MC-909.
2. Tournez le MC-909 sens dessous dessus, retirez les vis indiquées dans le diagramme ci-dessous et retirez le couvercle.




3. Appuyez sur les clips blancs à l'extrémité de la prise qui devraient être orientés vers le bas.

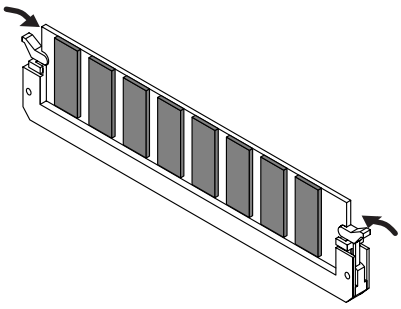


**4.** Prenez bien note de l'emplacement et de l'orientation de l'encoche du module de mémoire et insérez-le verticalement à l'intérieur des guides qui se trouvent de chaque côté de la prise.



* *Si vous éprouvez de la difficulté à insérer le module de mémoire, inclinez-le légèrement et insérez une extrémité à la fois.*

**5.** Ramenez les clips blancs vers le haut et appuyez dessus jusqu'à ce que le module de mémoire soit verrouillé en place.

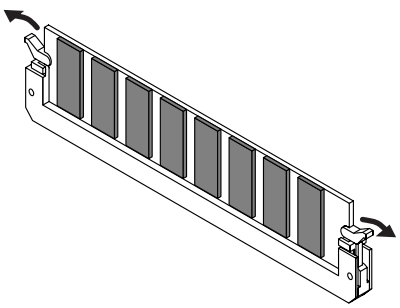


**6.** À l'aide des vis retirées à l'étape 2, remettez le couvercle en place.

## Retrait du module de mémoire

Pour retirer le module de mémoire, procédez à l'inverse de la procédure d'installation.

**1.** Appuyez simultanément, vers l'extérieur, sur les clips blancs situés aux extrémités de la prise.



**2.** Retirez le module de mémoire de la prise.

# Vérifier que la mémoire est installée correctement

**1.** Mettre en marche tel que décrit sous « Turning On/Off the Power » (p. 16).

**2.** Appuyer sur [MENU].

**3.** Utiliser [CURSOR] pour choisir [System].

**4.** Appuyer sur [ENTER] pour atteindre la fenêtre du menu du système.


**5.** Appuyer sur [F6 (System Info)].

**6.** Appuyer sur [F2 (Memory Info)].
S'assurer de lire dans la fenêtre la taille de la mémoire que vous avez installée.

**7.** Appuyer sur [F6 (Close)] pour revenir dans la fenêtre du menu du système.

**8.** Appuyer sur [EXIT] pour quitter la fenêtre du menu du système.

* *Si la taille de la mémoire dans la fenêtre n'est pas exacte, il est possible que la mémoire n'ait pas été détectée correctement. Éteindre tel que décrit sous « Turning On/Off the Power » (p. 16), et réinstaller la mémoire conformément aux instructions.*

### Spécifications de la mémoire d'expansion (DIMM) qui peuvent être utilisées

| | |
|---|---|
| Nombre de broches : | 168 broches |
| Vitesse : | 100 MHz (PC100 CL=2) |
| | 133 MHz (PC133 CL=3) |
| Tension : | 3.3 V |
| Capacité : | 128 Mo |
| | 256 Mo |
| Hauteur de la carte : | 38 mm ou moins |

**NOTE**

Il a été confirmé que le MC-909 fonctionne avec la mémoire standard possédant les spécifications ci-dessus. Nous ne pouvons toutefois pas certifier que toutes les mémoires possédant ces spécifications fonctionneront correctement. Il faut se rappeler que même si les spécifications sont identiques, des différences dans la conception du module de mémoire ou les conditions d'utilisation peuvent faire en sorte qu'il n'est pas possible d'utiliser le module de mémoire.

# Waveform List

| No. | Name |
|---|---|
| 001 | MC SuperSawA |
| 002 | MC SuperSawB |
| 003 | MC SuperSawC |
| 004 | SuperSawSlwA |
| 005 | SuperSawSlwB |
| 006 | SuperSawSlwC |
| 007 | Trance Saw A |
| 008 | Trance Saw B |
| 009 | Trance Saw C |
| 010 | Alpha Rave |
| 011 | MG Big Lead |
| 012 | JUNO Rave |
| 013 | Blaster |
| 014 | Sync Sweep |
| 015 | TB Natural |
| 016 | TB303Saw HD |
| 017 | 106 Saw HD |
| 018 | CustomSawAHD |
| 019 | JP8000 Saw |
| 020 | MG Reso Saw |
| 021 | MGSaw HD |
| 022 | Synth Saw |
| 023 | JP-8 Saw |
| 024 | P5Saw HD |
| 025 | P5 Saw |
| 026 | OB2Saw HD |
| 027 | OB Saw |
| 028 | Digital Saw |
| 029 | OSC Saw |
| 030 | OSC Reso Saw |
| 031 | Air Wave |
| 032 | DistTB Sqr |
| 033 | DistTBSqr Lp |
| 034 | TB Dst Sqr |
| 035 | TB303Sqr HD |
| 036 | TB Square 1 |
| 037 | TB Square 2 |
| 038 | JP-6 Square |
| 039 | MGSqr HD |
| 040 | MG Square |
| 041 | P5Sqr HD |
| 042 | P5 Square |
| 043 | OB2Sqr HD |
| 044 | CustomSquAHD |
| 045 | PureSqr1kHz |
| 046 | PureSqr440Hz |
| 047 | 106 SubOscHD |
| 048 | JP8PLS05 HD |
| 049 | JP8PLS25 HD |
| 050 | JP8PLS40 HD |
| 051 | JP8PLS45 HD |
| 052 | JP-8 Pulse |
| 053 | MG Pulse |
| 054 | 260 Pulse |
| 055 | Frog Wave |
| 056 | FM Pulse |
| 057 | JP8000 PWM |
| 058 | JP8000 FBK |
| 059 | 260 Sub OSC |
| 060 | MGTri HD |
| 061 | MG Triangle |
| 062 | ARPSin HD |
| 063 | Sine |
| 064 | PureSine1kHz |
| 065 | PureSin440Hz |
| 066 | 700SynthBass |
| 067 | Mini Bs 1A |
| 068 | Mini Bs 1B |
| 069 | Mini Bs 1C |
| 070 | Syn Bass 1 |
| 071 | Syn Bass 2 |
| 072 | Syn Bass 3 |
| 073 | Mini Bs 2 |
| 074 | Mini Bs 2 Lp |
| 075 | MG Big Bass |
| 076 | Garage Bass |
| 077 | Delta Bass |
| 078 | Jungle Bass |
| 079 | SH-101 Bass |
| 080 | MC-202 Bass |
| 081 | Poly Bass |
| 082 | Organ Bass |
| 083 | Voco Bass |
| 084 | Reso Bass 1A |
| 085 | Reso Bass 1B |
| 086 | Reso Bass 2A |
| 087 | Reso Bass 2B |
| 088 | FM Bass f |
| 089 | Solid Bass |
| 090 | Fingered Bs |
| 091 | Stick Bass |
| 092 | P.Bass |
| 093 | Slap Bass |
| 094 | Bass Slide |
| 095 | FretlessSoft |
| 096 | Fretless Bs |
| 097 | UprightBs |
| 098 | Ac Bass |
| 099 | Piano EQ |
| 100 | EP MkI mf |
| 101 | Stage p A |
| 102 | Stage f A |
| 103 | Lo-Fi Wurly |
| 104 | FM EP mf |
| 105 | D-50 EP |
| 106 | Clavi |
| 107 | E.Organ 1 |
| 108 | E.Organ 2 |
| 109 | Full Stop |
| 110 | FM Club Org |
| 111 | Old Organ |
| 112 | Church Org |
| 113 | Tubular |
| 114 | Glockenspiel |
| 115 | Vibraphone |
| 116 | FantabellSub |
| 117 | DIGI Bell |
| 118 | Steel Dr |
| 119 | FM Mallet mf |
| 120 | Marimba |
| 121 | Balaphone |
| 122 | Kalimba |
| 123 | Soft NylonGt |
| 124 | Steel Guitar |
| 125 | Clean TC |
| 126 | Funk Gt |
| 127 | Funk Gt Mute |
| 128 | Overdrive |
| 129 | D.MuteGt mp |
| 130 | DistGtrChord |
| 131 | CleanGtrCut |
| 132 | Gtr Trill |
| 133 | Gtr Cut |
| 134 | DistGtrRiff1 |
| 135 | DistGtrRiff2 |
| 136 | Wah Gtr Riff |
| 137 | GtrShtSlide |
| 138 | FullStr mf A |
| 139 | FullStr mf B |
| 140 | FullStr mf C |
| 141 | JV Strings |
| 142 | Tron Strings |
| 143 | JP Strings |
| 144 | Tremolo sfz |
| 145 | STR Attack |
| 146 | StrChord Maj |
| 147 | StrChord Min |
| 148 | VlnPizzicato |
| 149 | Pizzy Techno |
| 150 | FemChoirOosA |
| 151 | FemChoirOosB |
| 152 | FemChoirOosC |
| 153 | Brass Sect A |
| 154 | Brass Sect B |
| 155 | Brass Sect C |
| 156 | BrsShortFall |
| 157 | Solo Trumpet |
| 158 | Mute Trumpet |
| 159 | Soft AltoSax |
| 160 | Blow Tnr Sax |
| 161 | Wild Tnr Sax |
| 162 | Afro Flute |
| 163 | Pure Flute |
| 164 | Tron Flute |
| 165 | Pan Flute |
| 166 | Flute Gliss |
| 167 | Shamisen |
| 168 | Sitar |
| 169 | Hit Menu 1 |
| 170 | Hit Menu 2 |
| 171 | Hit Menu 3 |
| 172 | OrangeHit 1 |
| 173 | OrangeHit 2 |
| 174 | OrangeHit 3 |
| 175 | OrangeHit 4 |
| 176 | OrangeHit 5 |
| 177 | OrangeHit 6 |
| 178 | OrangeHit 7 |
| 179 | OrangeHit 8 |
| 180 | Ambience |
| 181 | 7th Hit |
| 182 | Minor Hit |
| 183 | Drive Hit |
| 184 | Brassy Hit |
| 185 | 6th Hit |
| 186 | Filtered Hit |
| 187 | Mild Hit |
| 188 | Bright Hit |
| 189 | 5th StackHit |
| 190 | Euro Hit |
| 191 | Dist Hit |
| 192 | Tekno Hit |
| 193 | Back Hit |
| 194 | Techno Chord |
| 195 | Thin Beef |
| 196 | Tao Hit |
| 197 | Philly Hit |
| 198 | ClassicHseHt |
| 199 | Smear Hit 1 |
| 200 | Smear Hit 2 |
| 201 | LoFi MinorHt |
| 202 | OrchPrc Hit |
| 203 | Sitar Gliss |
| 204 | Scratch Menu |
| 205 | Scratch 16 |
| 206 | Scratch 17 |
| 207 | Scratch 18 |
| 208 | Scratch 19 |
| 209 | Scratch 20 |
| 210 | Scratch 21 |
| 211 | Scratch 22 |
| 212 | Scratch 23 |
| 213 | Scratch 24 |
| 214 | Scratch 25 |
| 215 | Scratch 26 |
| 216 | Tape Rewind |
| 217 | Vox Menu 1 |
| 218 | Vox Menu 2 |
| 219 | One M |
| 220 | Two M |
| 221 | Three M |
| 222 | Four M |
| 223 | Aah! M |
| 224 | Hou! M |
| 225 | Ha! M |
| 226 | Hi! M |
| 227 | Hi2 M |
| 228 | Wow M |
| 229 | Yeah2 M |
| 230 | You Know M |
| 231 | Get It Up M |
| 232 | Come On M |
| 233 | Ah Hah M |
| 234 | Ah M |
| 235 | Ah2 M |
| 236 | Uuh Yeah! M |
| 237 | ComeOn F |
| 238 | Ha F |
| 239 | Woow F |
| 240 | MetalVoiceW1 |
| 241 | MetalVoiceW2 |
| 242 | MetalVoiceW3 |
| 243 | Aah Formant |
| 244 | Eeh Formant |
| 245 | Iih Formant |
| 246 | Ooh Formant |
| 247 | Uuh Formant |
| 248 | MetalVoiceL1 |
| 249 | MetalVoiceL2 |
| 250 | MetalVoiceL3 |
| 251 | VoxPerc Menu |
| 252 | Vox Kick 1 |
| 253 | Vox Kick 2 |
| 254 | VoxKickSweep |
| 255 | Vox Snare 1 |
| 256 | Vox Snare 2 |
| 257 | Vox Hihat 1 |
| 258 | Vox Hihat 2 |
| 259 | Vox Hihat 3 |
| 260 | Vox Cymbal |
| 261 | Pa! |
| 262 | Chiki! |
| 263 | Punch |
| 264 | AahVoice Maj |
| 265 | AahVoice Min |
| 266 | Auh Voice |
| 267 | Breath |
| 268 | Feedbackwave |
| 269 | Atmosphere |
| 270 | MG White Nz |
| 271 | MG Pink Nz |
| 272 | DigiAtkNoise |
| 273 | P5 Noise |
| 274 | 106 Noise |
| 275 | Noise AGG |
| 276 | Noise TMBR |
| 277 | Noise GIS |
| 278 | ThroatWind |
| 279 | Metal Wind |
| 280 | FX Menu 1 |
| 281 | FX Menu 2 |
| 282 | FX Menu 3 |
| 283 | FX Menu 4 |
| 284 | Euro Fx |
| 285 | LoFi Beep 1 |
| 286 | LoFi Beep 2 |
| 287 | LoFi Beep 3 |
| 288 | Hardhock |
| 289 | Orbit |
| 290 | Density |
| 291 | LoFi Beep 4 |
| 292 | LoFi Beep 5 |
| 293 | LoFi Beep 6 |
| 294 | Metal Bar 1 |
| 295 | Metal Press |
| 296 | Sand Hit |
| 297 | Metal Bar 2 |
| 298 | BPF Fx |
| 299 | Artful Perc1 |
| 300 | Artful Perc2 |
| 301 | MG Noise Fx |
| 302 | Beep |
| 303 | DarkSteam |
| 304 | MG Zap 1 |
| 305 | MG Zap 2 |
| 306 | MG Zap 3 |
| 307 | MG Zap 4 |
| 308 | MG Zap 5 |
| 309 | MG Zap 6 |
| 310 | MG Zap 7 |
| 311 | MG Zap 8 |
| 312 | MG Zap 9 |
| 313 | MG Zap 10 |
| 314 | MG Zap 11 |
| 315 | MG Zap 12 |
| 316 | MG Zap 13 |
| 317 | MG Zap 14 |
| 318 | MG Zap 15 |
| 319 | MG Blip |
| 320 | Beam HiQ |
| 321 | MG Attack |
| 322 | MG Sweep 1 |
| 323 | MG Sweep 2 |
| 324 | MG Sweep 3 |
| 325 | MG Sweep 4 |
| 326 | MG Sweep 5 |
| 327 | MG Sweep 6 |
| 328 | Space FX Swp |
| 329 | SFX Menu 1 |
| 330 | SFX Menu 2 |
| 331 | Dial |
| 332 | Door Knob |
| 333 | Vinyl burst |
| 334 | Water Cock 1 |
| 335 | Water Cock 2 |
| 336 | Bomb Noise |
| 337 | Sea |
| 338 | Brush Noise |
| 339 | Space Noise |
| 340 | Scream |
| 341 | Jet Plane |
| 342 | Toy Gun 1 |
| 343 | Toy Gun 2 |
| 344 | Emergency |
| 345 | Buzzer |
| 346 | Insect |
| 347 | Tonality |
| 348 | Ring OSC |
| 349 | Reso FX |
| 350 | Vinyl Noise |
| 351 | Vinyl Stop |
| 352 | Construct. |
| 353 | Jack Hammer |
| 354 | Turbine |
| 355 | Sawing |
| 356 | Firebomb |
| 357 | Applause |
| 358 | Thunderbolt |
| 359 | Dolphin Hi 1 |
| 360 | Dolphin Hi 2 |
| 361 | Dolphin Md |
| 362 | Dolphin Lo |
| 363 | MetallicShot |
| 364 | Siren |
| 365 | Drill Hit |
| 366 | Clap Menu 1 |
| 367 | Clap Menu 2 |
| 368 | Disc Clap |
| 369 | Dist Clap |
| 370 | PD Clap |
| 371 | Old Clap |
| 372 | R8 Clap |
| 373 | TR909 Clap 1 |
| 374 | TR909 Clap 2 |
| 375 | TR808 Clap |
| 376 | TR707 Clap |
| 377 | Cheap Clap |
| 378 | Real Clap 2 |
| 379 | Hip Clap |
| 380 | Group Clap |
| 381 | Claptail |
| 382 | Planet Clap |
| 383 | Royal Clap |
| 384 | Happy Clap |
| 385 | Club Clap |
| 386 | Funk Clap |
| 387 | Perc Menu 1 |
| 388 | Perc Menu 2 |
| 389 | Perc Menu 3 |
| 390 | Perc Menu 4 |
| 391 | R8 Cowbell |
| 392 | TR808Cowbell |
| 393 | CR78 Cowbell |
| 394 | R8 Hi Agogo |
| 395 | R8 LowAgogo |
| 396 | R8 HiCongaMt |
| 397 | R8 HiCongaOp |
| 398 | R8 LoCongaOp |
| 399 | Reg HiCng Mt |
| 400 | Reg HiCng Op |
| 401 | Reg LoCng Op |
| 402 | Reg HiBng Mt |
| 403 | Reg HiBng Op |
| 404 | Reg LoBng Op |
| 405 | TablaBayam 1 |
| 406 | TablaBayam 2 |
| 407 | TablaBayam 3 |
| 408 | TablaBayam 4 |
| 409 | TablaBayam 5 |
| 410 | TablaBayam 6 |
| 411 | TablaBayam 7 |
| 412 | Udo |
| 413 | Udu Pot1 Hi |
| 414 | Udu Pot1 Slp |
| 415 | Cajon 1 |
| 416 | Cajon 2 |
| 417 | Cajon 3 |
| 418 | AfroDrum Rat |
| 419 | Chenchen |
| 420 | Op Pandeiro |
| 421 | Mt Pandeiro |
| 422 | Timpani |
| 423 | Tambourine1 |
| 424 | Tambourine2 |
| 425 | Tambourine3 |
| 426 | Tambourine4 |
| 427 | CR78 Tamb |
| 428 | CR78 Beat |
| 429 | Timbale Hi |
| 430 | Timbale Lo |
| 431 | 808 Maracas |
| 432 | Maracas |
| 433 | R8 Shaker A |
| 434 | R8 Shaker B |
| 435 | R8 Cabasa |
| 436 | Triangle 1 |
| 437 | Triangle 2 |
| 438 | CR78 Guiro |
| 439 | Reg Guiro A |
| 440 | Reg Guiro B |
| 441 | Reg Guiro C |
| 442 | Whistle Shrt |
| 443 | Whistle |
| 444 | TR727Quijada |
| 445 | TR808 Claves |
| 446 | R8 ClavesCmp |
| 447 | Club FinSnap |
| 448 | Single Snap |
| 449 | Snap |
| 450 | Kick Menu 1 |
| 451 | Kick Menu 2 |
| 452 | Kick Menu 3 |
| 453 | Kick Menu 4 |
| 454 | Click Kick 1 |
| 455 | Pick Kick |
| 456 | Mild Kick |
| 457 | Back Kick |
| 458 | Vinyl Kick 1 |
| 459 | Low Kick 1 |
| 460 | Click Kick 2 |
| 461 | Boys Kick |
| 462 | Hippie Kick |
| 463 | Frenzy Kick |
| 464 | PlasticKick1 |
| 465 | Artful Kick |
| 466 | Swallow Kick |
| 467 | Neck Kick |
| 468 | Skool Kick |
| 469 | Dance Kick 1 |
| 470 | HipHop Kick1 |
| 471 | HipHop Kick2 |
| 472 | Rap Kick |
| 473 | Low Kick 2 |
| 474 | Pin Kick |
| 475 | Low Kick 3 |
| 476 | Low Kick 4 |
| 477 | AnalogKick 3 |
| 478 | PlasticKick2 |
| 479 | TR909 Kick 1 |
| 480 | TR909 Kick 2 |
| 481 | TR909 Kick 3 |
| 482 | AnalogKick 4 |
| 483 | TR909 Kick 4 |
| 484 | Gabba Kick 1 |
| 485 | AnalogKick 5 |
| 486 | AnalogKick 6 |
| 487 | AnalogKick 7 |
| 488 | AnalogKick 8 |
| 489 | AnalogKick 9 |
| 490 | AnalogKick10 |
| 491 | PlasticKick3 |
| 492 | TR606 Dst BD |
| 493 | AnalogKick11 |
| 494 | Sweep Kick |
| 495 | TR808 Kick |
| 496 | TR606 Kick |
| 497 | Jive Kick |
| 498 | TR909 Kick 5 |
| 499 | TR909 Kick 6 |
| 500 | Lo-Fi Kick 2 |
| 501 | Wet Kick |
| 502 | Tight Kick |
| 503 | TR707 Kick 1 |
| 504 | TR909 Kick 7 |
| 505 | Regular Kick |
| 506 | Lite Kick 1 |
| 507 | Roll Kick |
| 508 | Snare Menu 1 |
| 509 | Snare Menu 2 |
| 510 | Snare Menu 3 |
| 511 | Snare Menu 4 |
| 512 | Snare Menu 5 |
| 513 | Snare Menu 6 |
| 514 | Snare Menu 7 |
| 515 | Sizzle Snr 1 |
| 516 | LowDownSnr 1 |
| 517 | Jngl Tiny SD |
| 518 | Tiny Snr 1 |
| 519 | DJ Snare |
| 520 | R8 Brush Tap |
| 521 | Phat Snare |
| 522 | Lo-Hard Snr |
| 523 | ElectroSnr 1 |
| 524 | RaggaTightSD |
| 525 | Flange Snr |
| 526 | Slap Snr 1 |
| 527 | Analog Snr 1 |
| 528 | Analog Snr 2 |
| 529 | Analog Snr 3 |
| 530 | Modern Snr 1 |
| 531 | Swallow Snr |
| 532 | Jam Snr |
| 533 | Back Snr |
| 534 | Keen Snr 1 |
| 535 | Boys Snr 1 |
| 536 | Slap Snr 2 |
| 537 | Neck Snr |
| 538 | Artful Snr |
| 539 | Pin Snr |
| 540 | Chemical Snr |
| 541 | Sizzle Snr 2 |
| 542 | Antigua Snr |
| 543 | Tiny Snr 2 |
| 544 | Real Snare |
| 545 | R&B Snr 1 |
| 546 | R&B Snr 2 |
| 547 | Cross Snr |
| 548 | Grave Snr |
| 549 | Boys Snr 2 |
| 550 | Boys Snr 3 |
| 551 | LowDownSnr 2 |
| 552 | TR909 SD 1 |
| 553 | TR909 SD 2 |
| 554 | TR909 SD 3 |
| 555 | TR909 SD 4 |
| 556 | TR909 SD 5 |
| 557 | TR909 SD 6 |
| 558 | TR909 DstSD |
| 559 | TR808 SD 1 |
| 560 | TR808 SD 2 |
| 561 | TR808 SD 3 |
| 562 | TR808 SD 4 |
| 563 | Lite Snare |
| 564 | TR808 SD 5 |
| 565 | TR808 SD 6 |
| 566 | TR808 SD 7 |
| 567 | DanceHall SD |
| 568 | TR606 SD 1 |
| 569 | TR606 SD 2 |
| 570 | CR78 Snare |
| 571 | Sim Snare |
| 572 | Rap Snr 2 |
| 573 | Frenzy Snr 1 |
| 574 | Frenzy Snr 2 |
| 575 | Frenzy Snr 3 |
| 576 | Jngl Rim 1 |
| 577 | Jngl Rim 2 |
| 578 | R8 Snr 1 |
| 579 | R8 Snr 1cmp |
| 580 | R8 Snr 2 |
| 581 | Slap Snr 3 |
| 582 | Keen Snr 2 |
| 583 | Reagae Snr |
| 584 | DR660 Snr |
| 585 | RegularSnrMP |
| 586 | RegularSnrMF |
| 587 | RegularSnr F |
| 588 | RegularSnrR1 |
| 589 | RegularSnrR2 |
| 590 | RegularSnrG1 |
| 591 | RegularSnrG2 |
| 592 | RegularSnrG3 |
| 593 | R&B RegSnr 1 |
| 594 | R&B RegSnr 2 |
| 595 | R&B RegSnr 3 |
| 596 | R&B RegSnr 4 |
| 597 | R&B RegSnrG1 |
| 598 | Funk Snr 1 |
| 599 | Picc. Hrd Sn |
| 600 | Picc. Rol Sn |
| 601 | SnareWithCym |
| 602 | R8 BrshSwill |
| 603 | R8 BrushRoll |
| 604 | Urban RollSD |
| 605 | Roll Snare |
| 606 | RimShot Menu |
| 607 | TR909 Rim |
| 608 | TR808 Rim |
| 609 | R&B Rim 1 |
| 610 | R&B Rim 2 |
| 611 | R&B Rim 3 |
| 612 | Neck Rim |
| 613 | Swag Rim |
| 614 | Step Rim |
| 615 | R&B Rim 4 |
| 616 | Street Rim |
| 617 | Regular Rim |
| 618 | R8 Comp Rim |
| 619 | Tom Menu |
| 620 | R8 Comp Tom1 |
| 621 | R8 Comp Tom2 |
| 622 | R8 Comp Tom3 |
| 623 | R8 Comp Tom4 |
| 624 | Natural Tom |
| 625 | TR909 Tom |
| 626 | TR909 DstTom |
| 627 | TR808 Tom |
| 628 | TR606 Tom |
| 629 | Deep Tom |
| 630 | CHH Menu 1 |
| 631 | CHH Menu 2 |
| 632 | Modern CHH |
| 633 | Hipping CHH |
| 634 | Urban CHH |
| 635 | Regular CHH1 |
| 636 | Regular CHH2 |
| 637 | Regular CHH3 |
| 638 | Bristol CHH |
| 639 | R8 Brush CHH |
| 640 | Bang CHH |
| 641 | LowDownCHH |
| 642 | Disc CHH |
| 643 | Club CHH 1 |
| 644 | HipHop CHH |
| 645 | TR909 CHH 1 |
| 646 | TR909 CHH 2 |
| 647 | Shaky CHH |
| 648 | Club CHH 2 |
| 649 | Swallow CHH |
| 650 | TR808 CHH 1 |
| 651 | TR808 CHH 2 |
| 652 | TR606 CHH 1 |
| 653 | TR606 CHH 2 |
| 654 | TR606 DstCHH |
| 655 | Lite CHH |
| 656 | CR78 CHH |
| 657 | DR55 CHH 1 |
| 658 | Neck CHH |
| 659 | Jungle Hat |
| 660 | PHH Menu |
| 661 | Hip PHH |
| 662 | Pedal Hat 1 |
| 663 | Street PHH |
| 664 | Swallow PHH |
| 665 | TR909 PHH 1 |
| 666 | TR909 PHH 2 |
| 667 | TR808 PHH 1 |
| 668 | TR606 PHH 1 |
| 669 | TR606 PHH 2 |
| 670 | OHH Menu |
| 671 | Neck OHH |
| 672 | Regular OHH |
| 673 | Pop Hat Open |
| 674 | HipHop OHH |
| 675 | Bang OHH |
| 676 | TR909 OHH 1 |
| 677 | TR909 OHH 2 |
| 678 | TR808 OHH 1 |
| 679 | TR808 OHH 2 |
| 680 | TR606 OHH |
| 681 | Lite OHH |
| 682 | CR78 OHH |
| 683 | Cymbal Menu |
| 684 | TR909 Crash |
| 685 | NaturalCrash |
| 686 | Jungle Crash |
| 687 | Asian Gong |
| 688 | RAMA Cymbal |
| 689 | Analog Cym |
| 690 | TR606 Cym |
| 691 | Regular Ride |
| 692 | TR909 Ride |
| 693 | TR707 Ride |

# Preset Patch List

## Preset A (CC#0 = 81, CC#32 = 64)

| No. | Name |
|---|---|
| 001 | Trance Chord |
| 002 | UltimateEuro |
| 003 | JP OctAttack |
| 004 | DstTBSQR Atk |
| 005 | DistTB SQR |
| 006 | Traveler |
| 007 | BreathingPad |
| 008 | Lonely Heart |
| 009 | STR Attack |
| 010 | DistGtrChord |
| 011 | Detune Saw |
| 012 | Pressyn |
| 013 | BooSoloBoo |
| 014 | JUNO Rave 2 |
| 015 | SuperSawSlow |
| 016 | Trance Wave |
| 017 | SuperSawFast |
| 018 | Powerline |
| 019 | Detune Saws |
| 020 | Bustranza |
| 021 | Cyber Lead |
| 022 | Noisey |
| 023 | RAVtune |
| 024 | Blaster |
| 025 | Detuned Pad |
| 026 | Clean? |
| 027 | DelayStrings |
| 028 | DOC Stack |
| 029 | Syn Stack |
| 030 | Saw Stack |
| 031 | Trancy Synth |
| 032 | ScreaminLead |
| 033 | World Anthem |
| 034 | Houze Clav |
| 035 | PlayLow Dark |
| 036 | Digitaless |
| 037 | You know? |
| 038 | Moon Synth |
| 039 | Innercross |
| 040 | MultiDance02 |
| 041 | Brand X |
| 042 | Sweep Lead |
| 043 | SweepPad w/D |
| 044 | Remix Stack |
| 045 | Def Filter |
| 046 | Freedom |
| 047 | Fast Detune |
| 048 | DenMrk Lead |
| 049 | Squeepy |
| 050 | Xtatic |
| 051 | SaturnHolida |
| 052 | Anna Harp |
| 053 | Hyperactiver |
| 054 | Syn Lead |
| 055 | RetroRave 2 |
| 056 | RAVE w/me |
| 057 | HouseParty02 |
| 058 | Rave Party |
| 059 | Rave It Up |
| 060 | BPF Sweeper |
| 061 | Alpha Time |
| 062 | Alphat |
| 063 | Electricity |
| 064 | Bend Rave |
| 065 | Alpha Rave |
| 066 | Club Classic |
| 067 | Rubbery |
| 068 | Polychords |
| 069 | Atmorave |
| 070 | MG Big Lead |
| 071 | Tech Lead |
| 072 | NRG Synthe 1 |
| 073 | High Five |
| 074 | Noise Punch |
| 075 | OB M6 Saw |
| 076 | Organ Stack |
| 077 | SftFatPolyOB |
| 078 | SftPolyPfive |
| 079 | Poly Key |
| 080 | Pulse Komp |
| 081 | NRG Synthe 2 |
| 082 | OB Shinethru |
| 083 | KeyRand Saw |
| 084 | RndClaviator |
| 085 | Deowah Saw |
| 086 | PKG Key |
| 087 | forSequence1 |
| 088 | Shrtpin |
| 089 | PsycoActive |
| 090 | SMILE :-) |
| 091 | OB Raindrops |
| 092 | 5th Saw |
| 093 | PlasmaFields |
| 094 | HeavenlySine |
| 095 | FM Harp |
| 096 | Syn Harp |
| 097 | Glow Bugs |
| 098 | Dust Rave |
| 099 | Klangosaurus |
| 100 | Grandiosity |
| 101 | 12th Planet |
| 102 | NoisePeaker |
| 103 | Cave Tone |
| 104 | 106 Saw |
| 105 | Kiss My Grts |
| 106 | Lone Prpht |
| 107 | W-Side Saw |
| 108 | Basic Mg |
| 109 | Legato Saw |
| 110 | QuackyPfive |
| 111 | LPassRzSawMg |
| 112 | The Prpht OB |
| 113 | The Prpht TB |
| 114 | Q DualSaws |
| 115 | Dual Profs |
| 116 | DualP |
| 117 | BandSawMg |
| 118 | BandSawMg2 |
| 119 | Slow Mg |
| 120 | Freaky Fry |
| 121 | The Brothers |
| 122 | Mosquito |
| 123 | Digital BPF |
| 124 | HPF Sweep |
| 125 | Pulse Line |
| 126 | ArtifFrog |
| 127 | Metal Frog |
| 128 | Waspy Lead |

## Preset B (CC#0 = 81, CC#32 = 65)

| No. | Name |
|---|---|
| 001 | RetroSynLead |
| 002 | Warm SawLead |
| 003 | Kickin'Synth |
| 004 | Buzz Saw |
| 005 | HiPass Mg |
| 006 | LateFlapSqr |
| 007 | DualRateSqr |
| 008 | QuackyPSqr |
| 009 | Some Squares |
| 010 | Zooba Dooba |
| 011 | Pure Square |
| 012 | Voyage Mg |
| 013 | PortaSynLead |
| 014 | Jupiter6Sqr2 |
| 015 | BandSqrMg |
| 016 | My OneOSix |
| 017 | DCOs4ever |
| 018 | Dist Lead 2 |
| 019 | Griggley |
| 020 | Buzz Sucker |
| 021 | SonicVampire |
| 022 | Electrovox |
| 023 | Beep Mod |
| 024 | MosquitoLead |
| 025 | Destroyed Ld |
| 026 | HC Solo Lead |
| 027 | Synkronizor |
| 028 | Sync Dink |
| 029 | Da Sync |
| 030 | Sync Sweep |
| 031 | Elect Shock |
| 032 | Qube Sync |
| 033 | See a Chance |
| 034 | Splatter |
| 035 | Nasty Blade |
| 036 | Criminal |
| 037 | Syncing Sand |
| 038 | Uranus |
| 039 | Play with ME |
| 040 | IRobot |
| 041 | 3rd Pulse Mg |
| 042 | GumbyBot |
| 043 | Vibrato Saw |
| 044 | Arpness TB |
| 045 | Dist TB |
| 046 | headHit Lead |
| 047 | Too Pure |
| 048 | Old Synth |
| 049 | Basic 1 |
| 050 | ResoLFO LD |
| 051 | Similar Lead |
| 052 | Air Wave |
| 053 | Mew Lead |
| 054 | Cue Tip |
| 055 | Basic 2 |
| 056 | PeakArpSine |
| 057 | PekingTriMg |
| 058 | TubbyTriangl |
| 059 | Square Lead |
| 060 | Sine Mallet |
| 061 | SQR Diamond |
| 062 | Classy Pulse |
| 063 | Eat Skip |
| 064 | NRG Synthe 3 |
| 065 | Rave Stack |
| 066 | Line S&H |
| 067 | Yellow |
| 068 | Strobe 909 |
| 069 | Comptron |
| 070 | JPpulsingPWM |
| 071 | Dot16LFO Mg |
| 072 | Ray |
| 073 | Galaxy |
| 074 | Mars |
| 075 | Blurp |
| 076 | Bottle Clown |
| 077 | 909 Waltz |
| 078 | Slice Choir |
| 079 | Fashion |
| 080 | Sync'ed Pass |
| 081 | 909 Racer |
| 082 | MetroPoly 2 |
| 083 | Sands of LFO |
| 084 | PanningFrmnt |
| 085 | Bells of Q |
| 086 | TempoLFO OB |
| 087 | SlicedBread2 |
| 088 | Bass Engine |
| 089 | GuitarGroove |
| 090 | Twang Woo |
| 091 | Flow |
| 092 | ClassicRaver |
| 093 | Mission time |
| 094 | Small_Groove |
| 095 | OB M6 x2 |
| 096 | Dub Tales |
| 097 | Plus3 4 Bob |
| 098 | Venus |
| 099 | Timed Hit |
| 100 | .16 Orch |
| 101 | EchoResoPizz |
| 102 | TB Trancer |
| 103 | Doink |
| 104 | Seq.Synth 1 |
| 105 | Saw SEQ |
| 106 | NY83 SEQ |
| 107 | Sqr SEQ |
| 108 | PortaSqr SEQ |
| 109 | Seq.Synth 2 |
| 110 | Reso Bass 2 |
| 111 | Detune Bass |
| 112 | JunoWotImean |
| 113 | Dust Bass |
| 114 | TechnoTribal |
| 115 | Glide-iator |
| 116 | Pop JunkBass |
| 117 | New Acid Grv |
| 118 | WoodenGroove |
| 119 | RubberBass |
| 120 | Reso TB Bs |
| 121 | TB Legato |
| 122 | Robot |
| 123 | Loco Voco |
| 124 | Vel-o-TB |
| 125 | Gate Me Buzz |
| 126 | eRobot Bass |
| 127 | Metalic Bass |
| 128 | Goldon Bass |

## Preset C (CC#0 = 81, CC#32 = 66)

| No. | Name |
|---|---|
| 001 | SynBs 4 Seq |
| 002 | StabSaw Bass |
| 003 | Now Bass |
| 004 | Poly Bass |
| 005 | D9 Trcker |
| 006 | TB + Sine |
| 007 | Low Downer |
| 008 | Basstrap |
| 009 | Foundation |
| 010 | Thick Bass 2 |
| 011 | Home Baze |
| 012 | Atk Syn Bs |
| 013 | TB Tra Bass |
| 014 | Electro Rubb |
| 015 | Smoothbass |
| 016 | MC-404 Bass |
| 017 | MC-202 Bs |
| 018 | R&B Bass 1 |
| 019 | R&B Bass 2 |
| 020 | Enorjizor |
| 021 | MG Bass |
| 022 | MC-TB Bass |
| 023 | ArpeggioBass |
| 024 | HipHop Bs 1 |
| 025 | Voco Bass 1 |
| 026 | Voco Bass 2 |
| 027 | Alter Bass |
| 028 | Farmer Joe |
| 029 | MG Big Bass |
| 030 | SH-101 Bs 2 |
| 031 | Big Bass |
| 032 | Mini Bs |
| 033 | MiniMoe Bass |
| 034 | Chordpatch |
| 035 | Kickin'Bass |
| 036 | Phat bass |
| 037 | Super-G DX |
| 038 | Syn Bass 1 |
| 039 | Pong |
| 040 | R&B Bass 3 |
| 041 | R&B Bass 4 |
| 042 | Syn Bass 2 |
| 043 | OctSaw Bass |
| 044 | R&B Bass 5 |
| 045 | Monster TB |
| 046 | TB Clone |
| 047 | NU-NRG Bass |
| 048 | Inside Bass |
| 049 | Rezo Bass |
| 050 | R&B Bass 6 |
| 051 | FuzzBlockHed |
| 052 | Tracore Bass |
| 053 | Bau Bass |
| 054 | Acdg Bass |
| 055 | RingerBass |
| 056 | SQ Pan |
| 057 | LFO Bass |
| 058 | AcidMoon |
| 059 | Jungle Bass |
| 060 | Sine Bass |
| 061 | R&B Bass 7 |
| 062 | LFO SqrBs 2 |
| 063 | SQR+Sub Bs |
| 064 | Square Bass |

# Preset Patch List

| No. | Name |
|---|---|
| 065 | FallDown Bs |
| 066 | PeakOfTEBE |
| 067 | Dub Bass |
| 068 | Bass it |
| 069 | Basic SynBs |
| 070 | R&B Bass 8 |
| 071 | 808 Bass 2 |
| 072 | Organ Bass 2 |
| 073 | Org Atk Bs |
| 074 | Sqr Atk Bs |
| 075 | FM Bass |
| 076 | Front 909 |
| 077 | FM Super Bs2 |
| 078 | Univ Studies |
| 079 | Buum Bass |
| 080 | Solid Bass |
| 081 | T Nite Bass |
| 082 | Solid Goa |
| 083 | Solid Bottom |
| 084 | Dark Bass 1 |
| 085 | Dark Bass 2 |
| 086 | Dark Bass 3 |
| 087 | HipHop Bs 2 |
| 088 | HipHop Bs 3 |
| 089 | HipHop Bs 4 |
| 090 | ConcreteBass |
| 091 | AfterHoursMx |
| 092 | Delta Bass |
| 093 | Basstar |
| 094 | Tabla Bass |
| 095 | Pizz Bass |
| 096 | Destroyed Bs |
| 097 | FXM Bass |
| 098 | Dendo Bass |
| 099 | XL Too |
| 100 | NY83 Bass |
| 101 | Velo fingers |
| 102 | P.Bass |
| 103 | All Round |
| 104 | Nice P / |
| 105 | Stick Bass |
| 106 | NiceStick / |
| 107 | Heavy Bass |
| 108 | Upright Bs |
| 109 | Acousta Bass |
| 110 | LoFiAtk Bass |
| 111 | Downright |
| 112 | E.Ac.Bass |
| 113 | Acid Jazz Bs |
| 114 | Fretless Bs1 |
| 115 | FretlessBs P |
| 116 | Fretless Bs2 |
| 117 | Warm LeadG |
| 118 | Slap Bass |
| 119 | Bass Slide |
| 120 | V-BassHarm |
| 121 | MeanNoHarmBs |
| 122 | Tempest |
| 123 | Sweep Pad 1 |
| 124 | Sweep Pad 2 |
| 125 | Size Rizer |
| 126 | Juno Sweep |
| 127 | BPF Syn Pad |
| 128 | SmoothChange |

## Preset D (CC#0 = 81, CC#32 = 67)

| No. | Name |
|---|---|
| 001 | Morphed Silk |
| 002 | Hy Synstring |
| 003 | OB Rezo Pad |
| 004 | Rev Sweep |
| 005 | Phat Pad |
| 006 | DCO Stack |
| 007 | Rise Pad |
| 008 | Penta Pad |
| 009 | Juno Waves |
| 010 | Mod Pad |
| 011 | Slow Gear |
| 012 | DeepForest2 |
| 013 | HPF Ensemble |
| 014 | Steamed Sawz |
| 015 | AiRye Bread- |
| 016 | Analogscape |
| 017 | The Pad |
| 018 | JP Str Pad |
| 019 | Saw Pad |
| 020 | Palm Pad |
| 021 | 909 Sweep |
| 022 | Undulate Pad |
| 023 | Sweet Vocode |
| 024 | Double Morph |
| 025 | Floating Pad |
| 026 | Juno Waves 2 |
| 027 | Cosmosis |
| 028 | Metal Pad |
| 029 | Warm Pad |
| 030 | Soft Pad |
| 031 | Phaedra |
| 032 | Sine Pad |
| 033 | Heavenly Pad |
| 034 | HauntedStars |
| 035 | Female Oos |
| 036 | Floor Choir |
| 037 | Windy Vox |
| 038 | Digi Voices |
| 039 | SmoothGroove |
| 040 | Auh Luv Rave |
| 041 | JungleFever |
| 042 | Cheesy Stab |
| 043 | AahVoiceMaj |
| 044 | Sample Age |
| 045 | Sun Shower |
| 046 | CalifnSunset |
| 047 | AahVoiceMin |
| 048 | Right&Left |
| 049 | Hit Chorus |
| 050 | VOCOclavinet |
| 051 | Aah Formant |
| 052 | Eeh Formant |
| 053 | Iih Formant |
| 054 | Ooh Formant |
| 055 | Uuh Formant |
| 056 | MetalVoice1L |
| 057 | MetalVoice2L |
| 058 | MetalVoice3L |
| 059 | Vox Menu 1 |
| 060 | Vox Menu 2 |
| 061 | MetalVoice 1 |
| 062 | MetalVoice 2 |
| 063 | MetalVoice 3 |
| 064 | Try This |

| No. | Name |
|---|---|
| 065 | With ME |
| 066 | 1 Get Up^_^) |
| 067 | Puwa |
| 068 | Dance Grand |
| 069 | 64voicePiano |
| 070 | Hard Piano |
| 071 | Epic House |
| 072 | Honktonkhous |
| 073 | Piano Trance |
| 074 | NY Piano+Str |
| 075 | Sine EP+ |
| 076 | Soul Vibe |
| 077 | Talkin EP |
| 078 | Psychic EP |
| 079 | Wah EP |
| 080 | Noir |
| 081 | StageEP w/Tr |
| 082 | Back2the60s |
| 083 | Creep |
| 084 | Analog EP |
| 085 | Old EP X |
| 086 | Str8Up Wurly |
| 087 | Wirle EeePee |
| 088 | Gentle Wurly |
| 089 | Dist Wurly |
| 090 | Trem EP Mod |
| 091 | Cool EP |
| 092 | FM E.Piano |
| 093 | EppEEppE |
| 094 | SuperLushMod |
| 095 | Clavi |
| 096 | Funky D |
| 097 | Pulse Clav |
| 098 | Analog Clavi |
| 099 | Harpsichord |
| 100 | Pulse Key 2 |
| 101 | Digi Key |
| 102 | Cold Key |
| 103 | E.Organ 1 |
| 104 | E.Organ 2 |
| 105 | Organic |
| 106 | Percs Organ |
| 107 | Fake Organ |
| 108 | Vade Retro 2 |
| 109 | Club Organ |
| 110 | Continential |
| 111 | Hippy Organ |
| 112 | Bright Organ |
| 113 | Clubless Org |
| 114 | Happy Organ |
| 115 | Plastic |
| 116 | Remix Organ |
| 117 | Cheese Organ |
| 118 | Church Org |
| 119 | Rave Organ |
| 120 | Vibraphone |
| 121 | Vibrarimba |
| 122 | CTA Bell |
| 123 | Marimba |
| 124 | FM Mallet |
| 125 | Balaphone |
| 126 | Ethno Keys 1 |
| 127 | Seq Fodder |
| 128 | Mu Island |

## Preset E (CC#0 = 81, CC#32 = 68)

| No. | Name |
|---|---|
| 001 | Glockenspiel |
| 002 | Steel Drums |
| 003 | Sweep Mallet |
| 004 | Toy Jungle |
| 005 | FantabellSub |
| 006 | Small Bell |
| 007 | Synth Bell |
| 008 | Kalimbells |
| 009 | DIGI Bell |
| 010 | TribellDance |
| 011 | NitrousDragn |
| 012 | Tubular-Bell |
| 013 | Gigoloid |
| 014 | Ring Sine |
| 015 | Steel Guitar |
| 016 | Steel-Str.Gt |
| 017 | HipHop Gtr |
| 018 | Twin Aco Gtr |
| 019 | PureAcoustic |
| 020 | Bright Nylon |
| 021 | Fake Guitar |
| 022 | Clean TC |
| 023 | CleanEG w/Tr |
| 024 | Clean&String |
| 025 | Lo-Fi Gtr |
| 026 | BPF Guitar |
| 027 | Funk Gtr |
| 028 | FnkDittyMute |
| 029 | JAMIn' 01 |
| 030 | Jazzin |
| 031 | CleanGtrCut |
| 032 | VeloWahDMute |
| 033 | ReTrigDsMute |
| 034 | RockinMuteGt |
| 035 | AutoWahMute |
| 036 | Wah Gtr Riff |
| 037 | Tripled8 Wah |
| 038 | GtrShtSlide |
| 039 | MuteFall / |
| 040 | Gtr Cut |
| 041 | DistGtrRiff1 |
| 042 | DistGtrRiff2 |
| 043 | Gtr Trill |
| 044 | 909 Strings |
| 045 | Hybrid Str 1 |
| 046 | Hybrid Str 2 |
| 047 | JV Strings |
| 048 | Lo-FiStrings |
| 049 | Vinyl Strngs |
| 050 | Odd Strings |
| 051 | Melo Tapes |
| 052 | Mellody |
| 053 | Swim Strings |
| 054 | GloryOfCaesr |
| 055 | BunVox&Str |
| 056 | Tremolo SFZ |
| 057 | Finale |
| 058 | NostalgicOrc |
| 059 | ScaryStringz |
| 060 | DrkTrem Orch |
| 061 | IfIKingDaFst |
| 062 | Radio 30's |
| 063 | Ping |
| 064 | Queasy |

| No. | Name |
|---|---|
| 065 | Golem |
| 066 | StrChord Maj |
| 067 | StrChord Min |
| 068 | SynStrings |
| 069 | OB Slow Str |
| 070 | Super SynStr |
| 071 | Contrabass |
| 072 | VlnPizzicato |
| 073 | Pizz Orch |
| 074 | Wet |
| 075 | Piezzo |
| 076 | E-piz |
| 077 | Pizzicato |
| 078 | Pizz It |
| 079 | Techno Pitz |
| 080 | AfricanFlute |
| 081 | Jazzy Flute |
| 082 | McFlute Atk |
| 083 | FluteSoloist |
| 084 | Faked Flute |
| 085 | TronM Flute |
| 086 | TronFlute5th |
| 087 | Lonely Ghost |
| 088 | Strangefruit |
| 089 | Casals dream |
| 090 | Flute Pipe |
| 091 | Pan Flute |
| 092 | ACIDJdynaflt |
| 093 | Flute Gliss |
| 094 | Dr. Bellows |
| 095 | Whistle |
| 096 | Wide SynBrs |
| 097 | Special Saw |
| 098 | Silk Pad |
| 099 | Silky JP |
| 100 | Detuned DCOs |
| 101 | Cheap SynBrs |
| 102 | Synth Brass |
| 103 | Brass Stack |
| 104 | St Sfz Brass |
| 105 | 30's Tpt |
| 106 | Stereo Brass |
| 107 | ThunderBrass |
| 108 | Solo Tpt |
| 109 | LitlNapolian |
| 110 | Grit Brassh |
| 111 | Soft Brass |
| 112 | MuteTrumpet |
| 113 | KingApprochz |
| 114 | Brass Fall 1 |
| 115 | Brass Fall 2 |
| 116 | Mercury Fall |
| 117 | AltoSoftSax |
| 118 | Breathy Sax |
| 119 | Slow BlowSax |
| 120 | LatinTnr Sax |
| 121 | Sax Section |
| 122 | Bombay |
| 123 | Real Sitar |
| 124 | Sitar LFO |
| 125 | FarOutSGliss |
| 126 | Tripn'Bombay |
| 127 | Cheep Lead |
| 128 | Maharagna |

## Preset F (CC#0 = 81, CC#32 = 69)

| No. | Name |
|---|---|
| 001 | Tsugaru Road |
| 002 | TribalRitual |
| 003 | It Began in |
| 004 | Duel Ethno |
| 005 | Ethno Keys 2 |
| 006 | FX Menu 1 |
| 007 | FX Menu 2 |
| 008 | FX Menu 3 |
| 009 | FX Menu 4 |
| 010 | Hi? |
| 011 | Weird Snare |
| 012 | BreathingArp |
| 013 | Chiki / |
| 014 | Underground |
| 015 | Ambitech |
| 016 | ModtheGong |
| 017 | Breath Hit |
| 018 | Smooth Jet |
| 019 | Lazer Points |
| 020 | Mod Hit 1 |
| 021 | Stopper |
| 022 | We'r d'ROBOZ |
| 023 | Orbit Mod |
| 024 | Affects |
| 025 | LogicalSweep |
| 026 | BullsEye |
| 027 | DownThePitch |
| 028 | DnB Fall |
| 029 | Let it beep |
| 030 | Mousey Kick |
| 031 | Strange |
| 032 | Fear |
| 033 | Touch EF |
| 034 | NoFXrequired |
| 035 | Feedbackwave |
| 036 | Noise Voice |
| 037 | In The Mist |
| 038 | MagneticStrm |
| 039 | Take Effect |
| 040 | Random LFO |
| 041 | S&H Voc |
| 042 | RubbrBandSaw |
| 043 | Nasty Filt |
| 044 | Lipple Ring |
| 045 | 2Matt Colors |
| 046 | Flag Flash |
| 047 | Metalythm |
| 048 | Sync Tone |
| 049 | Down The Hit |
| 050 | MetallicShot |
| 051 | Kick Da Lion |
| 052 | Boost Tom |
| 053 | Perk Breath |
| 054 | WaitnOutside |
| 055 | GogSign |
| 056 | DingDong |
| 057 | Transport |
| 058 | GK Ready |
| 059 | to the stars |
| 060 | Dusted |
| 061 | Destructo |
| 062 | RockNSleestk |
| 063 | 3D Flanger |
| 064 | Pacifica |
| 065 | Home Sweep |
| 066 | Sub Atmosphe |
| 067 | Breeze |
| 068 | Liquid Air |
| 069 | Rev Cord |
| 070 | Trancer |
| 071 | Autovox |
| 072 | Randooom |
| 073 | Mod Hit 2 |
| 074 | Mod Hit 3 |
| 075 | Mad Mod |
| 076 | Q Jet FX 01 |
| 077 | Abduction |
| 078 | Scratch Menu |
| 079 | SFX Menu 1 |
| 080 | SFX Menu 2 |
| 081 | Bomb Noise |
| 082 | Hit Menu 1 |
| 083 | Hit Menu 2 |
| 084 | Hit Menu 3 |
| 085 | Bliss Sweepz |
| 086 | Maj7+11 Hit |
| 087 | Agent Orange |
| 088 | DfloorOrch |
| 089 | Blue Ice |
| 090 | Sweet Garage |
| 091 | Orch Hit 1 |
| 092 | Orch Hit 2 |
| 093 | Rave Hit |
| 094 | Chunky |
| 095 | Tekno ChdHit |
| 096 | Happy Hit |
| 097 | Dly Rls Stab |
| 098 | Classic Hit |
| 099 | RevHouse Hit |
| 100 | Smear Hit 1 |
| 101 | Smear Hit 2 |
| 102 | Dark Hit |
| 103 | Vinyl Brass |
| 104 | Funk Chank |
| 105 | Cheezy Movie |
| 106 | Mojo Man |
| 107 | Philly Hit |
| 108 | Power Hit |
| 109 | Neo Hit |
| 110 | HardHitnHous |
| 111 | Goto Europe |
| 112 | Dis The Bass |
| 113 | Bright Hit |
| 114 | Disminished |
| 115 | Tribal Song |
| 116 | Industrial02 |
| 117 | Clap Menu 1 |
| 118 | Clap Menu 2 |
| 119 | Perc Menu 1 |
| 120 | Perc Menu 2 |
| 121 | Perc Menu 3 |
| 122 | Perc Menu 4 |
| 123 | Tablabaya |
| 124 | Hip Pluck |
| 125 | Udu/Udo |
| 126 | Asian Gong |
| 127 | Timpani |
| 128 | VoxPerc Menu |

## Preset G (CC#0 = 81, CC#32 = 70)

| No. | Name |
|---|---|
| 001 | Kick Menu 1 |
| 002 | Kick Menu 2 |
| 003 | Kick Menu 3 |
| 004 | Kick Menu 4 |
| 005 | TR808 Kick |
| 006 | Snare Menu 1 |
| 007 | Snare Menu 2 |
| 008 | Snare Menu 3 |
| 009 | Snare Menu 4 |
| 010 | Snare Menu 5 |
| 011 | Snare Menu 6 |
| 012 | Snare Menu 7 |
| 013 | NY83 SD |
| 014 | TR909 Snare |
| 015 | Blip SD |
| 016 | RimShot Menu |
| 017 | Tom Menu |
| 018 | CHH Menu 1 |
| 019 | CHH Menu 2 |
| 020 | PHH Menu |
| 021 | OHH Menu |
| 022 | Cymbal Menu |
| 023 | AirWave Solo |
| 024 | TronFlt Solo |
| 025 | TronStr Solo |
| 026 | JP8 Saw Solo |
| 027 | SuperSawSolo |
| 028 | Trumpet Solo |
| 029 | E.Organ Solo |
| 030 | RealStr Solo |
| 031 | MTLVoiceSolo |
| 032 | E.Voice Solo |

## User: 001–128 (CC#0 = 81, CC#32 = 0)

## User: 129–256 (CC#0 = 81, CC#32 = 1)

## Card: 001–128 (CC#0 = 81, CC#32 = 32)

## Card: 129–256 (CC#0 = 81, CC#32 = 33)

# Preset Rhythm Set List

(Preset: FCC#0 = 82, CC#32 = 64  User: CC#0 = 82, CC#32 = 0  Card: CC#0 = 82, CC#32 = 32)

| Note No. | 001: 909 TR-909 1 | 004: 909 TR-909 3 | 007: 909 Techno 1 | 010: 909 Techno 4 | 013: 909 Trance 3 | 016: 909 House 2 |
|---|---|---|---|---|---|---|
| 59 | PlasticKick1 | TR909 Kick 1 | TR808 Kick | TR909 Kick 6 | AnalogKick 9 | Neck Kick |
| C4 60 | TR909 Kick 1 | TR909 Kick 2 | TR606 Dst BD | Pick Kick | AnalogKick 5 | Back Kick |
| 61 | TR909 Kick 7 | TR909 Kick 3 | TR808 Kick | AnalogKick 9 | PlasticKick3 | Tight Kick |
| 62 | TR909 SD 1 | TR909 SD 1 | TR808 SD 1 | Tiny Snr 1 | TR909 SD 3 | Tiny Snr 1 |
| 63 | TR909 SD 2 | TR909 SD 2 | TR808 SD 2 | Jngl Tiny SD | Boys Snr 2 | Rap Snr 2 |
| 64 | TR909 SD 3 | TR909 SD 3 | TR808 SD 3 | Slap Snr 1 | Analog Snr 1 | Tiny Snr 2 |
| 65 | TR909 Rim | TR909 Rim | TR808 Rim | Aah Formant | R&B Rim 4 | R&B Rim 4 |
| 66 | TR909 Clap 1 | TR909 Clap 2 | TR808 Clap | R8 ClavesCmp | Claptail | Old Clap |
| 67 | TR909 Tom | TR909 Tom | TR606 Tom | MG Attack | Deep Tom | GtrShtSlide |
| 68 | TR909 Tom | TR909 Tom | TR606 Tom | Beam HiQ | Deep Tom | Tambourine4 |
| 69 | TR909 Tom | TR909 DstTom | TR808 Claves | MG Blip | Deep Tom | AahVoice Maj |
| 70 | TR909 CHH 1 | TR909 CHH 1 | TR606 CHH 1 | TR808 CHH 1 | Urban CHH | LowDownCHH |
| 71 | TR909 PHH 2 | TR909 PHH 1 | TR606 PHH 1 | TR808 PHH 1 | TR808 PHH 1 | Swallow PHH |
| C5 72 | TR909 OHH 2 | TR909 OHH 1 | TR606 OHH | TR808 OHH 1 | Regular OHH | Regular OHH |
| 73 | TR909 Crash | TR909 Crash | TR606 Cym | TR606 OHH | TR909 Crash | NaturalCrash |
| 74 | TR909 Ride | TR909 Ride | TR909 Ride | NaturalCrash | TR707 Ride | Regular Ride |

| Note No. | 002: 909 TR-808 1 | 005: 909 TR-909 4 | 008: 909 Techno 2 | 011: 909 Trance 1 | 014: 909 Minimal | 017: 909 House 3 |
|---|---|---|---|---|---|---|
| 59 | TR808 Kick | TR909 Kick 4 | Back Kick | AnalogKick 8 | TR808 Kick | TR909 Kick 5 |
| C4 60 | TR808 Kick | TR909 Kick 5 | PlasticKick1 | AnalogKick 6 | TR909 Kick 1 | Pick Kick |
| 61 | TR808 Kick | TR909 Kick 6 | PlasticKick1 | AnalogKick 7 | AnalogKick10 | PlasticKick3 |
| 62 | TR808 SD 2 | TR909 SD 4 | Real Snare | Analog Snr 2 | TR909 SD 1 | LowDownSnr 1 |
| 63 | TR808 SD 4 | TR909 SD 5 | Lo-Hard Snr | Analog Snr 3 | TR808 SD 4 | Jngl Tiny SD |
| 64 | TR808 SD 5 | TR909 SD 6 | Swallow Snr | Analog Snr 1 | TR909 SD 3 | Tiny Snr 1 |
| 65 | TR808 Rim | TR909 Rim | R&B Rim 3 | Picc. Rol Sn | Snap | TR808 Rim |
| 66 | TR808 Clap | TR909 Clap 2 | R8 Clap | Dist Clap | TR909 Clap 1 | Club FinSnap |
| 67 | TR808 Tom | TR909 Tom | TablaBayam 1 | R8 Shaker A | Disc Clap | MG Attack |
| 68 | TR808 Tom | TR909 Tom | TablaBayam 2 | BPF Fx | Claptail | MG Blip |
| 69 | TR808 Tom | TR909 DstSD | TablaBayam 3 | Density | CR78 Tamb | Beam HiQ |
| 70 | TR808 CHH 1 | TR909 CHH 2 | Regular CHH1 | TR909 CHH 2 | TR909 OHH 2 | TR808 CHH 1 |
| 71 | TR808 CHH 2 | TR909 PHH 2 | Street PHH | TR909 PHH 2 | Neck OHH | TR808 PHH 1 |
| C5 72 | TR808 OHH 1 | TR909 OHH 2 | Regular OHH | TR909 OHH 2 | TR909 OHH 2 | TR808 OHH 1 |
| 73 | TR606 Cym | TR909 Crash | NaturalCrash | TR909 Crash | TR909 Crash | TR606 Cym |
| 74 | TR606 Cym | TR909 Ride | TR707 Ride | TR909 Ride | TR909 Ride | NaturalCrash |

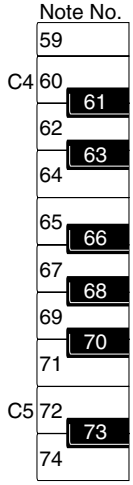
| Note No. | 003: 909 TR-909 2 | 006: 909 TR-808 2 | 009: 909 Techno 3 | 012: 909 Trance 2 | 015: 909 House 1 | 018: 909 BrkBts 1 |
|---|---|---|---|---|---|---|
| 59 | AnalogKick 6 | TR808 Kick | AnalogKick 9 | Wet Kick | Wet Kick | Density |
| C4 60 | AnalogKick 7 | TR808 Kick | AnalogKick11 | AnalogKick10 | Low Kick 1 | MG Zap 4 |
| 61 | AnalogKick 8 | TR808 Kick | TR909 Kick 1 | Frenzy Kick | Skool Kick | Pick Kick |
| 62 | Analog Snr 1 | TR808 SD 1 | TR909 SD 4 | TR909 SD 1 | TR909 SD 3 | Analog Snr 1 |
| 63 | Analog Snr 2 | TR808 SD 2 | Pin Snr | Frenzy Snr 1 | LowDownSnr 1 | Swallow Snr |
| 64 | Analog Snr 3 | TR808 SD 3 | Flange Snr | TR808 SD 4 | Tiny Snr 2 | Tiny Snr 2 |
| 65 | TR909 Rim | TR808 Rim | Street Rim | Swag Rim | R&B Rim 4 | R&B Rim 2 |
| 66 | TR909 Clap 2 | TR808 Clap | Old Clap | TR707 Clap | R8 Clap | TR909 Clap 2 |
| 67 | TR909 Tom | TR808 Tom | Deep Tom | Deep Tom | Reg HiBng Mt | TR909 DstTom |
| 68 | TR909 Tom | TR808 Tom | TR808 Tom | Deep Tom | Reg LoBng Op | TR909 DstTom |
| 69 | TR909 DstTom | TR808Cowbell | Deep Tom | Deep Tom | Reg HiBng Op | TR909 DstTom |
| 70 | TR909 CHH 1 | TR808 CHH 1 | Shaky CHH | TR606 CHH 1 | Regular CHH1 | Hipping CHH |
| 71 | TR909 PHH 1 | TR808 PHH 1 | Hip PHH | TR606 PHH 1 | TR606 PHH 1 | Street PHH |
| C5 72 | TR909 OHH 1 | TR808 OHH 1 | Pop Hat Open | TR909 OHH 2 | Regular OHH | Bang OHH |
| 73 | TR909 Crash | TR606 Cym | TR909 Crash | Analog Cym | NaturalCrash | TR909 Crash |
| 74 | TR909 Ride | TR808 OHH 2 | TR606 Cym | TR808 OHH 1 | TR707 Ride | TR707 Ride |

| Note No. | 019: 909 BrkBts 2 | 022: 909 DnB 1 | 025: 909 2Step 1 | 028: 909 HipHop 2 | 031: 909 G-Funk 1 | 034: 909 R&B 1 |
|---|---|---|---|---|---|---|
| 59 | Vinyl Kick 1 | Jive Kick | TR808 Kick | Mild Kick | TR606 Kick | Mild Kick |
| C4 60 | Skool Kick | Pick Kick | Jive Kick | HipHop Kick1 | Low Kick 3 | HipHop Kick1 |
| 61 | Click Kick 1 | AnalogKick10 | Wet Kick | Low Kick 4 | Low Kick 4 | Low Kick 4 |
| 62 | R8 Brush Tap | Jngl Tiny SD | Cross Snr | Tiny Snr 1 | Back Snr | Jngl Tiny SD |
| 63 | Real Snare | Jngl Tiny SD | R&B Snr 1 | Analog Snr 3 | Sizzle Snr 1 | LowDownSnr 1 |
| 64 | Chemical Snr | DJ Snare | R&B RegSnr 1 | TR909 SD 6 | Chemical Snr | DanceHall SD |
| 65 | R8 Comp Rim | TR808 Rim | Swag Rim | R&B Rim 1 | R&B Rim 2 | R&B Rim 2 |
| 66 | TR909 Clap 1 | Funk Clap | Snap | Group Clap | TR808 Clap | Royal Clap |
| 67 | R8 Comp Tom3 | MG Attack | Ah M | Scratch 17 | TR606 Tom | Scratch 17 |
| 68 | R8 Comp Tom2 | MG Blip | Triangle 1 | Scratch 20 | TR606 Tom | LoFi MinorHt |
| 69 | R8 Comp Tom1 | Beam HiQ | Uuh Yeah! M | Sand Hit | TR606 Tom | Scratch 17 |
| 70 | Hipping CHH | TR808 CHH 1 | Bristol CHH | Hipping CHH | HipHop CHH | Urban CHH |
| 71 | Hip PHH | TR808 PHH 1 | Hip PHH | Hip PHH | TR808 PHH 1 | Hip PHH |
| C5 72 | Neck OHH | TR808 OHH 1 | Pop Hat Open | Pop Hat Open | TR808 OHH 2 | Pop Hat Open |
| 73 | TR909 OHH 2 | TR606 Cym | Analog Cym | NaturalCrash | NaturalCrash | NaturalCrash |
| 74 | NaturalCrash | Analog Cym | TR606 Cym | Regular Ride | Regular Ride | Regular Ride |

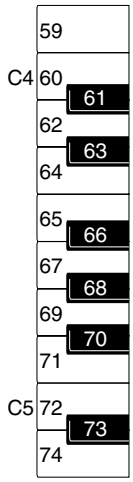
| | 020: 909 BrkBts 3 | 023: 909 DnB 2 | 026: 909 2Step 2 | 029: 909 HipHop 3 | 032: 909 G-Funk 2 | 035: 909 R&B 2 |
|---|---|---|---|---|---|---|
| 59 | Pick Kick | TR909 Kick 5 | Pick Kick | Mild Kick | Low Kick 3 | Low Kick 3 |
| C4 60 | HipHop Kick2 | Pick Kick | Jive Kick | Skool Kick | Low Kick 1 | Low Kick 1 |
| 61 | AnalogKick 3 | AnalogKick10 | AnalogKick10 | Low Kick 3 | Skool Kick | Skool Kick |
| 62 | Flange Snr | Tiny Snr 1 | Tiny Snr 1 | LowDownSnr 1 | Back Snr | Back Snr |
| 63 | Tiny Snr 1 | Jngl Tiny SD | Boys Snr 3 | Jngl Tiny SD | Slap Snr 1 | Slap Snr 1 |
| 64 | RegularSnrMF | R8 Brush Tap | R8 Snr 1cmp | DanceHall SD | Boys Snr 2 | Grave Snr |
| 65 | R&B Rim 4 | R&B Rim 1 | R8 Comp Rim | R&B Rim 2 | Swag Rim | Swag Rim |
| 66 | Group Clap | Hip Clap | TR909 Clap 2 | Claptail | Planet Clap | Planet Clap |
| 67 | Euro Fx | MG Attack | R8 Comp Tom4 | Scratch 19 | R8 Comp Tom3 | Snap |
| 68 | Scratch 23 | MG Blip | R8 Comp Tom2 | Ha! M | R8 Comp Tom2 | R8 Hi Agogo |
| 69 | LoFi Beep 6 | Beam HiQ | R8 Comp Tom1 | Dial | R8 Comp Tom1 | Snap |
| 70 | Urban CHH | TR808 CHH 1 | Neck CHH | TR909 CHH 1 | Bang CHH | Hipping CHH |
| 71 | Hip PHH | TR808 PHH 1 | Pedal Hat 1 | Hip PHH | TR808 CHH 1 | TR808 CHH 1 |
| C5 72 | Pop Hat Open | TR808 OHH 1 | Regular OHH | TR808 OHH 1 | Regular OHH | HipHop OHH |
| 73 | NaturalCrash | NaturalCrash | TR909 Crash | TR909 Crash | TR909 Crash | NaturalCrash |
| 74 | Regular Ride | TR606 Cym | Analog Cym | Regular Ride | Regular Ride | TR707 Ride |

| | 021: 909 BrkBts 4 | 024: 909 DnB 3 | 027: 909 HipHop 1 | 030: 909 HipHop 4 | 033: 909 G-Funk 3 | 036: 909 R&B 3 |
|---|---|---|---|---|---|---|
| 59 | Artful Kick | Jive Kick | Mild Kick | Mild Kick | Pin Kick | Swallow Kick |
| C4 60 | TR707 Kick 1 | Mild Kick | HipHop Kick1 | HipHop Kick1 | Skool Kick | Back Kick |
| 61 | TR909 Kick 7 | PlasticKick3 | Low Kick 4 | TR909 Kick 1 | Click Kick 1 | Tight Kick |
| 62 | Real Snare | Jngl Tiny SD | Jngl Tiny SD | RaggaTightSD | Keen Snr 1 | Tiny Snr 1 |
| 63 | DanceHall SD | LowDownSnr 1 | LowDownSnr 1 | RaggaTightSD | Boys Snr 1 | Rap Snr 2 |
| 64 | TR808 SD 7 | RegularSnr F | DanceHall SD | DanceHall SD | Slap Snr 1 | Tiny Snr 2 |
| 65 | R&B Rim 4 | R&B Rim 1 | R&B Rim 2 | Swag Rim | Regular Rim | Street Rim |
| 66 | TR808 Clap | Disc Clap | Claptail | Cheap Clap | Hip Clap | Old Clap |
| 67 | TablaBayam 7 | MG Sweep 5 | Scratch 16 | Scratch 25 | CR78 Tamb | Tape Rewind |
| 68 | TR909 DstTom | MG Sweep 1 | Scratch 19 | Scratch 21 | R8 Shaker B | Tambourine4 |
| 69 | Maracas | MG Sweep 3 | Metal Press | ThroatWind | R8 Cabasa | Vox Cymbal |
| 70 | Bristol CHH | Swallow CHH | Hipping CHH | Modern CHH | Bang CHH | LowDownCHH |
| 71 | TR606 PHH 1 | TR606 PHH 2 | Hip PHH | Street PHH | Street PHH | Swallow PHH |
| C5 72 | TR606 OHH | HipHop OHH | Pop Hat Open | HipHop OHH | Bang OHH | Regular OHH |
| 73 | NaturalCrash | NaturalCrash | NaturalCrash | TR909 Crash | TR606 Cym | NaturalCrash |
| 74 | TR707 Ride | Jungle Crash | Regular Ride | Regular Ride | Analog Cym | Regular Ride |

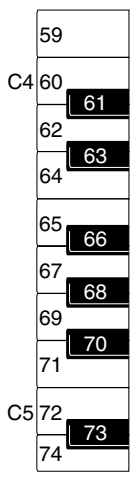
# Preset Rhythm Set List




| 037: 909 Human 1 | 040: 909 80's 2 | 043: 909 Elctrnca | 046: 909 Regge 2 | 049: 909 Real 2 | 052: 909 World |
|---|---|---|---|---|---|
| Vox Kick 1 | PlasticKick1 | AnalogKick 9 | Vinyl Kick 1 | Low Kick 4 | Cajon 3 |
| Vox Kick 2 | Artful Kick | TR808 Kick | Low Kick 3 | Mild Kick | TablaBayam 1 |
| VoxKickSweep | AnalogKick 5 | TR808 Kick | Back Kick | Dance Kick 1 | TablaBayam 2 |
| Vox Snare 1 | Artful Snr | R&B RegSnr 1 | Analog Snr 1 | Back Snr | TablaBayam 3 |
| Vox Snare 2 | Analog Snr 3 | R8 Snr 2 | Real Snare | Slap Snr 1 | TablaBayam 4 |
| Vox Snare 1 | Analog Snr 1 | TR606 SD 1 | Antigua Snr | Cross Snr | TablaBayam 5 |
| Chiki! | R&B Rim 2 | Scratch 20 | R&B Rim 2 | Swag Rim | TablaBayam 6 |
| Pa! | Disc Clap | Happy Clap | Real Clap 2 | Hip Clap | Club Clap |
| Chiki! | TR808 Tom | Snap | Deep Tom | R8 Comp Tom3 | Udo |
| Ah M | TR606 Tom | TablaBayam 3 | Deep Tom | R8 Comp Tom2 | Udu Pot1 Hi |
| Ah2 M | Deep Tom | Udu Pot1 Hi | Deep Tom | R8 Comp Tom1 | Udu Pot1 Slp |
| Vox Hihat 2 | TR606 CHH 1 | CR78 CHH | Hipping CHH | Hipping CHH | Chenchen |
| Vox Hihat 1 | TR606 PHH 1 | CR78 OHH | Hip PHH | TR808 CHH 1 | Op Pandeiro |
| Vox Hihat 3 | TR808 OHH 2 | CR78 OHH | Neck OHH | TR606 PHH 1 | Mt Pandeiro |
| Vox Cymbal | TR606 Cym | Analog Cym | TR909 OHH 2 | NaturalCrash | Asian Gong |
| Vox Hihat 3 | TR707 Ride | Regular Ride | NaturalCrash | Regular Ride | RAMA Cymbal |




| 038: 909 Human 2 | 041: 909 80's 3 | 044: 909 Cheap | 047: 909 Regge 3 | 050: 909 Jazz | 053: 909 Perc 1 |
|---|---|---|---|---|---|
| Vox Kick 1 | PlasticKick2 | Lite Kick 1 | TR909 Kick 7 | Pick Kick | R8 Cowbell |
| Vox Kick 2 | AnalogKick10 | Artful Kick | Skool Kick | Low Kick 1 | TR808Cowbell |
| VoxKickSweep | PlasticKick3 | TR606 Kick | Jive Kick | TR707 Kick 1 | CR78 Cowbell |
| Vox Snare 1 | TR808 SD 5 | Lite Snare | DanceHall SD | Real Snare | R8 Hi Agogo |
| Vox Snare 2 | TR808 SD 3 | CR78 Snare | TR909 SD 5 | Cross Snr | R8 LowAgogo |
| Ah M | TR808 SD 7 | TR808 SD 1 | TR808 SD 3 | R&B RegSnr 4 | Noise AGG |
| Woow F | TR808 Rim | TR808 Rim | TR808 Claves | Neck Rim | Triangle 1 |
| Funk Clap | TR808 Clap | PD Clap | Hip Clap | R8 Clap | Triangle 1 |
| Scratch 20 | TR808Cowbell | CR78 Tamb | Udo | R8 Comp Tom3 | Triangle 2 |
| Pa! | MG Zap 9 | CR78 Beat | Udu Pot1 Hi | R8 Comp Tom2 | Triangle 2 |
| Chiki! | Beam HiQ | CR78 Guiro | Udu Pot1 Slp | R8 Comp Tom1 | Tambourine1 |
| Vox Hihat 2 | TR808 CHH 1 | Lite CHH | TR606 CHH 2 | Regular CHH1 | Tambourine2 |
| Vox Hihat 1 | CR78 CHH | Lite OHH | Hip PHH | Pedal Hat 1 | Tambourine3 |
| Vox Cymbal | TR606 OHH | Lite OHH | TR909 OHH 2 | Regular OHH | Tambourine4 |
| Asian Gong | TR606 OHH | TR606 Cym | NaturalCrash | NaturalCrash | CR78 Tamb |
| Scratch 24 | TR909 Ride | Analog Cym | TR707 Ride | Regular Ride | CR78 Beat |




| 039: 909 80's 1 | 042: 909 Electro | 045: 909 Regge 1 | 048: 909 Real 1 | 051: 909 Brash | 054: 909 Perc 2 |
|---|---|---|---|---|---|
| HipHop Kick2 | Low Kick 3 | Rap Kick | Boys Kick | Jive Kick | 808 Maracas |
| PlasticKick3 | PlasticKick2 | Neck Kick | Low Kick 1 | TR707 Kick 1 | Maracas |
| TR909 Kick 1 | AnalogKick10 | Vinyl Kick 1 | Regular Kick | Regular Kick | R8 Shaker A |
| TR909 SD 5 | DanceHall SD | Frenzy Snr 2 | RegularSnrMP | R8 BrushRoll | R8 Cabasa |
| Tiny Snr 1 | Lite Snare | Reagae Snr | RegularSnr F | R8 BrshSwill | CR78 Guiro |
| Analog Snr 1 | RegularSnr F | Urban RollSD | RegularSnrMF | R&B RegSnr 4 | Reg Guiro A |
| R&B Rim 3 | TR808 Rim | Modern CHH | Regular Rim | R&B Rim 3 | Reg Guiro B |
| TR909 Clap 1 | Dist Clap | R8 Clap | R&B RegSnrG1 | Real Clap 2 | Reg Guiro C |
| Deep Tom | TR606 Tom | TR909 DstTom | R8 Comp Tom4 | Natural Tom | Whistle Shrt |
| Deep Tom | TR606 Tom | TR909 Tom | R8 Comp Tom2 | Natural Tom | Whistle |
| Deep Tom | TR606 Tom | TR808 Tom | R8 Comp Tom1 | Natural Tom | TR727Quijada |
| Modern CHH | TR909 CHH 2 | Swallow CHH | Urban CHH | Regular CHH2 | R8 ClavesCmp |
| Swallow PHH | TR606 CHH 1 | Street PHH | Pedal Hat 1 | Street PHH | TR808 Claves |
| Regular OHH | TR606 OHH | Neck OHH | Regular OHH | Regular OHH | Single Snap |
| NaturalCrash | TR909 Crash | Jungle Crash | NaturalCrash | NaturalCrash | Snap |
| Regular Ride | TR707 Ride | Dist Clap | Regular Ride | Regular Ride | Club FinSnap |

* *Numbers 065–072 are sets to which the sample data used by patterns 1–5 have been assigned.*

| Note No. | 055: 909 Perc 3 | 058: 909 Scratch | 061: 909 Vox Perc | 064: 909 Sound FX | 067: G-Funk Voice | 070: House Guitar |
|---|---|---|---|---|---|---|
| 59 | R8 HiCongaMt | Scratch 16 | Vox Kick 1 | Dial | Break It On | House Gtr1 |
| C4 60 | R8 HiCongaOp | Scratch 17 | Vox Kick 2 | Door Knob | Check It Out | House Gtr2 |
| 61 | R8 LoCongaOp | Scratch 18 | VoxKickSweep | Water Cock 2 | I Like That | |
| 62 | Reg HiCng Mt | Scratch 19 | Vox Snare 1 | Sea | Thats Tight | |
| 63 | Reg HiCng Op | Scratch 20 | Vox Snare 2 | Dolphin Md | | |
| 64 | Reg LoCng Op | Scratch 21 | Vox Hihat 1 | Dolphin Lo | | |
| 65 | Reg HiBng Mt | Scratch 24 | Vox Hihat 2 | Applause | | |
| 66 | Reg HiBng Op | Scratch 25 | Vox Hihat 3 | Thunderbolt | | |
| 67 | Reg LoBng Op | Scratch 26 | Vox Cymbal | Vinyl burst | | |
| 68 | Timbale Hi | Scratch 22 | Pa! | Bomb Noise | | |
| 69 | Timbale Lo | Scratch 22 | Chiki! | Firebomb | | |
| 70 | Cajon 1 | Scratch 23 | Punch | Jack Hammer | | |
| 71 | Cajon 2 | Scratch 23 | Vox Cymbal | Turbine | | |
| C5 72 | Cajon 3 | Tape Rewind | Pa! | Sawing | | |
| 73 | Op Pandeiro | Vinyl Stop | Chiki! | Siren | | |
| 74 | Mt Pandeiro | Vinyl Noise | Punch | Drill Hit | | |

| | 056: 909 Perc 4 | 059: 909 Voice 1 | 062: 909 Zap | 065: R&B Vocal | 068: Trance Vocal | 071: Breath |
|---|---|---|---|---|---|---|
| 59 | TablaBayam 1 | One M | MG Zap 1 | R&B Vocal1 | All Right1 | Breath1 |
| C4 60 | TablaBayam 2 | Two M | MG Zap 2 | R&B Vocal2 | All Right2 | Breath2 |
| 61 | TablaBayam 3 | Three M | MG Zap 3 | | | |
| 62 | TablaBayam 4 | Four M | MG Zap 4 | | | |
| 63 | TablaBayam 5 | Aah! M | MG Zap 5 | | | |
| 64 | TablaBayam 6 | Hou! M | MG Zap 6 | | | |
| 65 | TablaBayam 7 | Ha! M | MG Zap 7 | | | |
| 66 | Udo | Hi! M | MG Zap 8 | | | |
| 67 | Udu Pot1 Hi | Hi2 M | MG Zap 9 | | | |
| 68 | Udu Pot1 Slp | Wow M | MG Zap 10 | | | |
| 69 | AfroDrum Rat | Yeah2 M | MG Zap 11 | | | |
| 70 | Sitar Gliss | You Know M | MG Zap 12 | | | |
| 71 | Sitar Gliss | Get It Up M | MG Zap 13 | | | |
| C5 72 | Chenchen | Come On M | MG Zap 14 | | | |
| 73 | RAMA Cymbal | Ah Hah M | MG Zap 15 | | | |
| 74 | Asian Gong | Ah M | MG Blip | | | |

| | 057: 909 Hit&Stab | 060: 909 Voice 2 | 063: 909 Synth FX | 066: R&B Guitar | 069: House Vocal | 072: Techno Voice |
|---|---|---|---|---|---|---|
| 59 | OrangeHit 1 | Ah2 M | LoFi Beep 1 | R&B Guitar1 | Set Me Free | Yah |
| C4 60 | OrangeHit 3 | Uuh Yeah! M | LoFi Beep 2 | R&B Guitar2 | Uhh | What I Want |
| 61 | OrangeHit 4 | ComeOn F | LoFi Beep 3 | | | |
| 62 | OrangeHit 7 | Ha F | LoFi Beep 4 | | | |
| 63 | 7th Hit | Woow F | LoFi Beep 5 | | | |
| 64 | Minor Hit | Aah Formant | LoFi Beep 6 | | | |
| 65 | Dist Hit | Eeh Formant | Hardhock | | | |
| 66 | Tekno Hit | Iih Formant | Euro Fx | | | |
| 67 | Back Hit | Ooh Formant | Orbit | | | |
| 68 | Thin Beef | Uuh Formant | Density | | | |
| 69 | Tao Hit | MetalVoiceW1 | Metal Bar 1 | | | |
| 70 | Philly Hit | MetalVoiceW2 | Metal Bar 2 | | | |
| 71 | ClassicHseHt | MetalVoiceW3 | Metal Press | | | |
| C5 72 | Smear Hit 1 | AahVoice Maj | Sand Hit | | | |
| 73 | Smear Hit 2 | AahVoice Min | DarkSteam | | | |
| 74 | LoFi MinorHt | Auh Voice | Ambience | | | |

# Preset Pattern List

| No. | Pattern Name | BPM | Mes. | Programmer |
|---|---|---|---|---|
| 001 | R&B 1 | 65 | 4 | Shinichiro Murayama |
| 002 | G-Funk 1 | 77 | 4 | Kazuhiko Maeda |
| 003 | Euro Trance 1 | 138 | 8 | B.U.S |
| 004 | Garage 1 | 130 | 4 | B.U.S |
| 005 | Minimal 1 | 137 | 4 | grogman |
| 006 | Techno 1 | 132 | 8 | Q'HEY |
| 007 | Techno 2 | 130 | 4 | Heigo Tani |
| 008 | Techno 3 | 128 | 4 | Heigo Tani |
| 009 | Techno 4 | 132 | 4 | Heigo Tani |
| 010 | Techno 5 | 137 | 4 | grogman |
| 011 | Techno 6 | 135 | 8 | Roland Corporation |
| 012 | Techno 7 | 133 | 8 | Nick Tidy |
| 013 | Techno 8 | 130 | 4 | Takatoshi Nishibu |
| 014 | Techno 9 | 130 | 8 | Heigo Tani |
| 015 | Techno 10 | 130 | 4 | Heigo Tani |
| 016 | Techno 11 | 128 | 4 | Q'HEY |
| 017 | Techno 12 | 130 | 8 | Kunihiro Ueno |
| 018 | Techno 13 | 130 | 8 | Kunihiro Ueno |
| 019 | Techno 14 | 128 | 4 | Kunihiro Ueno |
| 020 | Techno 15 | 127 | 8 | Cappadocia Productions |
| 021 | Techno 16 | 125 | 4 | Heigo Tani |
| 022 | Techno 17 | 132 | 4 | Q'HEY |
| 023 | Techno 18 | 140 | 8 | Nick Tidy |
| 024 | Techno 19 | 132 | 4 | Q'HEY |
| 025 | Techno 20 | 135 | 8 | Q'HEY |
| 026 | Techno 21 | 127 | 8 | Nick Tidy |
| 027 | Techno 22 | 138 | 8 | Nick Tidy |
| 028 | Minimal 2 | 140 | 4 | Heigo Tani |
| 029 | Minimal 3 | 140 | 4 | Heigo Tani |
| 030 | Minimal 4 | 141 | 4 | Daishiro Minami |
| 031 | Minimal 5 | 138 | 4 | Roland Corporation |
| 032 | Minimal 6 | 137 | 4 | grogman |
| 033 | Minimal 7 | 135 | 8 | Q'HEY |
| 034 | Minimal 8 | 135 | 8 | Q'HEY |
| 035 | Minimal 9 | 135 | 4 | Q'HEY |
| 036 | Minimal 10 | 135 | 8 | Q'HEY |
| 037 | Minimal 11 | 135 | 8 | Q'HEY |
| 038 | Minimal 12 | 135 | 8 | Q'HEY |
| 039 | Minimal 13 | 135 | 8 | Q'HEY |
| 040 | Hardcore 1 | 180 | 8 | NEURON |
| 041 | Hardcore 2 | 180 | 8 | NEURON |
| 042 | Hardcore 3 | 180 | 8 | NEURON |
| 043 | Hardcore 4 | 150 | 8 | NEURON |
| 044 | Hardcore 5 | 150 | 8 | NEURON |
| 045 | Ambient 1 | 89 | 8 | Cappadocia Productions |
| 046 | Ambient 2 | 89 | 8 | Cappadocia Productions |
| 047 | Ambient 3 | 82 | 8 | Roland Corporation U.S. |
| 048 | Ambient 4 | 100 | 4 | Roland Corporation |
| 049 | Ambient 5 | 120 | 4 | MASA |
| 050 | Ambient 6 | 130 | 4 | Q'HEY |
| 051 | Drum'n'Bass 1 | 180 | 8 | Kunihiro Ueno |
| 052 | Drum'n'Bass 2 | 180 | 8 | Kunihiro Ueno |
| 053 | Drum'n'Bass 3 | 175 | 4 | Heigo Tani |
| 054 | Drum'n'Bass 4 | 166 | 8 | Nick Tidy |
| 055 | Drum'n'Bass 5 | 180 | 8 | Nick Tidy |
| 056 | Drum'n'Bass 6 | 170 | 4 | Roland Corporation |
| 057 | Drum'n'Bass 7 | 175 | 8 | Roland Corporation |
| 058 | Drum'n'Bass 8 | 170 | 8 | Heigo Tani |
| 059 | Drum'n'Bass 9 | 180 | 8 | Kunihiro Ueno |
| 060 | Drum'n'Bass 10 | 180 | 8 | Kunihiro Ueno |
| 061 | Drum'n'Bass 11 | 170 | 8 | Kunihiro Ueno |
| 062 | Drum'n'Bass 12 | 180 | 8 | Kunihiro Ueno |
| 063 | Drum'n'Bass 13 | 180 | 4 | Kunihiro Ueno |
| 064 | Break Beats 1 | 140 | 4 | Heigo Tani |
| 065 | Break Beats 2 | 140 | 4 | Heigo Tani |
| 066 | Break Beats 3 | 136 | 8 | Kunihiro Ueno |
| 067 | Break Beats 4 | 126 | 8 | Nick Tidy |
| 068 | Break Beats 5 | 110 | 4 | Kunihiro Ueno |
| 069 | Break Beats 6 | 128 | 8 | Nick Tidy |
| 070 | Break Beats 7 | 120 | 8 | Kunihiro Ueno |
| 071 | Break Beats 8 | 120 | 8 | Nick Tidy |
| 072 | Break Beats 9 | 154 | 8 | Kunihiro Ueno |
| 073 | Break Beats 10 | 170 | 8 | Heigo Tani |
| 074 | Break Beats 11 | 175 | 4 | Heigo Tani |
| 075 | Break Beats 12 | 138 | 4 | Heigo Tani |
| 076 | Break Beats 13 | 127 | 4 | B.U.S |
| 077 | Break Beats 14 | 144 | 8 | Nick Tidy |
| 078 | Euro Trance 2 | 140 | 8 | Roland Corporation |
| 079 | Euro Trance 3 | 135 | 8 | Roland Corporation |
| 080 | Euro Trance 4 | 140 | 8 | Hans-Joerg Scheffler |
| 081 | Euro Trance 5 | 140 | 8 | B.U.S |
| 082 | Euro Trance 6 | 138 | 4 | B.U.S |
| 083 | Euro Trance 7 | 136 | 4 | B.U.S |
| 084 | Euro Trance 8 | 138 | 8 | Roland Corporation U.S. |
| 085 | Euro Trance 9 | 145 | 8 | NEURON |
| 086 | Hard Trance 1 | 140 | 8 | Hans-Joerg Scheffler |
| 087 | Hard Trance 2 | 150 | 8 | NEURON |
| 088 | Hard Trance 3 | 150 | 8 | NEURON |
| 089 | Hard Trance 4 | 140 | 8 | Hans-Joerg Scheffler |
| 090 | Hard Trance 5 | 145 | 8 | Roland Corporation |
| 091 | Hard Trance 6 | 136 | 4 | Takatoshi Nishibu |
| 092 | Hard Trance 7 | 140 | 8 | Hans-Joerg Scheffler |
| 093 | Hard Trance 8 | 134 | 4 | Roland Corporation U.S. |
| 094 | Hard Trance 9 | 140 | 4 | MASA |
| 095 | Hard Trance 10 | 138 | 4 | MASA |
| 096 | Hard Trance 11 | 140 | 4 | MASA |
| 097 | Psy. Trance 1 | 140 | 4 | MASA |
| 098 | Psy. Trance 2 | 140 | 4 | MASA |
| 099 | Psy. Trance 3 | 138 | 4 | MASA |
| 100 | Psy. Trance 4 | 138 | 4 | MASA |
| 101 | Psy. Trance 5 | 138 | 8 | MASA |
| 102 | Psy. Trance 6 | 143 | 8 | NEURON |
| 103 | Psy. Trance 7 | 140 | 8 | NEURON |
| 104 | UK HardHouse 1 | 150 | 8 | Roland Corporation |
| 105 | UK HardHouse 2 | 145 | 8 | Roland Corporation |
| 106 | UK HardHouse 3 | 142 | 4 | B.U.S |
| 107 | UK HardHouse 4 | 142 | 8 | Roland Corporation U.S. |
| 108 | UK HardHouse 5 | 142 | 8 | Roland Corporation U.S. |
| 109 | UK HardHouse 6 | 140 | 4 | Roland Corporation U.S. |
| 110 | UK HardHouse 7 | 140 | 8 | B.U.S |
| 111 | US HardHouse 1 | 133 | 4 | Roland Corporation U.S. |
| 112 | US HardHouse 2 | 125 | 4 | Roland Corporation |
| 113 | US HardHouse 3 | 125 | 4 | Roland Corporation |
| 114 | US HardHouse 4 | 129 | 4 | Roland Corporation U.S. |
| 115 | US HardHouse 5 | 130 | 4 | Kazuhiko Maeda |
| 116 | US HardHouse 6 | 130 | 4 | Kazuhiko Maeda |
| 117 | US HardHouse 7 | 130 | 4 | Kazuhiko Maeda |
| 118 | Progressive 1 | 133 | 8 | Roland Corporation |
| 119 | Progressive 2 | 130 | 8 | Roland Corporation |
| 120 | Progressive 3 | 132 | 8 | Roland Corporation U.S. |

| No. | Pattern Name | BPM | Mes. | Programmer |
|---|---|---|---|---|
| 121 | Progressive 4 | 136 | 4 | B.U.S |
| 122 | Progressive 5 | 136 | 4 | B.U.S |
| 123 | Progressive 6 | 138 | 4 | B.U.S |
| 124 | Progressive 7 | 137 | 8 | Nick Tidy |
| 125 | Garage 2 | 128 | 4 | Roland Corporation U.S. |
| 126 | Garage 3 | 132 | 4 | B.U.S |
| 127 | Garage 4 | 130 | 4 | B.U.S |
| 128 | Garage 5 | 125 | 8 | Hans-Joerg Scheffler |
| 129 | Garage 6 | 129 | 8 | Hans-Joerg Scheffler |
| 130 | Garage 7 | 134 | 8 | Hans-Joerg Scheffler |
| 131 | Garage 8 | 142 | 8 | Naoki Matsuura |
| 132 | Garage 9 | 134 | 8 | Naoki Matsuura |
| 133 | Garage 10 | 138 | 8 | Naoki Matsuura |
| 134 | Disco 1 | 132 | 8 | B.U.S |
| 135 | Disco 2 | 132 | 8 | B.U.S |
| 136 | Disco 3 | 135 | 4 | Roland Corporation U.S. |
| 137 | House 1 | 135 | 4 | MASA |
| 138 | House 2 | 124 | 4 | Hans-Joerg Scheffler |
| 139 | House 3 | 134 | 4 | Hans-Joerg Scheffler |
| 140 | House 4 | 127 | 8 | Nick Tidy |
| 141 | House 5 | 128 | 8 | Hans-Joerg Scheffler |
| 142 | House 6 | 126 | 8 | Hans-Joerg Scheffler |
| 143 | R&B 2 | 104 | 4 | Shinichiro Murayama |
| 144 | R&B 3 | 99 | 4 | Kazuhiko Maeda |
| 145 | R&B 4 | 89 | 4 | Kazuhiko Maeda |
| 146 | R&B 5 | 66 | 8 | Shinichiro Murayama |
| 147 | R&B 6 | 70 | 4 | Kazuhiko Maeda |
| 148 | R&B 7 | 80 | 4 | Kazuhiko Maeda |
| 149 | R&B 8 | 92 | 4 | Kazuhiko Maeda |
| 150 | R&B 9 | 96 | 8 | Shinichiro Murayama |
| 151 | R&B 10 | 97 | 4 | Kazuhiko Maeda |
| 152 | R&B 11 | 100 | 8 | Shinichiro Murayama |
| 153 | R&B 12 | 90 | 8 | Shinichiro Murayama |
| 154 | R&B 13 | 90 | 8 | Shinichiro Murayama |
| 155 | R&B 14 | 105 | 8 | Shinichiro Murayama |
| 156 | R&B 15 | 100 | 8 | Shinichiro Murayama |
| 157 | R&B 16 | 98 | 8 | Shinichiro Murayama |
| 158 | R&B 17 | 100 | 8 | Shinichiro Murayama |
| 159 | R&B 18 | 102 | 8 | Shinichiro Murayama |
| 160 | Hip Hop 1 | 84 | 8 | Kazuhiko Maeda |
| 161 | Hip Hop 2 | 93 | 4 | Kazuhiko Maeda |
| 162 | Hip Hop 3 | 113 | 8 | Roland Corporation U.S. |
| 163 | Hip Hop 4 | 108 | 8 | Roland Corporation U.S. |
| 164 | Hip Hop 5 | 116 | 8 | Roland Corporation U.S. |
| 165 | Hip Hop 6 | 71 | 4 | Roland Corporation |
| 166 | Hip Hop 7 | 98 | 8 | Roland Corporation |
| 167 | Hip Hop 8 | 95 | 4 | Roland Corporation |
| 168 | Hip Hop 9 | 89 | 4 | Cappadocia Productions |
| 169 | Hip Hop 10 | 89 | 4 | Cappadocia Productions |
| 170 | Hip Hop 11 | 87 | 8 | Roland Corporation U.S. |
| 171 | Hip Hop 12 | 91 | 8 | Roland Corporation U.S. |
| 172 | Hip Hop 13 | 89 | 4 | Cappadocia Productions |
| 173 | G-Funk 2 | 97 | 4 | Kazuhiko Maeda |
| 174 | G-Funk 3 | 96 | 4 | Kazuhiko Maeda |
| 175 | G-Funk 4 | 97 | 8 | Roland Corporation U.S. |
| 176 | G-Funk 5 | 94 | 8 | Roland Corporation U.S. |
| 177 | G-Funk 6 | 91 | 8 | Roland Corporation U.S. |
| 178 | G-Funk 7 | 97 | 8 | Roland Corporation U.S. |
| 179 | G-Funk 8 | 91 | 8 | Roland Corporation U.S. |
| 180 | G-Funk 9 | 91 | 8 | Roland Corporation U.S. |
| 181 | G-Funk 10 | 95 | 4 | Roland Corporation |
| 182 | G-Funk 11 | 90 | 4 | Roland Corporation |
| 183 | Abstract 1 | 95 | 4 | Roland Corporation |
| 184 | Abstract 2 | 80 | 4 | Roland Corporation |
| 185 | Abstract 3 | 60 | 4 | Roland Corporation |
| 186 | Abstract 4 | 95 | 4 | Roland Corporation |
| 187 | Abstract 5 | 92 | 8 | Roland Corporation U.S. |
| 188 | Abstract 6 | 96 | 8 | Roland Corporation U.S. |
| 189 | Electro 1 | 124 | 4 | Cappadocia Productions |
| 190 | Electro 2 | 135 | 8 | Cappadocia Productions |
| 191 | Electro 3 | 127 | 8 | Cappadocia Productions |
| 192 | Electro 4 | 100 | 4 | Cappadocia Productions |
| 193 | Electro 5 | 133 | 8 | Nick Tidy |
| 194 | Electro 6 | 113 | 8 | Roland Corporation U.S. |
| 195 | Electronica 1 | 120 | 4 | Roland Corporation |
| 196 | Electronica 2 | 120 | 4 | Roland Corporation |
| 197 | Electronica 3 | 110 | 4 | Roland Corporation |
| 198 | Electronica 4 | 110 | 4 | Roland Corporation |
| 199 | Electronica 5 | 120 | 4 | Roland Corporation |
| 200 | Electronica 6 | 120 | 4 | Roland Corporation |
| 201 | Electronica 7 | 130 | 8 | Roland Corporation |
| 202 | Electronica 8 | 128 | 8 | Q'HEY |
| 203 | Electronica 9 | 130 | 4 | Q'HEY |
| 204 | Reggae 1 (Dance Hall) | 90 | 4 | Roland Corporation |
| 205 | Reggae 2 (Dance Hall) | 90 | 4 | Roland Corporation |
| 206 | Reggae 3 (Dance Hall) | 85 | 4 | Naoki Matsuura |
| 207 | Reggae 4 (Dance Hall) | 85 | 4 | Naoki Matsuura |
| 208 | Reggae 5 (Dance Hall) | 93 | 4 | Roland Corporation |
| 209 | Reggae 6 (Lovers) | 90 | 4 | Roland Corporation |
| 210 | Reggae 7 (Lovers) | 89 | 4 | Kazuhiko Maeda |
| 211 | Reggae 8 (Lovers) | 78 | 8 | Naoki Matsuura |
| 212 | Reggae 9 (Lovers) | 68 | 8 | Naoki Matsuura |
| 213 | Reggae 10 (Roots) | 80 | 4 | Naoki Matsuura |
| 214 | Reggae 11 (Roots) | 65 | 4 | Naoki Matsuura |
| 215 | Reggae 12 (Dub) | 71 | 8 | Naoki Matsuura |

* *Depending on the country in which you purchased your MC-909, the first five preset patterns may be in a different order.*

| | | | | |
|---|---|---|---|---|
| 001 | Euro Trance 1 | 138 | 8 | B.U.S |
| 002 | Garage 1 | 130 | 4 | B.U.S |
| 003 | Minimal 1 | 137 | 4 | grogman |
| 004 | R&B 1 | 65 | 4 | Shinichiro Murayama |
| 005 | G-Funk 1 | 77 | 4 | Kazuhiko Maeda |

No.: Pattern Number / Mes.: Measure Length

# RPS Pattern List

| No. | Pattern Name |
|---|---|
| 216 | Techno Drums 1 |
| 217 | Techno Drums 2 |
| 218 | Techno Drums 3 |
| 219 | Techno Drums 4 |
| 220 | Techno Drums 5 |
| 221 | Techno Drums 6 |
| 222 | Techno Drums 7 |
| 223 | Techno Drums 8 |
| 224 | Techno Drums 9 |
| 225 | Techno Drums 10 |
| 226 | Techno Drums 11 |
| 227 | Techno Drums 12 |
| 228 | Techno Drums 13 |
| 229 | Techno Drums 14 |
| 230 | Trance Drums 1 |
| 231 | Trance Drums 2 |
| 232 | Trance Drums 3 |
| 233 | Trance Drums 4 |
| 234 | Trance Drums 5 |
| 235 | Trance Drums 6 |
| 236 | Trance Drums 7 |
| 237 | Trance Drums 8 |
| 238 | House Drums 1 |
| 239 | House Drums 2 |
| 240 | House Drums 3 |
| 241 | House Drums 4 |
| 242 | House Drums 5 |
| 243 | House Drums 6 |
| 244 | House Drums 7 |
| 245 | House Drums 8 |
| 246 | 2Step Drums 1 |
| 247 | 2Step Drums 2 |
| 248 | Dnb Drums 1 |
| 249 | Dnb Drums 2 |
| 250 | Dnb Drums 3 |
| 251 | Dnb Drums 4 |
| 252 | B.Beats Drums 1 |
| 253 | B.Beats Drums 2 |
| 254 | B.Beats Drums 3 |
| 255 | B.Beats Drums 4 |
| 256 | HipHop Drums 1 |
| 257 | HipHop Drums 2 |
| 258 | HipHop Drums 3 |
| 259 | HipHop Drums 4 |
| 260 | HipHop Drums 5 |
| 261 | HipHop Drums 6 |
| 262 | HipHop Drums 7 |
| 263 | HipHop Drums 8 |
| 264 | HipHop Drums 9 |
| 265 | HipHop Drums 10 |
| 266 | Reggae Drums 1 |
| 267 | Reggae Drums 2 |
| 268 | Human Beat 1 |
| 269 | Human Beat 2 |
| 270 | Techno Bass 1 |

| No. | Pattern Name |
|---|---|
| 271 | Techno Bass 2 |
| 272 | Techno Bass 3 |
| 273 | Techno Bass 4 |
| 274 | Techno Bass 5 |
| 275 | Techno Bass 6 |
| 276 | Techno Bass 7 |
| 277 | Techno Bass 8 |
| 278 | Techno Bass 9 |
| 279 | Techno Bass 10 |
| 280 | Techno Bass 11 |
| 281 | Techno Bass 12 |
| 282 | Techno Bass 13 |
| 283 | Techno Bass 14 |
| 284 | Trance Bass 1 |
| 285 | Trance Bass 2 |
| 286 | Trance Bass 3 |
| 287 | Trance Bass 4 |
| 288 | Trance Bass 5 |
| 289 | Trance Bass 6 |
| 290 | Trance Bass 7 |
| 291 | Trance Bass 8 |
| 292 | House Bass 1 |
| 293 | House Bass 2 |
| 294 | House Bass 3 |
| 295 | House Bass 4 |
| 296 | House Bass 5 |
| 297 | House Bass 6 |
| 298 | House Bass 7 |
| 299 | House Bass 8 |
| 300 | 2Step Bass 1 |
| 301 | 2Step Bass 2 |
| 302 | Dnb Bass 1 |
| 303 | Dnb Bass 2 |
| 304 | Dnb Bass 3 |
| 305 | Dnb Bass 4 |
| 306 | B.Beats Bass 1 |
| 307 | B.Beats Bass 2 |
| 308 | B.Beats Bass 3 |
| 309 | B.Beats Bass 4 |
| 310 | HipHop Bass 1 |
| 311 | HipHop Bass 2 |
| 312 | HipHop Bass 3 |
| 313 | HipHop Bass 4 |
| 314 | HipHop Bass 5 |
| 315 | HipHop Bass 6 |
| 316 | HipHop Bass 7 |
| 317 | HipHop Bass 8 |
| 318 | HipHop Bass 9 |
| 319 | HipHop Bass 10 |
| 320 | Reggae Bass 1 |
| 321 | Reggae Bass 2 |
| 322 | Kick Fill 1 |
| 323 | Kick Fill 2 |
| 324 | Kick Fill 3 |
| 325 | Kick Fill 4 |

| No. | Pattern Name |
|---|---|
| 326 | Kick Fill 5 |
| 327 | Kick Fill 6 |
| 328 | Kick Fill 7 |
| 329 | Kick Fill 8 |
| 330 | Kick Fill 9 |
| 331 | Kick Fill 10 |
| 332 | Kick Fill 11 |
| 333 | Kick Fill 12 |
| 334 | Kick Fill 13 |
| 335 | Snare Fill 1 |
| 336 | Snare Fill 2 |
| 337 | Snare Fill 3 |
| 338 | Snare Fill 4 |
| 339 | Snare Fill 5 |
| 340 | Snare Fill 6 |
| 341 | Snare Fill 7 |
| 342 | Snare Fill 8 |
| 343 | Snare Fill 9 |
| 344 | Snare Fill 10 |
| 345 | Snare Fill 11 |
| 346 | Snare Fill 12 |
| 347 | Snare Fill 13 |
| 348 | Snare Fill 14 |
| 349 | Snare Fill 15 |
| 350 | Snare Fill 16 |
| 351 | Snare Fill 17 |
| 352 | Snare Fill 18 |
| 353 | Snare Fill 19 |
| 354 | Snare Fill 20 |
| 355 | Hi-hat Fill 1 |
| 356 | Hi-hat Fill 2 |
| 357 | Hi-hat Fill 3 |
| 358 | Hi-hat Fill 4 |
| 359 | Hi-hat Fill 5 |
| 360 | Hi-hat Fill 6 |
| 361 | Hi-hat Fill 7 |
| 362 | Hi-hat Fill 8 |
| 363 | Hi-hat Fill 9 |
| 364 | Hi-hat Fill 10 |
| 365 | Hi-hat Fill 11 |
| 366 | Hi-hat Fill 12 |
| 367 | Hi-hat Fill 13 |
| 368 | Hi-hat Fill 14 |
| 369 | Hi-hat Fill 15 |
| 370 | Hi-hat Fill 16 |
| 371 | Hi-hat Fill 17 |
| 372 | Hi-hat Fill 18 |
| 373 | Hi-hat Fill 19 |
| 374 | Hi-hat Fill 20 |
| 375 | Hi-hat Fill 21 |
| 376 | Cymbal Fill 1 |
| 377 | Cymbal Fill 2 |
| 378 | Cymbal Fill 3 |
| 379 | Cymbal 1 |
| 380 | Cymbal 2 |

| No. | Pattern Name |
|---|---|
| 381 | Cymbal 3 |
| 382 | Cymbal 4 |
| 383 | Clap Fill 1 |
| 384 | Clap Fill 2 |
| 385 | Clap Fill 3 |
| 386 | Clap Fill 4 |
| 387 | Clap Fill 5 |
| 388 | Clap Fill 6 |
| 389 | Clap Fill 7 |
| 390 | Clap Fill 8 |
| 391 | Tom Fill 1 |
| 392 | Tom Fill 2 |
| 393 | Perc. Fill 1 |
| 394 | Perc. Fill 2 |
| 395 | Perc. Fill 3 |
| 396 | Perc. Fill 4 |
| 397 | Perc. Fill 5 |
| 398 | Perc. Fill 6 |
| 399 | Perc. Fill 7 |
| 400 | Perc. Fill 8 |
| 401 | Perc. Fill 9 |
| 402 | Perc. Fill 10 |
| 403 | Perc. Fill 11 |
| 404 | Perc. Fill 12 |
| 405 | Perc. Fill 13 |
| 406 | Perc. Fill 14 |
| 407 | Perc. Fill 15 |
| 408 | Perc. Fill 16 |
| 409 | Perc. Fill 17 |
| 410 | Perc. Fill 18 |
| 411 | Perc. Fill 19 |
| 412 | Perc. Fill 20 |
| 413 | Perc. Fill 21 |
| 414 | Perc. Fill 22 |
| 415 | Perc. Fill 23 |
| 416 | Perc. Fill 24 |
| 417 | Perc. Fill 25 |
| 418 | Perc. Fill 26 |
| 419 | Perc. Fill 27 |
| 420 | Cowbell 1 |
| 421 | Human Fill 1 |
| 422 | Human Fill 2 |
| 423 | Human Fill 3 |
| 424 | Human Fill 4 |
| 425 | Human Fill 5 |
| 426 | Human Fill 6 |
| 427 | Scratch 1 |
| 428 | Scratch 2 |
| 429 | Scratch 3 |
| 430 | Scratch 4 |
| 431 | Scratch 5 |
| 432 | Scratch 6 |
| 433 | Scratch 7 |
| 434 | Scratch 8 |
| 435 | Scratch 9 |

| No. | Pattern Name |
|---|---|
| 436 | Scratch 10 |
| 437 | Scratch 11 |
| 438 | Scratch 12 |
| 439 | Scratch 13 |
| 440 | Scratch 14 |
| 441 | Scratch 15 |
| 442 | Scratch 16 |
| 443 | Scratch 17 |
| 444 | Piano 1 |
| 445 | Piano 2 |
| 446 | Piano 3 |
| 447 | Piano 4 |
| 448 | Piano 5 |
| 449 | Piano 6 |
| 450 | Piano 7 |
| 451 | E.Piano 1 |
| 452 | E.Piano 2 |
| 453 | E.Piano 3 |
| 454 | E.Piano 4 |
| 455 | E.Piano 5 |
| 456 | E.Piano 6 |
| 457 | Organ 1 |
| 458 | Organ 2 |
| 459 | Organ 3 |
| 460 | Guitar Riff 1 |
| 461 | Guitar Riff 2 |
| 462 | Guitar Riff 3 |
| 463 | Guitar Riff 4 |
| 464 | Guitar Riff 5 |
| 465 | Guitar Riff 6 |
| 466 | Guitar Riff 7 |
| 467 | Guitar Riff 8 |
| 468 | Guitar Riff 9 |
| 469 | Guitar Riff 10 |
| 470 | Guitar Riff 11 |
| 471 | Guitar Riff 12 |
| 472 | Strings 1 |
| 473 | Strings 2 |
| 474 | Strings 3 |
| 475 | Strings 4 |
| 476 | Strings 5 |
| 477 | Strings 6 |
| 478 | Strings 7 |
| 479 | Vox 1 |
| 480 | Vox 2 |
| 481 | Vox 3 |
| 482 | Vox 4 |
| 483 | Vox 5 |
| 484 | Vox 6 |
| 485 | Vox 7 |
| 486 | Brass 1 |
| 487 | Brass 2 |
| 488 | Brass 3 |
| 489 | Brass 4 |
| 490 | Brass 5 |

| No. | Pattern Name |
|---|---|
| 491 | Flute 1 |
| 492 | Flute 2 |
| 493 | Flute 3 |
| 494 | Ethnic Riff 1 |
| 495 | Ethnic Riff 2 |
| 496 | Balaphone 1 |
| 497 | Balaphone 2 |
| 498 | Bass Riff 1 |
| 499 | Bass Riff 2 |
| 500 | Synth Lead 1 |
| 501 | Synth Lead 2 |
| 502 | Synth Lead 3 |
| 503 | Synth Lead 4 |
| 504 | Synth Lead 5 |
| 505 | Synth Lead 6 |
| 506 | Synth Lead 7 |
| 507 | Synth Lead 8 |
| 508 | Synth Lead 9 |
| 509 | Synth Pad 1 |
| 510 | Synth Pad 2 |
| 511 | Synth Pad 3 |
| 512 | Synth Pad 4 |
| 513 | Synth Pad 5 |
| 514 | Synth Pad 6 |
| 515 | Synth Pad 7 |
| 516 | Synth Pad 8 |
| 517 | Synth Pad 9 |
| 518 | Synth Pad 10 |
| 519 | Synth Pad 11 |
| 520 | Synth Pad 12 |
| 521 | Synth Pad 13 |
| 522 | Synth Pad 14 |
| 523 | Synth Pad 15 |
| 524 | Synth Pad 16 |
| 525 | Synth Pad 17 |
| 526 | Synth Riff 1 |
| 527 | Synth Riff 2 |
| 528 | Synth Riff 3 |
| 529 | Synth Riff 4 |
| 530 | Synth Riff 5 |
| 531 | Synth Riff 6 |
| 532 | Synth Riff 7 |
| 533 | Synth Riff 8 |
| 534 | Synth Riff 9 |
| 535 | Synth Riff 10 |
| 536 | Synth Riff 11 |
| 537 | Synth Riff 12 |
| 538 | Synth Riff 13 |
| 539 | Synth Riff 14 |
| 540 | Synth Riff 15 |
| 541 | Synth Riff 16 |
| 542 | Synth Riff 17 |
| 543 | Synth Riff 18 |
| 544 | Synth Riff 19 |
| 545 | Synth Riff 20 |

| No. | Pattern Name |
|---|---|
| 546 | Synth Riff 21 |
| 547 | Synth Riff 22 |
| 548 | Synth Riff 23 |
| 549 | Synth Riff 24 |
| 550 | Synth Riff 25 |
| 551 | Synth Riff 26 |
| 552 | Synth Riff 27 |
| 553 | Synth Riff 28 |
| 554 | Synth Riff 29 |
| 555 | Synth Riff 30 |
| 556 | Synth Riff 31 |
| 557 | Synth Riff 32 |
| 558 | Synth Riff 33 |
| 559 | Synth Riff 34 |
| 560 | Synth Riff 35 |
| 561 | Synth Riff 36 |
| 562 | Synth Seq 1 |
| 563 | Synth Seq 2 |
| 564 | Synth Seq 3 |
| 565 | Synth Seq 4 |
| 566 | Synth Seq 5 |
| 567 | Synth Seq 6 |
| 568 | Synth Seq 7 |
| 569 | Synth Seq 8 |
| 570 | Synth Seq 9 |
| 571 | Synth Seq 10 |
| 572 | Synth Seq 11 |
| 573 | Synth Seq 12 |
| 574 | Synth Seq 13 |
| 575 | Synth Seq 14 |
| 576 | Synth Seq 15 |
| 577 | Synth Seq 16 |
| 578 | Synth Seq 17 |
| 579 | Synth Seq 18 |
| 580 | Synth Seq 19 |
| 581 | Synth Seq 20 |
| 582 | Synth Seq 21 |
| 583 | Synth Seq 22 |
| 584 | Hit 1 |
| 585 | Hit 2 |
| 586 | Hit 3 |
| 587 | Hit 4 |
| 588 | Hit 5 |
| 589 | Voice 1 |
| 590 | Voice 2 |
| 591 | Voice 3 |
| 592 | Voice 4 |
| 593 | Voice 5 |
| 594 | Voice 6 |
| 595 | Voice 7 |
| 596 | Voice 8 |
| 597 | Voice 9 |
| 598 | Voice 10 |
| 599 | Voice 11 |
| 600 | Voice 12 |

| No. | Pattern Name |
|---|---|
| 601 | Voice 13 |
| 602 | Voice 14 |
| 603 | Voice 15 |
| 604 | Voice 16 |
| 605 | Voice 17 |
| 606 | Voice 18 |
| 607 | Voice 19 |
| 608 | FX 1 |
| 609 | FX 2 |
| 610 | FX 3 |
| 611 | FX 4 |
| 612 | FX 5 |
| 613 | FX 6 |
| 614 | FX 7 |
| 615 | FX 8 |
| 616 | FX 9 |
| 617 | FX 10 |
| 618 | FX 11 |
| 619 | FX 12 |
| 620 | FX 13 |
| 621 | FX 14 |
| 622 | FX 15 |
| 623 | FX 16 |
| 624 | FX 17 |
| 625 | FX 18 |
| 626 | FX 19 |
| 627 | FX 20 |
| 628 | FX 21 |
| 629 | FX 22 |
| 630 | FX 23 |
| 631 | FX 24 |
| 632 | FX 25 |
| 633 | FX 26 |
| 634 | FX 27 |
| 635 | FX 28 |
| 636 | FX 29 |
| 637 | FX 30 |
| 638 | FX 31 |
| 639 | FX 32 |
| 640 | FX 33 |
| 641 | FX 34 |
| 642 | FX 35 |
| 643 | FX 36 |
| 644 | FX 37 |
| 645 | FX 38 |
| 646 | FX 39 |
| 647 | FX 40 |
| 648 | FX 41 |
| 649 | FX 42 |
| 650 | FX 43 |
| 651 | FX 44 |
| 652 | FX 45 |
| 653 | FX 46 |
| 654 | FX 47 |
| 655 | FX 48 |

# RPS Set List

### 01. Techno 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 216 | Techno Drums 1 |
| 2 | 217 | Techno Drums 2 |
| 3 | 270 | Techno Bass 1 |
| 4 | 271 | Techno Bass 2 |
| 5 | 376 | Cymbal Fill 1 |
| 6 | 322 | Kick Fill 1 |
| 7 | 335 | Snare Fill 1 |
| 8 | 383 | Clap Fill 1 |
| 9 | 526 | Synth Riff 1 |
| 10 | 562 | Synth Seq 1 |
| 11 | 527 | Synth Riff 2 |
| 12 | 563 | Synth Seq 2 |
| 13 | 509 | Synth Pad 1 |
| 14 | 608 | FX 1 |
| 15 | 609 | FX 2 |
| 16 | 589 | Voice 1 |

### 02. Techno 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 218 | Techno Drums 3 |
| 2 | 219 | Techno Drums 4 |
| 3 | 272 | Techno Bass 3 |
| 4 | 273 | Techno Bass 4 |
| 5 | 355 | Hi-hat Fill 1 |
| 6 | 391 | Tom Fill 1 |
| 7 | 323 | Kick Fill 2 |
| 8 | 393 | Perc. Fill 1 |
| 9 | 500 | Synth Lead 1 |
| 10 | 501 | Synth Lead 2 |
| 11 | 564 | Synth Seq 3 |
| 12 | 528 | Synth Riff 3 |
| 13 | 510 | Synth Pad 2 |
| 14 | 610 | FX 3 |
| 15 | 611 | FX 4 |
| 16 | 612 | FX 5 |

### 03. Techno 3

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 220 | Techno Drums 5 |
| 2 | 221 | Techno Drums 6 |
| 3 | 274 | Techno Bass 5 |
| 4 | 275 | Techno Bass 6 |
| 5 | 394 | Perc. Fill 2 |
| 6 | 395 | Perc. Fill 3 |
| 7 | 384 | Clap Fill 2 |
| 8 | 356 | Hi-hat Fill 2 |
| 9 | 529 | Synth Riff 4 |
| 10 | 530 | Synth Riff 5 |
| 11 | 531 | Synth Riff 6 |
| 12 | 532 | Synth Riff 7 |
| 13 | 479 | Vox 1 |
| 14 | 590 | Voice 2 |
| 15 | 584 | Hit 1 |
| 16 | 613 | FX 6 |

### 04. Minimal

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 222 | Techno Drums 7 |
| 2 | 223 | Techno Drums 8 |
| 3 | 276 | Techno Bass 7 |
| 4 | 277 | Techno Bass 8 |
| 5 | 324 | Kick Fill 3 |
| 6 | 336 | Snare Fill 2 |
| 7 | 396 | Perc. Fill 4 |
| 8 | 496 | Balaphone 1 |
| 9 | 494 | Ethnic Riff 1 |
| 10 | 480 | Vox 2 |
| 11 | 533 | Synth Riff 8 |
| 12 | 565 | Synth Seq 4 |
| 13 | 534 | Synth Riff 9 |
| 14 | 481 | Vox 3 |
| 15 | 585 | Hit 2 |
| 16 | 614 | FX 7 |

### 05. Hardcore

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 224 | Techno Drums 9 |
| 2 | 225 | Techno Drums 10 |
| 3 | 278 | Techno Bass 9 |
| 4 | 279 | Techno Bass 10 |
| 5 | 337 | Snare Fill 3 |
| 6 | 338 | Snare Fill 4 |
| 7 | 397 | Perc. Fill 5 |
| 8 | 379 | Cymbal 1 |
| 9 | 566 | Synth Seq 5 |
| 10 | 567 | Synth Seq 6 |
| 11 | 444 | Piano 1 |
| 12 | 535 | Synth Riff 10 |
| 13 | 536 | Synth Riff 11 |
| 14 | 537 | Synth Riff 12 |
| 15 | 615 | FX 8 |
| 16 | 591 | Voice 3 |

### 06. Ambient

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 226 | Techno Drums 11 |
| 2 | 227 | Techno Drums 12 |
| 3 | 280 | Techno Bass 11 |
| 4 | 281 | Techno Bass 12 |
| 5 | 357 | Hi-hat Fill 3 |
| 6 | 377 | Cymbal Fill 2 |
| 7 | 398 | Perc. Fill 6 |
| 8 | 325 | Kick Fill 4 |
| 9 | 568 | Synth Seq 7 |
| 10 | 569 | Synth Seq 8 |
| 11 | 570 | Synth Seq 9 |
| 12 | 511 | Synth Pad 3 |
| 13 | 512 | Synth Pad 4 |
| 14 | 616 | FX 9 |
| 15 | 617 | FX 10 |
| 16 | 472 | Strings 1 |

### 07. Drum'n'Bass 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 248 | Dnb Drums 1 |
| 2 | 249 | Dnb Drums 2 |
| 3 | 302 | Dnb Bass 1 |
| 4 | 303 | Dnb Bass 2 |
| 5 | 358 | Hi-hat Fill 4 |
| 6 | 380 | Cymbal 2 |
| 7 | 326 | Kick Fill 5 |
| 8 | 327 | Kick Fill 6 |
| 9 | 502 | Synth Lead 3 |
| 10 | 503 | Synth Lead 4 |
| 11 | 504 | Synth Lead 5 |
| 12 | 473 | Strings 2 |
| 13 | 571 | Synth Seq 10 |
| 14 | 618 | FX 11 |
| 15 | 619 | FX 12 |
| 16 | 620 | FX 13 |

### 08. Drum'n'Bass 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 250 | Dnb Drums 3 |
| 2 | 251 | Dnb Drums 4 |
| 3 | 304 | Dnb Bass 3 |
| 4 | 305 | Dnb Bass 4 |
| 5 | 328 | Kick Fill 7 |
| 6 | 359 | Hi-hat Fill 5 |
| 7 | 360 | Hi-hat Fill 6 |
| 8 | 399 | Perc. Fill 7 |
| 9 | 445 | Piano 2 |
| 10 | 451 | E.Piano 1 |
| 11 | 513 | Synth Pad 5 |
| 12 | 514 | Synth Pad 6 |
| 13 | 515 | Synth Pad 7 |
| 14 | 621 | FX 14 |
| 15 | 622 | FX 15 |
| 16 | 572 | Synth Seq 11 |

### 09. Break Beats 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 252 | B.Beats Drums 1 |
| 2 | 253 | B.Beats Drums 2 |
| 3 | 306 | B.Beats Bass 1 |
| 4 | 307 | B.Beats Bass 2 |
| 5 | 329 | Kick Fill 8 |
| 6 | 339 | Snare Fill 5 |
| 7 | 361 | Hi-hat Fill 7 |
| 8 | 421 | Human Fill 1 |
| 9 | 538 | Synth Riff 13 |
| 10 | 460 | Guitar Riff 1 |
| 11 | 623 | FX 16 |
| 12 | 624 | FX 17 |
| 13 | 461 | Guitar Riff 2 |
| 14 | 427 | Scratch 1 |
| 15 | 625 | FX 18 |
| 16 | 592 | Voice 4 |

### 10. Break Beats 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 254 | B.Beats Drums 3 |
| 2 | 255 | B.Beats Drums 4 |
| 3 | 308 | B.Beats Bass 3 |
| 4 | 309 | B.Beats Bass 4 |
| 5 | 340 | Snare Fill 6 |
| 6 | 400 | Perc. Fill 8 |
| 7 | 401 | Perc. Fill 9 |
| 8 | 422 | Human Fill 2 |
| 9 | 446 | Piano 3 |
| 10 | 462 | Guitar Riff 3 |
| 11 | 463 | Guitar Riff 4 |
| 12 | 486 | Brass 1 |
| 13 | 487 | Brass 2 |
| 14 | 593 | Voice 5 |
| 15 | 428 | Scratch 2 |
| 16 | 539 | Synth Riff 14 |

### 11. Euro Trance 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 230 | Trance Drums 1 |
| 2 | 231 | Trance Drums 2 |
| 3 | 284 | Trance Bass 1 |
| 4 | 285 | Trance Bass 2 |
| 5 | 341 | Snare Fill 7 |
| 6 | 362 | Hi-hat Fill 8 |
| 7 | 379 | Cymbal 1 |
| 8 | 385 | Clap Fill 3 |
| 9 | 505 | Synth Lead 6 |
| 10 | 540 | Synth Riff 15 |
| 11 | 573 | Synth Seq 12 |
| 12 | 574 | Synth Seq 13 |
| 13 | 516 | Synth Pad 8 |
| 14 | 575 | Synth Seq 14 |
| 15 | 626 | FX 19 |
| 16 | 627 | FX 20 |

### 12. Euro Trance 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 232 | Trance Drums 3 |
| 2 | 233 | Trance Drums 4 |
| 3 | 286 | Trance Bass 3 |
| 4 | 287 | Trance Bass 4 |
| 5 | 342 | Snare Fill 8 |
| 6 | 363 | Hi-hat Fill 9 |
| 7 | 378 | Cymbal Fill 3 |
| 8 | 402 | Perc. Fill 10 |
| 9 | 506 | Synth Lead 7 |
| 10 | 541 | Synth Riff 16 |
| 11 | 542 | Synth Riff 17 |
| 12 | 543 | Synth Riff 18 |
| 13 | 517 | Synth Pad 9 |
| 14 | 576 | Synth Seq 15 |
| 15 | 628 | FX 21 |
| 16 | 629 | FX 22 |

### 13. Hard Trance

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 234 | Trance Drums 5 |
| 2 | 235 | Trance Drums 6 |
| 3 | 288 | Trance Bass 5 |
| 4 | 289 | Trance Bass 6 |
| 5 | 343 | Snare Fill 9 |
| 6 | 344 | Snare Fill 10 |
| 7 | 364 | Hi-hat Fill 10 |
| 8 | 403 | Perc. Fill 11 |
| 9 | 544 | Synth Riff 19 |
| 10 | 577 | Synth Seq 16 |
| 11 | 498 | Bass Riff 1 |
| 12 | 578 | Synth Seq 17 |
| 13 | 518 | Synth Pad 10 |
| 14 | 545 | Synth Riff 20 |
| 15 | 546 | Synth Riff 21 |
| 16 | 547 | Synth Riff 22 |

### 14. Psy. Trance

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 236 | Trance Drums 7 |
| 2 | 237 | Trance Drums 8 |
| 3 | 290 | Trance Bass 7 |
| 4 | 291 | Trance Bass 8 |
| 5 | 345 | Snare Fill 11 |
| 6 | 346 | Snare Fill 12 |
| 7 | 386 | Clap Fill 4 |
| 8 | 365 | Hi-hat Fill 11 |
| 9 | 548 | Synth Riff 23 |
| 10 | 549 | Synth Riff 24 |
| 11 | 550 | Synth Riff 25 |
| 12 | 579 | Synth Seq 18 |
| 13 | 519 | Synth Pad 11 |
| 14 | 630 | FX 23 |
| 15 | 631 | FX 24 |
| 16 | 464 | Guitar Riff 5 |

### 15. UK HardHouse

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 238 | House Drums 1 |
| 2 | 239 | House Drums 2 |
| 3 | 292 | House Bass 1 |
| 4 | 293 | House Bass 2 |
| 5 | 347 | Snare Fill 13 |
| 6 | 387 | Clap Fill 5 |
| 7 | 381 | Cymbal 3 |
| 8 | 404 | Perc. Fill 12 |
| 9 | 551 | Synth Riff 26 |
| 10 | 552 | Synth Riff 27 |
| 11 | 553 | Synth Riff 28 |
| 12 | 554 | Synth Riff 29 |
| 13 | 499 | Bass Riff 2 |
| 14 | 520 | Synth Pad 12 |
| 15 | 594 | Voice 6 |
| 16 | 632 | FX 25 |

### 16. US HardHouse

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 240 | House Drums 3 |
| 2 | 241 | House Drums 4 |
| 3 | 294 | House Bass 3 |
| 4 | 295 | House Bass 4 |
| 5 | 330 | Kick Fill 9 |
| 6 | 366 | Hi-hat Fill 12 |
| 7 | 388 | Clap Fill 6 |
| 8 | 405 | Perc. Fill 13 |
| 9 | 555 | Synth Riff 30 |
| 10 | 556 | Synth Riff 31 |
| 11 | 474 | Strings 3 |
| 12 | 488 | Brass 3 |
| 13 | 521 | Synth Pad 13 |
| 14 | 595 | Voice 7 |
| 15 | 633 | FX 26 |
| 16 | 634 | FX 27 |

### 17. Progressive

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 242 | House Drums 5 |
| 2 | 243 | House Drums 6 |
| 3 | 296 | House Bass 5 |
| 4 | 297 | House Bass 6 |
| 5 | 348 | Snare Fill 14 |
| 6 | 367 | Hi-hat Fill 13 |
| 7 | 389 | Clap Fill 7 |
| 8 | 406 | Perc. Fill 14 |
| 9 | 557 | Synth Riff 32 |
| 10 | 558 | Synth Riff 33 |
| 11 | 559 | Synth Riff 34 |
| 12 | 452 | E.Piano 2 |
| 13 | 522 | Synth Pad 14 |
| 14 | 596 | Voice 8 |
| 15 | 635 | FX 28 |
| 16 | 636 | FX 29 |

### 18. Garage 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 244 | House Drums 7 |
| 2 | 245 | House Drums 8 |
| 3 | 298 | House Bass 7 |
| 4 | 299 | House Bass 8 |
| 5 | 349 | Snare Fill 15 |
| 6 | 407 | Perc. Fill 15 |
| 7 | 408 | Perc. Fill 16 |
| 8 | 392 | Tom Fill 2 |
| 9 | 447 | Piano 4 |
| 10 | 448 | Piano 5 |
| 11 | 475 | Strings 4 |
| 12 | 453 | E.Piano 3 |
| 13 | 560 | Synth Riff 35 |
| 14 | 489 | Brass 4 |
| 15 | 586 | Hit 3 |
| 16 | 637 | FX 30 |

### 19. Garage 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 246 | 2Step Drums 1 |
| 2 | 247 | 2Step Drums 2 |
| 3 | 300 | 2Step Bass 1 |
| 4 | 301 | 2Step Bass 2 |
| 5 | 331 | Kick Fill 10 |
| 6 | 368 | Hi-hat Fill 14 |
| 7 | 409 | Perc. Fill 17 |
| 8 | 423 | Human Fill 3 |
| 9 | 457 | Organ 1 |
| 10 | 454 | E.Piano 4 |
| 11 | 465 | Guitar Riff 6 |
| 12 | 466 | Guitar Riff 7 |
| 13 | 523 | Synth Pad 15 |
| 14 | 491 | Flute 1 |
| 15 | 449 | Piano 6 |
| 16 | 587 | Hit 4 |

### 20. R&B

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 256 | HipHop Drums 1 |
| 2 | 257 | HipHop Drums 2 |
| 3 | 310 | HipHop Bass 1 |
| 4 | 311 | HipHop Bass 2 |
| 5 | 369 | Hi-hat Fill 15 |
| 6 | 410 | Perc. Fill 18 |
| 7 | 411 | Perc. Fill 19 |
| 8 | 382 | Cymbal 4 |
| 9 | 476 | Strings 5 |
| 10 | 450 | Piano 7 |
| 11 | 455 | E.Piano 5 |
| 12 | 580 | Synth Seq 19 |
| 13 | 524 | Synth Pad 16 |
| 14 | 429 | Scratch 3 |
| 15 | 638 | FX 31 |
| 16 | 639 | FX 32 |

### 21. Hip Hop

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 258 | HipHop Drums 3 |
| 2 | 259 | HipHop Drums 4 |
| 3 | 312 | HipHop Bass 3 |
| 4 | 313 | HipHop Bass 4 |
| 5 | 370 | Hi-hat Fill 16 |
| 6 | 412 | Perc. Fill 20 |
| 7 | 413 | Perc. Fill 21 |
| 8 | 414 | Perc. Fill 22 |
| 9 | 495 | Ethnic Riff 2 |
| 10 | 477 | Strings 6 |
| 11 | 492 | Flute 2 |
| 12 | 467 | Guitar Riff 8 |
| 13 | 588 | Hit 5 |
| 14 | 430 | Scratch 4 |
| 15 | 431 | Scratch 5 |
| 16 | 597 | Voice 9 |

### 22. G-Funk

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 260 | HipHop Drums 5 |
| 2 | 261 | HipHop Drums 6 |
| 3 | 314 | HipHop Bass 5 |
| 4 | 315 | HipHop Bass 6 |
| 5 | 350 | Snare Fill 16 |
| 6 | 371 | Hi-hat Fill 17 |
| 7 | 372 | Hi-hat Fill 18 |
| 8 | 415 | Perc. Fill 23 |
| 9 | 507 | Synth Lead 8 |
| 10 | 493 | Flute 3 |
| 11 | 468 | Guitar Riff 9 |
| 12 | 478 | Strings 7 |
| 13 | 456 | E.Piano 6 |
| 14 | 640 | FX 33 |
| 15 | 641 | FX 34 |
| 16 | 432 | Scratch 6 |

### 23. Abstract

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 262 | HipHop Drums 7 |
| 2 | 263 | HipHop Drums 8 |
| 3 | 316 | HipHop Bass 7 |
| 4 | 317 | HipHop Bass 8 |
| 5 | 373 | Hi-hat Fill 19 |
| 6 | 416 | Perc. Fill 24 |
| 7 | 417 | Perc. Fill 25 |
| 8 | 351 | Snare Fill 17 |
| 9 | 497 | Balaphone 2 |
| 10 | 458 | Organ 2 |
| 11 | 642 | FX 35 |
| 12 | 643 | FX 36 |
| 13 | 644 | FX 37 |
| 14 | 645 | FX 38 |
| 15 | 482 | Vox 4 |
| 16 | 483 | Vox 5 |

### 24. Electro

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 264 | HipHop Drums 9 |
| 2 | 265 | HipHop Drums 10 |
| 3 | 318 | HipHop Bass 9 |
| 4 | 319 | HipHop Bass 10 |
| 5 | 352 | Snare Fill 18 |
| 6 | 390 | Clap Fill 8 |
| 7 | 418 | Perc. Fill 26 |
| 8 | 420 | Cowbell 1 |
| 9 | 508 | Synth Lead 9 |
| 10 | 469 | Guitar Riff 10 |
| 11 | 581 | Synth Seq 20 |
| 12 | 582 | Synth Seq 21 |
| 13 | 525 | Synth Pad 17 |
| 14 | 484 | Vox 6 |
| 15 | 646 | FX 39 |
| 16 | 647 | FX 40 |

### 25. Electronica

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 228 | Techno Drums 13 |
| 2 | 229 | Techno Drums 14 |
| 3 | 282 | Techno Bass 13 |
| 4 | 283 | Techno Bass 14 |
| 5 | 332 | Kick Fill 11 |
| 6 | 333 | Kick Fill 12 |
| 7 | 374 | Hi-hat Fill 20 |
| 8 | 424 | Human Fill 4 |
| 9 | 583 | Synth Seq 22 |
| 10 | 648 | FX 41 |
| 11 | 649 | FX 42 |
| 12 | 650 | FX 43 |
| 13 | 651 | FX 44 |
| 14 | 652 | FX 45 |
| 15 | 653 | FX 46 |
| 16 | 654 | FX 47 |

### 26. Reggae

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 266 | Reggae Drums 1 |
| 2 | 267 | Reggae Drums 2 |
| 3 | 320 | Reggae Bass 1 |
| 4 | 321 | Reggae Bass 2 |
| 5 | 334 | Kick Fill 13 |
| 6 | 353 | Snare Fill 19 |
| 7 | 375 | Hi-hat Fill 21 |
| 8 | 419 | Perc. Fill 27 |
| 9 | 459 | Organ 3 |
| 10 | 470 | Guitar Riff 11 |
| 11 | 471 | Guitar Riff 12 |
| 12 | 561 | Synth Riff 36 |
| 13 | 485 | Vox 7 |
| 14 | 655 | FX 48 |
| 15 | 598 | Voice 10 |
| 16 | 490 | Brass 5 |

### 27. Snare Fill Set

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 349 | Snare Fill 15 |
| 2 | 337 | Snare Fill 3 |
| 3 | 335 | Snare Fill 1 |
| 4 | 341 | Snare Fill 7 |
| 5 | 339 | Snare Fill 5 |
| 6 | 354 | Snare Fill 20 |
| 7 | 347 | Snare Fill 13 |
| 8 | 342 | Snare Fill 8 |
| 9 | 348 | Snare Fill 14 |
| 10 | 353 | Snare Fill 19 |
| 11 | 340 | Snare Fill 6 |
| 12 | 345 | Snare Fill 11 |
| 13 | 344 | Snare Fill 10 |
| 14 | 350 | Snare Fill 16 |
| 15 | 352 | Snare Fill 18 |
| 16 | 336 | Snare Fill 2 |

### 28. FX Set

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 632 | FX 25 |
| 2 | 625 | FX 18 |
| 3 | 628 | FX 21 |
| 4 | 610 | FX 3 |
| 5 | 636 | FX 29 |
| 6 | 616 | FX 9 |
| 7 | 620 | FX 13 |
| 8 | 623 | FX 16 |
| 9 | 648 | FX 41 |
| 10 | 653 | FX 46 |
| 11 | 619 | FX 12 |
| 12 | 627 | FX 20 |
| 13 | 615 | FX 8 |
| 14 | 629 | FX 22 |
| 15 | 612 | FX 5 |
| 16 | 639 | FX 32 |

### 29. Human Set

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 268 | Human Beat 1 |
| 2 | 269 | Human Beat 2 |
| 3 | 425 | Human Fill 5 |
| 4 | 426 | Human Fill 6 |
| 5 | 599 | Voice 11 |
| 6 | 592 | Voice 4 |
| 7 | 600 | Voice 12 |
| 8 | 601 | Voice 13 |
| 9 | 602 | Voice 14 |
| 10 | 603 | Voice 15 |
| 11 | 595 | Voice 7 |
| 12 | 604 | Voice 16 |
| 13 | 590 | Voice 2 |
| 14 | 605 | Voice 17 |
| 15 | 606 | Voice 18 |
| 16 | 607 | Voice 19 |

### 30. Scratch Set

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 427 | Scratch 1 |
| 2 | 433 | Scratch 7 |
| 3 | 434 | Scratch 8 |
| 4 | 435 | Scratch 9 |
| 5 | 436 | Scratch 10 |
| 6 | 437 | Scratch 11 |
| 7 | 428 | Scratch 2 |
| 8 | 431 | Scratch 5 |
| 9 | 432 | Scratch 6 |
| 10 | 438 | scratch 12 |
| 11 | 430 | Scratch 4 |
| 12 | 439 | Scratch 13 |
| 13 | 440 | Scratch 14 |
| 14 | 441 | Scratch 15 |
| 15 | 442 | Scratch 16 |
| 16 | 443 | Scratch 17 |

No.: RPS Pattern Number

* *All data is that programmed at the factory. For instructions on carrying out Factory Reset, refer to p. 20.*

# Pattern Set List

### 01. Techno 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 6 | Techno 1 |
| 2 | 7 | Techno 2 |
| 3 | 8 | Techno 3 |
| 4 | 9 | Techno 4 |
| 5 | 10 | Techno 5 |
| 6 | 11 | Techno 6 |
| 7 | 12 | Techno 7 |
| 8 | 13 | Techno 8 |
| 9 | 14 | Techno 9 |
| 10 | 15 | Techno 10 |
| 11 | 16 | Techno 11 |
| 12 | 17 | Techno 12 |
| 13 | 18 | Techno 13 |
| 14 | 19 | Techno 14 |
| 15 | 20 | Techno 15 |
| 16 | 21 | Techno 16 |

### 02. Techno 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 28 | Minimal 2 |
| 2 | 29 | Minimal 3 |
| 3 | 30 | Minimal 4 |
| 4 | 31 | Minimal 5 |
| 5 | 32 | Minimal 6 |
| 6 | 33 | Minimal 7 |
| 7 | 34 | Minimal 8 |
| 8 | 35 | Minimal 9 |
| 9 | 36 | Minimal 10 |
| 10 | 37 | Minimal 11 |
| 11 | 38 | Minimal 12 |
| 12 | 39 | Minimal 13 |
| 13 | 22 | Techno 17 |
| 14 | 23 | Techno 18 |
| 15 | 24 | Techno 19 |
| 16 | 25 | Techno 20 |

### 03. Drum'n'Bass

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 51 | Drum'n'Bass 1 |
| 2 | 52 | Drum'n'Bass 2 |
| 3 | 53 | Drum'n'Bass 3 |
| 4 | 54 | Drum'n'Bass 4 |
| 5 | 55 | Drum'n'Bass 5 |
| 6 | 56 | Drum'n'Bass 6 |
| 7 | 57 | Drum'n'Bass 7 |
| 8 | 58 | Drum'n'Bass 8 |
| 9 | 59 | Drum'n'Bass 9 |
| 10 | 60 | Drum'n'Bass 10 |
| 11 | 61 | Drum'n'Bass 11 |
| 12 | 62 | Drum'n'Bass 12 |
| 13 | 63 | Drum'n'Bass 13 |
| 14 | 51 | Drum'n'Bass 1 |
| 15 | 52 | Drum'n'Bass 2 |
| 16 | 53 | Drum'n'Bass 3 |

### 04. Break Beats

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 64 | Break Beats 1 |
| 2 | 65 | Break Beats 2 |
| 3 | 66 | Break Beats 3 |
| 4 | 67 | Break Beats 4 |
| 5 | 68 | Break Beats 5 |
| 6 | 69 | Break Beats 6 |
| 7 | 70 | Break Beats 7 |
| 8 | 71 | Break Beats 8 |
| 9 | 72 | Break Beats 9 |
| 10 | 73 | Break Beats 10 |
| 11 | 74 | Break Beats 11 |
| 12 | 75 | Break Beats 12 |
| 13 | 76 | Break Beats 13 |
| 14 | 77 | Break Beats 14 |
| 15 | 26 | Techno 21 |
| 16 | 27 | Techno 22 |

### 05. Trance 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 78 | Euro Trance 2 |
| 2 | 79 | Euro Trance 3 |
| 3 | 80 | Euro Trance 4 |
| 4 | 81 | Euro Trance 5 |
| 5 | 82 | Euro Trance 6 |
| 6 | 83 | Euro Trance 7 |
| 7 | 84 | Euro Trance 8 |
| 8 | 85 | Euro Trance 9 |
| 9 | 86 | Hard Trance 1 |
| 10 | 87 | Hard Trance 2 |
| 11 | 88 | Hard Trance 3 |
| 12 | 89 | Hard Trance 4 |
| 13 | 90 | Hard Trance 5 |
| 14 | 91 | Hard Trance 6 |
| 15 | 92 | Hard Trance 7 |
| 16 | 93 | Hard Trance 8 |

### 06. Trance 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 94 | Hard Trance 9 |
| 2 | 95 | Hard Trance 10 |
| 3 | 96 | Hard Trance 11 |
| 4 | 97 | Psy. Trance 1 |
| 5 | 98 | Psy. Trance 2 |
| 6 | 99 | Psy. Trance 3 |
| 7 | 100 | Psy. Trance 4 |
| 8 | 101 | Psy. Trance 5 |
| 9 | 102 | Psy. Trance 6 |
| 10 | 103 | Psy. Trance 7 |
| 11 | 118 | Progressive 1 |
| 12 | 119 | Progressive 2 |
| 13 | 43 | Hardcore 4 |
| 14 | 44 | Hardcore 5 |
| 15 | 42 | Hardcore 3 |
| 16 | 41 | Hardcore 2 |

### 07. House 1

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 104 | UK HardHouse 1 |
| 2 | 105 | UK HardHouse 2 |
| 3 | 106 | UK HardHouse 3 |
| 4 | 107 | UK HardHouse 4 |
| 5 | 108 | UK HardHouse 5 |
| 6 | 109 | UK HardHouse 6 |
| 7 | 110 | UK HardHouse 7 |
| 8 | 111 | US HardHouse 1 |
| 9 | 112 | US HardHouse 2 |
| 10 | 113 | US HardHouse 3 |
| 11 | 114 | US HardHouse 4 |
| 12 | 115 | US HardHouse 5 |
| 13 | 116 | US HardHouse 6 |
| 14 | 117 | US HardHouse 7 |
| 15 | 120 | Progressive 3 |
| 16 | 121 | Progressive 4 |

### 08. House 2

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 125 | Garage 2 |
| 2 | 126 | Garage 3 |
| 3 | 127 | Garage 4 |
| 4 | 128 | Garage 5 |
| 5 | 129 | Garage 6 |
| 6 | 130 | Garage 7 |
| 7 | 131 | Garage 8 |
| 8 | 132 | Garage 9 |
| 9 | 133 | Garage 10 |
| 10 | 134 | Disco 1 |
| 11 | 135 | Disco 2 |
| 12 | 136 | Disco 3 |
| 13 | 137 | House 1 |
| 14 | 138 | House 2 |
| 15 | 139 | House 3 |
| 16 | 141 | House 5 |

### 09. R&B

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 143 | R&B 2 |
| 2 | 144 | R&B 3 |
| 3 | 145 | R&B 4 |
| 4 | 146 | R&B 5 |
| 5 | 147 | R&B 6 |
| 6 | 148 | R&B 7 |
| 7 | 149 | R&B 8 |
| 8 | 150 | R&B 9 |
| 9 | 151 | R&B 10 |
| 10 | 152 | R&B 11 |
| 11 | 153 | R&B 12 |
| 12 | 154 | R&B 13 |
| 13 | 155 | R&B 14 |
| 14 | 156 | R&B 15 |
| 15 | 157 | R&B 16 |
| 16 | 158 | R&B 17 |

### 10. Hip Hop

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 160 | Hip Hop 1 |
| 2 | 161 | Hip Hop 2 |
| 3 | 162 | Hip Hop 3 |
| 4 | 163 | Hip Hop 4 |
| 5 | 164 | Hip Hop 5 |
| 6 | 165 | Hip Hop 6 |
| 7 | 166 | Hip Hop 7 |
| 8 | 167 | Hip Hop 8 |
| 9 | 168 | Hip Hop 9 |
| 10 | 169 | Hip Hop 10 |
| 11 | 170 | Hip Hop 11 |
| 12 | 171 | Hip Hop 12 |
| 13 | 172 | Hip Hop 13 |
| 14 | 173 | G-Funk 2 |
| 15 | 174 | G-Funk 3 |
| 16 | 175 | G-Funk 4 |

### 11. Abstract

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 183 | Abstract 1 |
| 2 | 184 | Abstract 2 |
| 3 | 185 | Abstract 3 |
| 4 | 186 | Abstract 4 |
| 5 | 45 | Ambient 1 |
| 6 | 46 | Ambient 2 |
| 7 | 47 | Ambient 3 |
| 8 | 48 | Ambient 4 |
| 9 | 49 | Ambient 5 |
| 10 | 195 | Electronica 1 |
| 11 | 196 | Electronica 2 |
| 12 | 197 | Electronica 3 |
| 13 | 198 | Electronica 4 |
| 14 | 199 | Electronica 5 |
| 15 | 200 | Electronica 6 |
| 16 | 201 | Electronica 7 |

### 12. Reggae

| Pad | No. | Pattern Name |
|---|---|---|
| 1 | 204 | Reggae 1(Dance Hall) |
| 2 | 205 | Reggae 2(Dance Hall) |
| 3 | 206 | Reggae 3(Dance Hall) |
| 4 | 207 | Reggae 4(Dance Hall) |
| 5 | 208 | Reggae 5(Dance Hall) |
| 6 | 209 | Reggae 6(Lovers) |
| 7 | 210 | Reggae 7(Lovers) |
| 8 | 211 | Reggae 8(Lovers) |
| 9 | 212 | Reggae 9(Lovers) |
| 10 | 213 | Reggae 10(Roots) |
| 11 | 214 | Reggae 11(Roots) |
| 12 | 215 | Reggae 12(Dub) |
| 13 | 209 | Reggae 6(Lovers) |
| 14 | 210 | Reggae 7(Lovers) |
| 15 | 211 | Reggae 8(Lovers) |
| 16 | 212 | Reggae 9(Lovers) |

No.: Pattern Number

* *All data is that programmed at the factory. For instructions on carrying out Factory Reset, refer to p. 20.*

* *When the unit shipped from the factory, pattern sets 13–24, 25–36, and 37–48 contained the same sets as pattern sets 1–12, and 49 and 50 contained the same sets as 1 and 2.*

# Song List

| Song No. | Song Name | No. | Pattern Name |
|---|---|---|---|
| **01** | Techno 1 | 10 | Techno 5 |
| **02** | Techno 2 | 14 | Techno 9 |
| **03** | Minimal | 37 | Minimal 11 |
| **04** | Hardcore | 40 | Hardcore 1 |
| **05** | Ambient | 45 | Ambient 1 |
| **06** | Drum'n'Bass 1 | 51 | Drum'n'Bass 1 |
| **07** | Drum'n'Bass 2 | 62 | Drum'n'Bass 12 |
| **08** | Break Beats 1 | 64 | Break Beats 1 |
| **09** | Break Beats 2 | 68 | Break Beats 5 |
| **10** | Euro Trance | 78 | Euro Trance 2 |
| **11** | Hard Trance | 91 | Hard Trance 6 |
| **12** | Psy. Trance | 102 | Psy. Trance 6 |
| **13** | UK HardHouse | 104 | UK HardHouse 1 |
| **14** | US HardHouse | 111 | US HardHouse 1 |
| **15** | Progressive | 120 | Progressive 3 |
| **16** | Garage 1 | 126 | Garage 3 |
| **17** | Garage 2 | 129 | Garage 6 |
| **18** | Disco | 136 | Disco 3 |
| **19** | R&B | 143 | R&B 2 |
| **20** | Hip Hop | 160 | Hip Hop 1 |
| **21** | G-Funk | 174 | G-Funk 3 |
| **22** | Abstract | 183 | Abstract 1 |
| **23** | Electro | 189 | Electro 1 |
| **24** | Electronica | 195 | Electronica 1 |
| **25** | Reggae | 213 | Reggae 10(Roots) |

No.: Pattern Number

* *All data is that programmed at the factory. For instructions on carrying out Factory Reset, refer to p. 20.*

# Arpeggio Style List

| No. | Number of Notes | Number of Steps | Effective Chord Forms |
|---|---|---|---|
| 001 | 2 | 2 | |
| 002 | 3 | 3 | |
| 003 | 4 | 4 | |
| 004 | 2 | 2 | |
| 005 | 3 | 3 | |
| 006 | 4 | 4 | |
| 007 | 4 | 6 | |
| 008 | 3 | 8 | |
| 009 | 3 | 6 | |
| 010 | 4 | 4 | |
| 011 | 5 | 8 | |
| 012 | 12 | 16 | |
| 013 | 3 | 4 | |
| 014 | 3 | 6 | |
| 015 | 3 | 8 | |
| 016 | 3 | 4 | |
| 017 | 4 | 4 | |
| 018 | 4 | 8 | |
| 019 | 6 | 6 | |
| 020 | 4 | 8 | |
| 021 | 4 | 8 | |
| 022 | 5 | 8 | |
| 023 | 3 | 16 | |
| 024 | 1 | 16 | |
| 025 | 2 | 16 | |
| 026 | 3 | 16 | |
| 027 | 3 | 16 | |
| 028 | 3 | 16 | |
| 029 | 3 | 16 | |
| 030 | 3 | 16 | |
| 031 | 3 | 16 | |
| 032 | 3 | 32 | |
| 033 | 3 | 16 | |
| 034 | 4 | 16 | |
| 035 | 4 | 16 | |
| 036 | 4 | 16 | |
| 037 | 3 | 8 | |
| 038 | 2 | 16 | |
| 039 | 4 | 16 | 29 |
| 040 | 4 | 16 | 30 |
| 041 | 3 | 8 | |
| 042 | 2 | 8 | |
| 043 | 2 | 8 | |
| 044 | 2 | 4 | |
| 045 | 3 | 4 | |
| 046 | 4 | 16 | |
| 047 | 4 | 16 | 31 |
| 048 | 3 | 16 | |
| 049 | 4 | 16 | |
| 050 | 4 | 16 | 32 |
| 051 | 4 | 16 | |
| 052 | 4 | 16 | 33 |
| 053 | 3 | 16 | |
| 054 | 7 | 8 | |
| 055 | 9 | 16 | |
| 056 | 9 | 16 | |
| 057 | 6 | 32 | |
| 058 | 7 | 16 | |
| 059 | 9 | 16 | 34 |
| 060 | 12 | 32 | 35 |
| 061 | 5 | 16 | |
| 062 | 8 | 16 | 36 |
| 063 | 7 | 24 | 37 |
| 064 | 5 | 16 | |

| No. | Number of Notes | Number of Steps | Effective Chord Forms |
|---|---|---|---|
| 065 | 5 | 16 | |
| 066 | 5 | 16 | 38 |
| 067 | 5 | 16 | |
| 068 | 6 | 8 | |
| 069 | 5 | 8 | |
| 070 | 4 | 8 | 39 |
| 071 | 4 | 8 | 40 |
| 072 | 4 | 8 | 41 |
| 073 | 4 | 8 | |
| 074 | 4 | 8 | 41 |
| 075 | 4 | 16 | 42 |
| 076 | 4 | 8 | 41 |
| 077 | 4 | 8 | 43 |
| 078 | 4 | 16 | |
| 079 | 4 | 8 | 44 |
| 080 | 4 | 8 | 45 |
| 081 | 4 | 16 | 46 |
| 082 | 4 | 16 | 47 |
| 083 | 4 | 16 | |
| 084 | 4 | 8 | |
| 085 | 4 | 8 | 48 |
| 086 | 4 | 16 | |
| 087 | 4 | 8 | |
| 088 | 4 | 8 | |
| 089 | 4 | 8 | |
| 090 | 4 | 8 | |
| 091 | 2 | 4 | |
| 092 | 2 | 16 | |
| 093 | 2 | 16 | |
| 094 | 4 | 16 | |
| 095 | 4 | 16 | |
| 096 | 4 | 16 | |
| 097 | 4 | 32 | |
| 098 | 5 | 16 | |
| 099 | 10 | 16 | |
| 100 | 10 | 8 | |
| 101 | 10 | 16 | |
| 102 | 4 | 32 | |
| 103 | 10 | 8 | |
| 104 | 10 | 16 | |
| 105 | 10 | 16 | |
| 106 | 4 | 16 | |
| 107 | 4 | 8 | |
| 108 | 5 | 16 | |
| 109 | 5 | 12 | |
| 110 | 5 | 4 | |
| 111 | 6 | 16 | |
| 112 | 5 | 23 | 49 |
| 113 | 6 | 32 | 50 |
| 114 | 6 | 32 | 51 |
| 115 | 6 | 32 | 52 |
| 116 | 7 | 16 | 53 |
| 117 | 5 | 16 | 54 |
| 118 | 7 | 32 | 55 |
| 119 | 4 | 32 | 56 |
| 120 | 6 | 32 | 57 |
| 121 | 9 | 32 | 58 |
| 122 | 6 | 16 | 59 |
| 123 | 7 | 16 | 60 |
| 124 | 9 | 16 | 61 |
| 125 | 8 | 16 | 62 |
| 126 | 7 | 16 | 63 |
| 127 | 10 | 32 | 64 |
| 128 | 6 | 16 | |

# Chord Form List

| No. | Chord Name | Constituent Notes of Chord Form (when C4 is pressed) |
|---|---|---|
| 1 | C Maj | C4, E4, G4 |
| 2 | C Maj7 | C4, E4, G4, B4 |
| 3 | C 7 | C4, E4, G4, Bb4 |
| 4 | C min | C4, Eb4, G4 |
| 5 | C min7 | C4, Eb4, G4, Bb4 |
| 6 | C dim | C4, Eb4, Gb4, A4 |
| 7 | C min7 b5 | C4, Eb4, Gb4, Ab4 |
| 8 | C Aug | C4, E4, G#4 |
| 9 | C sus4 | C4, F4, G4 |
| 10 | C 7sus4 | C4, F4, G4, Bb4 |
| 11 | C add9 | C4, E4, G4, D5 |
| 12 | C #11 | C4, E4, F#4 |
| 13 | C min7 b9 | C4, Eb4, G4, Bb4, Db5 |
| 14 | C min add9 | C4, Eb4, G4, D5 |
| 15 | C 6 | C4, E4, G4, A4 |
| 16 | C 6 9 | C4, E4, G4, A4, D5 |
| 17 | C Maj9 | C4, E4, G4, B4, D5 |
| 18 | C min6 | C4, Eb4, G4, A4 |
| 19 | C min9 | C4, Eb4, G4, Bb4, D5 |
| 20 | C min Maj7 | C4, Eb4, G4, B4 |
| 21 | C 7 b5 | C4, E4, Gb4, Bb4 |
| 22 | C 7 b9 | C4, E4, G4, Bb4, Db5 |
| 23 | C 9 | C4, E4, G4, Bb4, D5 |
| 24 | C 7 #9 | C4, E4, G4, Bb4, D#5 |
| 25 | C 7 #11 | C4, E4, G4, Bb4, F#5 |
| 26 | C Aug7 | C4, E4, G#4, Bb4 |
| 27 | C 7 b13 | C4, G4, Bb4, E5, Ab5 |
| 28 | C 7 13 | C4, G4, Bb4, E5, A5 |
| 29 | A min add9 | E4, A4, B4, C5 |
| 30 | A min add11 | A3, C4, D4, E4 |
| 31 | G Maj add9 | A3, G4, A4, B4 |
| 32 | A min9 11 | A3, B3, C4, D4 |
| 33 | A 7 b9 | A3, G4, A4, Bb4 |
| 34 | A min7 11 | G3, A3, C4, D4, E4, G4, A4, C5, D5 |
| 35 | C Maj9 #11 13 | A1, C2, D2, E2, D4, E4, F#4, G4, A4, B4, C5, D5 |
| 36 | A min6 9 11 | A4, B4, C5, D5, E5, F5, G#5, B5 |
| 37 | C min7 11 | Bb1, C2, Eb2, F2, Gb2, G2, Bb2 |
| 38 | G Maj add9 | G1, G4, A4, B4, D5 |
| 39 | B Maj7 | B2, F#3, A#3, D#4 |
| 40 | D sus4 | D2, D3, A3, G4 |
| 41 | A min | A2, A3, C4, E4 |
| 42 | C sus4 | F2, F3, C4, G4 |
| 43 | A min | A2, E3, A3, C4 |
| 44 | G sus4 | C3, G3, D4, G4 |
| 45 | A | A2, A3, E4, A4 |
| 46 | F Maj | F2, F3, A3, C4 |
| 47 | A | A2, E3, A3, E4 |
| 48 | G Maj | C2, C3, E3, G3 |
| 49 | C min9 11 | G3, C4, D4, Eb4, F4 |
| 50 | A min9 11 | E5, G5, A5, B5, C6, D6 |
| 51 | A min9 11 | E3, A3, B3, C4, D4, E4 |
| 52 | E 7 #11 13 | G#2, A#2, B3, C#4, D4, E4 |
| 53 | A min9 | A2, C3, A3, B3, C4, E4, G4 |
| 54 | A min9 | A3, G4, A4, B4, C5 |
| 55 | A min9 | A3, C4, E4, G4, A4, B4, C5 |
| 56 | A min9 11 | A4, B4, C5, D5 |
| 57 | F Maj9 #11 | A3, F4, G4, A4, B4, C5 |
| 58 | A min9 11 | A2, A3, B3, C4, D4, A4, B4, C5, D5 |
| 59 | A min9 11 | C2, G3, G4, A4, B4, D5 |
| 60 | G min9 | G2, A2, Bb2, A4, Bb4, E5, F5 |
| 61 | C Maj9 | G2, B2, C3, D3, G3, B3, C4, D4, E4 |
| 62 | F Maj9 | C1, C2, C3, G3, A3, C4, E4, F4 |
| 63 | F Maj9 13 | E1, F2, G3, A3, C4, D4, E4 |
| 64 | F Maj9 #11 | E1, G2, B2, F4, G4, A4, B4, C5, E5, F5 |

* *1–28 are basic chords*

* *29–64 are chords effective for arpeggio styles*

# SRX-05 Special Patch List

SRX-05 Special Patches are patches that can be used only if the SRX-05 "Supreme Dance" wave expansion board is installed in the MC-909.

| No. | Name | No. | Name | No. | Name | No. | Name |
|---|---|---|---|---|---|---|---|
| **313** | SRX05 SupSaw | **331** | MG Tri Solo | **349** | Twilight | **367** | 080:BladeBt |
| **314** | Oct SuperSaw | **332** | SynVox Ld | **350** | TranceWarmer | **368** | 093:R&Bees |
| **315** | Rave Saws | **333** | Vib Sine 2 | **351** | 5th PianoPad | **369** | 096:RugBurn |
| **316** | KrasheadSaws | **334** | Pulsing Saws | **352** | FM HouseBs / | **370** | 120:Clubbin |
| **317** | Saw Stack | **335** | PulsingSaws2 | **353** | SH Rubber Bs | **371** | 135:X Racer |
| **318** | Saws&Pulses | **336** | SyncroSaws | **354** | SynBs Slide | **372** | LoFi Tre EP |
| **319** | Super 5th | **337** | LFO Dance | **355** | SqrResoSwpBs | **373** | BPF Clavi |
| **320** | Reso Saw 5th | **338** | Crawl Pulse | **356** | LFO Bass | **374** | JUNO-D Bell |
| **321** | Drain-O | **339** | FilSweep Pls | **357** | FingerE.Bs / | **375** | Square Bell3 |
| **322** | Brow Out | **340** | JunoUnisnSEQ | **358** | Piano Hit | **376** | High Dist Ld |
| **323** | Andes 909 | **341** | Oct Sqr SEQ | **359** | Organ Hit 5 | **377** | ShredFuzzGtr |
| **324** | PnoStack 909 | **342** | JU2 Saw SEQ | **360** | Aah Hit | **378** | Dance Str 2 |
| **325** | Northern EP | **343** | Seq 909 | **361** | Sand Hit | **379** | DanceStrings |
| **326** | Unison Lead | **344** | BPF Sweep 2 | **362** | OldBrass Hit | **380** | StrChd Min11 |
| **327** | FM Lead | **345** | SawStrings | **363** | Ring FX 1 | **381** | StrChd Min 9 |
| **328** | Noise Lead | **346** | Panning Saws | **364** | Ring FX 2 | **382** | Saw Brass |
| **329** | Belly Lead | **347** | UndrWater909 | **365** | Tri Alarm | **383** | BPF Sax |
| **330** | Whistle Ld | **348** | FilSweep Pad | **366** | Noise Kick | **384** | ShmiSynth |

# SRX-05 Special Rhythm Set List

SRX-05 Special Rhythm Sets are rhythm sets that can be used only if the SRX-05 "Supreme Dance" wave expansion board is installed in the MC-909.

| Note No. | 035: SRX05 TR-909 | 038: SRX05 Techno | 041: SRX05 R&B | 044: SRX05 FX |
|---|---|---|---|---|
| 59 | 909 DryKick3 | PlasticKick2 | R&B Kick 1 | Bobs Slide |
| C4 60 | 909 DryKick2 | AnalogKick10 | R&B Kick 2 | Cave Hit |
| 61 | 909 DryKick1 | PlasticKick1 | Dinky Kick 2 | Thru Hit 2 |
| 62 | 909 Dry SD5 | TR909 SD 3 | Dinky SD 2 | Ripper L |
| 63 | 909 Dry SD2 | Grim SD | Retro SD3 | Tramp Hit |
| 64 | 909 SD&CLP | Layer SD5 mb | R&B SD 2 | Cartn Fall |
| 65 | 909 Dry RSht | Deviant RM3 | Deviant RM1 | Nz Pass |
| 66 | 909 Dry Clap | Claptail | Real Clap | Thumpkin |
| 67 | 909 Dry LTom | MG S Zap 1 | WindChime Up | Dist Slide |
| 68 | 909 Dry MTom | Electric Saw | Long Triangl | Cartn Boing1 |
| 69 | 909 Dry HTom | US SweepD L3 | Long Triangl | Electronica |
| 70 | 909 Dry CHH1 | TR909 CHH 1 | Miami CHH | Electric Saw |
| 71 | 909 Dry CHH3 | TR909 PHH 1 | Mosaic CHH 1 | Howl Sync |
| C5 72 | 909 Dry OHH2 | TR909 OHH 1 | Miami OHH | PercolateHit |
| 73 | 909 Dry CR 2 | 909 Dry CR 2 | Pop Crash2 | Metal Atk Hi |
| 74 | 909 Dry RD2 | Pop ChinaCym | PopRideCym 3 | Metal Atk Lo |

| | 036: SRX05 TR-808 | 039: SRX05 House | 042: SRX05 Elctro |
|---|---|---|---|
| 59 | 808 DryKick5 | 909 DryKick3 | LoBit Kick 1 |
| C4 60 | 808 DryKick4 | TR909 Kick 7 | Livn Kick |
| 61 | 808 DryKick3 | 909 DryKick1 | SH2 U Zap 6 |
| 62 | 808 Dry SD1 | TR909 SD 1 | Sim Snare |
| 63 | 808 Dry SD2 | 909 Dry SD4 | 707 Dry SD1 |
| 64 | 808 Dry SD3 | TR909 SD 3 | 106 SD2 |
| 65 | 808 Dry RSht | Basis Rim | Lo-Bit CStk |
| 66 | 808 Dry Clap | Club Clap | Old Clap |
| 67 | 808 Dry Clvs | HiConga Opn | Sim5 Tom4S |
| 68 | 808 Dry Mrcs | LoConga Opn | Sim5 Tom2S |
| 69 | 808 Dry Cwbl | Tmbl Hi | Sim5 Tom1S |
| 70 | 808 Dry CHH | 909 Dry CHH1 | Urban CHH |
| 71 | 808 Cl&OpHH | 909 Dry CHH3 | Pedal Hat 1 |
| C5 72 | 808 Dry OHH3 | 909 Dry OHH1 | Pop Hat Open |
| 73 | 808 Dry Cym1 | 909 Dry CR 2 | MG Nz Cym |
| 74 | 808 Dry Cym3 | 909 Dry RD2 | US Nz Cym |

| | 037: SRX05 TR-707 | 040: SRX05 HipHop | 043: SRX05 Perc |
|---|---|---|---|
| 59 | 707 DryKick1 | Old Kick 2 | HiBongo Opn |
| C4 60 | 707 DryKick2 | Vinyl Kick | LoBongo Opn |
| 61 | 707 DryKick2 | Boys Kick | HiConga Opn |
| 62 | 707 Dry SD1 | HipHop SD 1 | LoConga Opn |
| 63 | 707 Dry SD2 | Filter SD3 | Tmbl Hi |
| 64 | 707 Dry SD1 | RegularSnrMF | Tmbl Hi Flm |
| 65 | 707 Dry RSht | Deviant RM2 | Real Shaker1 |
| 66 | 707 Dry Clap | Hip Clap | Real Cabasa3 |
| 67 | 707 Dry LTom | TablaBayam 1 | Short Guiro2 |
| 68 | 707 Dry MTom | Scratch 6 | Long Guiro2 |
| 69 | 707 Dry HTom | Warp Hit 3 | St. FgSnap |
| 70 | 707 Dry CHH | Hipping CHH | GospelClap |
| 71 | 707 Dry CHH | Hip PHH | Cwbl Hi |
| C5 72 | 707 Dry OHH | HipHop OHH | Cwbl Lo |
| 73 | 707 Dry CR | Pop Crash1 | WindChime Up |
| 74 | 707 Dry RD | PopRideCym 2 | WindChime Dn |

sampling groovebox (Sound Generator Section)
Model MC-909

# MIDI Implementation Chart

Date : Sep. 20, 2002
Version : 1.00

| Function... | | Transmitted | Recognized | Remarks |
|---|---|---|---|---|
| Basic | Default | X | 1–16 | |
| Channel | Changed | X | 1–16 | |
| Mode | Default | X | Mode 3 | |
| | Messages | X | Mode 3, 4 (M = 1) | * 2 |
| | Altered | ********** | | |
| Note Number : | True Voice | 0–127<br>********** | 0–127<br>0–127 | |
| Velocity | Note On | O | O | |
| | Note Off | O | O | |
| After Touch | Key's | X | O * 1 | |
| | Channel's | O | O * 1 | |
| Pitch Bend | | O | O * 1 | |
| Control Change | 0, 32 | O *1 | O *1 | Bank select |
| | 1 | O | O | Modulation |
| | 5 | X | O | Portamento time |
| | 6, 38 | X | O | Data entry |
| | 7 | O | O | Volume |
| | 10 | O | O | Panpot |
| | 11 | X | O | Expression |
| | 16 | O | O | General Purpose Controller 1 |
| | 18 | O | O | General Purpose Controller 3 |
| | 19 | O | O | General Purpose Controller 4 |
| | 64 | O | O | Hold 1 |
| | 65 | X | O | Portamento |
| | 66 | X | O | Sostenuto |
| | 68 | X | O | Legato Foot Switch |
| | 71 | O | O | Resonance |
| | 72 | O | O | Release Time |
| | 73 | O | O | Attack Time |
| | 74 | O | O | Cutoff |
| | 75 | O | O | Decay Time |
| | 80 | O | O | General Purpose Controller 5 |
| | 81 | O | O | General Purpose Controller 6 |
| | 82 | O | O | General Purpose Controller 7 |
| | 83 | O | O | General Purpose Controller 8 |
| | 84 | X | O | Portamento control |
| | 91 | O | O (Reverb) | General Purpose Effect 1 |
| | 1–3, 33–95 *3 | O | O | |
| | 98, 99 | X | X | NRPN LSB, MSB |
| | 100, 101 | X | O | RPN LSB, MSB |
| Program Change | : True Number | O *1<br>********** | O *1<br>0–127 | Program No. 1–128 |
| System Exclusive | | O | O *1 | |
| System Common | : Song Position | X | X | |
| | : Song Select | X | X | |
| | : Tune Request | X | X | |
| System Real Time | : Clock | X | O | |
| | : Commands | X | X | |
| Aux Messages | : All Sound Off | X | O | |
| | : Reset All Controllers | O *4 | O | |
| | : Local On/Off | X | X | |
| | : All Notes Off | O *4 | O (123–127) | |
| | : Active Sensing | O *1 | O | |
| | : System Reset | X | X | |
| Notes | | * 1 O X is selectable.<br>* 2 Recognized as M=1 even if M≠1.<br>* 3 The settings are changeable.<br>* 4 Transmitted only when V-LINK is ON. | | |

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

sampling groovebox (Sequencer Section)
Model MC-909

# MIDI Implementation Chart

Date : Sep. 20, 2002
Version : 1.00

| Function... | | Transmitted | Recognized | Remarks |
|---|---|---|---|---|
| Basic Channel | Default | 1–16 | 1–16 | There is no basic channel. |
| | Changed | X | X | |
| Mode | Default | X | X | |
| | Messages | X | X | |
| | Altered | | | |
| Note Number : | | 0–127 | 0–127 | |
| | True Voice | ********** | 0–127 | |
| Velocity | Note On | O | O | |
| | Note Off | O | O | |
| After Touch | Key's | O | O | |
| | Channel's | O | O | |
| Pitch Bend | | O | O | |
| Control Change | 0–119 | O | O | |
| Program Change | | O | O | |
| | : True Number | ********** | 0–127 | |
| System Exclusive | | O | O | |
| System Common | : Song Position | O *1 | O *2 | |
| | : Song Select | X | X | |
| | : Tune Request | X | X | |
| System Real Time | : Clock | O *1 | O *3 | |
| | : Commands | O *1 | O *2 | |
| Aux Messages | : All Sound Off | O | O | |
| | : Reset All Controllers | O | O | |
| | : Local On/Off | X | X | |
| | : All Notes Off | O *4 | O (123–127) *4 | |
| | : Active Sensing | O | O | |
| | : System Reset | X | X | |
| Notes | | *1 Transmitted only when Sync Out is ON.<br>*2 Recognized only when Sync Mode is SLAVE or REMOTE.<br>*3 Recognized only when Sync Mode is SLAVE.<br>*4 Mode messages (123–127) are stored/transmitted after All Note Off processing is performed. The All Note Off message itself is not stored/transmitted. | | |

Mode 1 : OMNI ON, POLY
Mode 2 : OMNI ON, MONO
Mode 3 : OMNI OFF, POLY
Mode 4 : OMNI OFF, MONO

O : Yes
X : No

# Index

## L



## M



## N



## P



## R

## S



## T



## U



## V



## W



## Z

# Specifications

## MC-909: Sampling groovebox

### Sound Generator Section

| | |
|---|---|
| Maximum Poliphony | 64 voices<br>(shared with sampling section) |
| Sampling Frequency | 44.1 kHz |
| Parts | 16 (Main) + 16 (RPS) |
| Waves | 693 |
| Patches | |
| Preset | 800 |
| User | 256 |
| Card | 256 |
| Rhythm Set | |
| Preset | 72 |
| User | 128 |
| Card | 128 |

### Sampling Section

| | |
|---|---|
| Data Format | 16-bit linear<br>(File Type: WAV/AIFF) |
| Maximum Poliphony | shared with sound generator section |
| Sampling Frequency | 44.1 kHz (fixed) |
| Maximum Sampling Time | |

- Internal memory (16 MB) only
  mono: 180 sec. approx. (stereo: 90 sec. approx.)
- with DIMM (256 MB)
  mono: 51 min. approx. (stereo: 25.5 min. approx.)

| | |
|---|---|
| Samples | |
| User | 2,000 |
| Card | 7,000 (128 MB SmartMedia) |

### Sequencer Section

| | |
|---|---|
| Parts | 16 + Tempo/Mute Control |
| Resolution | 480 ticks per quarter note |
| Tempo | 5–300 |
| Maximum Note Storage | approx. 1,300,000 notes |
| Patterns | |
| Preset | 215 |
| RPS | 440 |
| User | 200 |
| Card | 999 |
| Recording Mode | Realtime, TR-REC, Step |
| Songs | 50 |
| Arpeggio Style | |
| Preset | 128 |
| User | 128 |
| Chord Memory | |
| Preset | 64 |
| User | 128 |
| RPS Set | 50 |
| Pattern Set | 50 |

### Effects Section

| | |
|---|---|
| Reverb | 1 (4 types) |
| Compressor | 1 (1 type) |
| Multi-effects (MFX) | 2<br>(MFX1: 38 types)<br>(MFX2: 47 types) |
| Pitch Shifter<br>(for external input) | 1 (1 type) |

### Mastering Section

| | |
|---|---|
| 3-bands Compressor | 1 (1 type) |

# Specifications

## Expansion Slot

Wave Expansion Board SRX Series: 1 slot
DIMM: 1 slot

| | |
|---|---|
| Number of pins: | 168-pin |
| Speed: | 100 MHz (PC100 CL=2) |
| | 133 MHz (PC133 CL=3) |
| Voltage: | 3.3 V |
| Capacity: | 128 MB |
| | 256 MB |
| Board height: | 38 mm or less |

## External Memory

SmartMedia card: 1 slot
8MB/16MB/32MB/64MB/128MB (3.3V)

## Controllers, Display

Display
- QVGA LCD
- BPM Diplay: 7 segment 4 character (LED)

Control Knob
- Pitch: 1 (FINE TUNE/COARSE TUNE)
- Filter: 2 (CUTOFF, RESONANCE)
- LFO 1: 2 (DEPTH/RATE, WAVEFORM)
- Sound Others: 3 (FAT, RANDOM MODIFY, MATRIX CONTROL 1)
- Effects: 3 (TYPE, C1, C2)
- Mastering: 2 (Attack, Release)
- OUTPUT Volume: 1
- INPUT Volume: 1

Control Slider
- Envelope: 13 (Pitch/Filter/Amp)
- Part Mixer: 8
- Turntable Emulation (100 mm): 1

Other Controllers
- Twin D Beam Controller
- Velocity Pads

## Connectors

MIX OUTPUT Jack (L (MONO), R)
DIRECT 1 OUTPUT Jack (L (MONO), R)
DIRECT 2 OUTPUT Jack (L (MONO), R)
IPUT Jack (L (MONO), R)
Headphones Jack
MIDI Connectors (IN, OUT)
USB Connector
Digital Audio Interface
- IN/OUT (OPTICAL, COAXIAL)

AC Inlet

## Power Supply

AC 117 V, AC 230 V, AC 240 V

## Power Consumption

20 W

## Dimensions

491 (W) x 386 (D) x 123 (H) mm
19-3/8 (W) x 15-1/4 (D) x 4-7/8 (H) inches

## Weight

6.0 kg
13 lbs 4 oz

## Accessories

Quick Start
Owner's Manual
Sample Data (Audio) CD
Power Cord
Card Protecter

## Options

Wave Expansion Board: SRX Series

* *A separate publication titled "MIDI Implementation" is also available. It provides complete details concerning the way MIDI has been implemented on this unit. If you should require this publication (such as when you intend to carry out byte-level programming), please contact the nearest Roland Service Center or authorized Roland distributor.*

* *In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.*

# Error Message List

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 | Cause/Action |
|---|---|---|
| Beat Differs! | While using the Pattern Edit operation Copy, the copy could not be executed since the copy-source and copy-destination patterns have differing time signatures. | You must copy between patterns that have the same time signature. |
| | The imported SMF has a time signature that cannot be played by the MC-909, or has a changing time signature. | Import SMF data with a time signature that can be played by the MC-909, and whose time signature does not change. |
| Cannot Assign Phrase! | Since there are two or more unmuted parts, the phrase cannot be registered in an RPS set. | Choose one part of the phrase that you want to register, and mute all of the remaining parts (p. 28). |
| Cannot Edit Preset Sample! | This is a preset sample, and therefore cannot be edited. | — |
| Cannot Extract! | When executing the Pattern Edit command Extract a Rhythm Instrument, the move-source part contained no data of the note number you specified by Extract Note. | Specify a note number for which data exists in the move-source part. |
| Card Not Ready! | A memory card is not inserted in the slot. | Insert a memory card into the slot. |
| Card Protected! | The write-protect sticker is affixed to the card. | — |
| Empty Pattern! | The pattern cannot be played since it contains no performance data. | Select a pattern that contains data. |
| Empty Sample! | The sample contains no data. | Select a sample that contains data. |
| Empty Song! | The song has not been recorded, and therefore cannot be played. | Select a song that contains data. |
| Illegal File! | The MC-909 cannot use this file. | The MC-909 can use only audio files (WAV/AIFF format), SMF, and bitmap files. |
| Memory Damaged! | The contents of memory may have been damaged. | Please perform the Factory Reset operation (p. 20). If this does not resolve the problem, please contact your dealer or the nearest Roland Service Center. |
| Memory Full! (USER/CARD Area Full!) | Saving is not possible because there is insufficient space in the user area or memory card. | Delete unneeded data. |
| MIDI Offline! | There is a problem with the MIDI cable connection. | Check that the MIDI cable has not been disconnected or broken. |
| No More Sample Numbers! | The sample cannot be divided any further. | Delete unneeded samples (p. 124) in order to allocate 256 or more consecutive sample numbers. |
| | Since fewer than 256 consecutive sample numbers are vacant, no further sampling is possible. | |
| Now Playing! | Since the MC-909 is playing, this operation cannot be executed. | Stop playback before you execute the operation. |
| Pattern Full! | Since the maximum number of notes that can be recorded in one pattern has been exceeded, no further pattern recording is possible. | Erase unneeded data from the pattern you are recording (p. 49). |
| Permission Denied! | The file is protected. | — |
| Sample Length Too Short! | The sample is too short, and cannot be edited correctly. | If the sample is extremely short, editing may not produce the desired result. |
| Sample Memory Full! | Since there is insufficient sample memory, no further sampling or sample editing is possible. | Erase unneeded samples (p. 124). |
| Song Recording Full! | Since the maximum number of patterns that can be recorded in one song has been exceeded, no further song recording is possible. | A maximum of 50 patterns can be recorded in one song. No further patterns can be recorded. |
| Unformatted! | The memory card is in an unsupported format. | Format the memory card (p. 134). |
| Wrong Setting! | The pattern edit setting is incorrect. | Make the correct setting. |

# MEMO

**For EU Countries**

CE This product complies with the requirements of European Directives EMC 89/336/EEC and LVD 73/23/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.

# 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 A1 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

**That Other Music Shop(PTY)Ltd.**
11 Melle St., Braamfontein,
Johannesbourg,
SOUTH AFRICA
TEL: (011) 403 4105
FAX: (011) 403 1234

**Paul Bothner(PTY)Ltd.**
17 Werdmuller Centre,
Main Road, Claremont 7708
SOUTH AFRICA
TEL: (021) 674 4030

## 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

**Roland Shanghai Electronics Co.,Ltd.**
**(GUANGZHOU OFFICE)**
2/F., No.30 Si You Nan Er Jie
Yi Xiang, Wu Yang Xin Cheng,
Guangzhou 510600, CHINA
TEL: (020) 8736-0428

### 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.**
409, Nirman Kendra
Mahalaxmi Flats Compound
Off. Dr. Edwin Moses Road,
Mumbai-400011, INDIA
TEL: (022) 2493 9051

### INDONESIA

**PT Citra IntiRama**
J1. Cideng Timur No. 15J-150
Jakarta Pusat
INDONESIA
TEL: (021) 6324170

### KOREA

**Cosmos Corporation**
1461-9, Seocho-Dong,
Seocho Ku, Seoul, KOREA
TEL: (02) 3486-8855

### MALAYSIA

**Roland Asia Pacific Sdn. Bhd.**
45-1, Block C2, Jalan PJU 1/39,
Dataran Prima, 47301 Petaling Jaya, Selangor, MALAYSIA
TEL: (03) 7805-3263

### PHILIPPINES

**G.A. Yupangco & Co. Inc.**
339 Gil J. Puyat Avenue
Makati, Metro Manila 1200,
PHILIPPINES
TEL: (02) 899 9801

### SINGAPORE

**SWEE LEE MUSIC COMPANY PTE. LTD.**
150 Sims Drive,
SINGAPORE 387381
TEL: 6846-3676

**CRISTOFORI MUSIC PTE LTD**
Blk 3014, Bedok Industrial Park E,
#02-2148, SINGAPORE 489980
TEL: 6243-9555

### TAIWAN

**ROLAND TAIWAN ENTERPRISE CO., LTD.**
Room 5, 9fl. No. 112 Chung Shan N.Road Sec.2, Taipei,
TAIWAN, R.O.C.
TEL: (02) 2561 3339

### THAILAND

**Theera Music Co. , Ltd.**
330 Verng NakornKasem, Soi 2,
Bangkok 10100, THAILAND
TEL: (02) 2248821

### VIETNAM

**Saigon Music**
Suite DP-8
40 Ba Huyen Thanh Quan Street
Hochiminh City, VIETNAM
TEL: (08) 930-1969

## AUSTRALIA/ NEW ZEALAND

### AUSTRALIA/ NEW ZEALAND

**Roland Corporation Australia Pty.,Ltd.**
38 Campbell Avenue
Dee Why West. NSW 2099
AUSTRALIA

For Australia
Tel: (02) 9982 8266
For New Zealand
Tel: (09) 3098 715

## CENTRAL/LATIN AMERICA

### ARGENTINA

**Instrumentos Musicales S.A.**
Av.Santa Fe 2055
(1123) Buenos Aires
ARGENTINA
TEL: (011) 4508-2700

### BARBADOS

**A&B Music Supplies LTD**
12 Webster Industrial Park
Wildey, St.Michael, Barbados
TEL: (246)430-1100

### BRAZIL

**Roland Brasil Ltda.**
Rua San Jose, 780 Sala B
Parque Industrial San Jose
Cotia - Sao Paulo - SP, BRAZIL
TEL: (011) 4615 5666

### CHILE

**Comercial Fancy II S.A.**
Rut.: 96.919.420-1
Nataniel Cox #739, 4th Floor
Santiago - Centro, CHILE
TEL: (02) 688-9540

### COLOMBIA

**Centro Musical Ltda.**
Cra 43 B No 25 A 41 Bododega 9
Medellin, Colombia
TEL: (574)3812529

### COSTA RICA

**JUAN Bansbach Instrumentos Musicales**
Ave.1. Calle 11, Apartado 10237,
San Jose, COSTA RICA
TEL: 258-0211

### CURACAO

**Zeelandia Music Center Inc.**
Orionweg 30
Curacao, Netherland Antilles
TEL:(305)5926866

### DOMINICAN REPUBLIC

**Instrumentos Fernando Giraldez**
Calle Proyecto Central No.3
Ens.La Esperilla
Santo Domingo,
Dominican Republic
TEL:(809) 683 0305

### ECUADOR

**Mas Musika**
Rumichaca 822 y Zaruma
Guayaquil - Ecuador
TEL:(593-4)2302364

### EL SALVADOR

**OMNI MUSIC**
75 Avenida Norte y Final
Alameda Juan Pablo II,
Edificio No.4010 San Salvador,
EL SALVADOR
TEL: 262-0788

### GUATEMALA

**Casa Instrumental**
Calzada Roosevelt 34-01,zona 11
Ciudad de Guatemala
Guatemala
TEL:(502) 599-2888

### HONDURAS

**Almacen Pajaro Azul S.A. de C.V.**
BO.Paz Barahona
3 Ave.11 Calle S.O
San Pedro Sula, Honduras
TEL: (504) 553-2029

### MARTINIQUE

**Musique & Son**
Z.I.Les Mangle
97232 Le Lamantin
Martinique F.W.I.
TEL: 596 596 426860

**Gigamusic SARL**
10 Rte De La Folie
97200 Fort De France
Martinique F.W.I.
TEL: 596 596 715222

### MEXICO

**Casa Veerkamp, s.a. de c.v.**
Av. Toluca No. 323, Col. Olivar de los Padres 01780 Mexico D.F. MEXICO
TEL: (55) 5668-6699

### NICARAGUA

**Bansbach Instrumentos Musicales Nicaragua**
Altamira D'Este Calle Principal de la Farmacia 5ta.Avenida
1 Cuadra al Lago.#503
Managua, Nicaragua
TEL: (505)277-2557

### PANAMA

**SUPRO MUNDIAL, S.A.**
Boulevard Andrews, Albrook,
Panama City, REP. DE PANAMA
TEL: 315-0101

### PARAGUAY

**Distribuidora De Instrumentos Musicales**
J.E. Olear y ESQ. Manduvira
Asuncion PARAGUAY
TEL: (595) 21 492147

### PERU

**Audionet**
Distribuciones Musicales SAC
Juan Fanning 530
Miraflores
Lima - Peru
TEL: (511) 4461388

### TRINIDAD

**AMR Ltd**
Ground Floor
Maritime Plaza
Barataria Trinidad W.I.
TEL: (868)638 6385

### URUGUAY

**Todo Musica S.A.**
Francisco Acuna de Figueroa 1771
C.P.: 11.800
Montevideo, URUGUAY
TEL: (02) 924-2335

### VENEZUELA

**Instrumentos Musicales Allegro,C.A.**
Av.las industrias edf.Guitar import
#7 zona Industrial de Turumo
Caracas, Venezuela
TEL: (212) 244-1122

## EUROPE

### AUSTRIA

**Roland Elektronische Musikinstrumente HmbH.**
**Austrian Office**
Eduard-Bodem-Gasse 8,
A-6020 Innsbruck, AUSTRIA
TEL: (0512) 26 44 260

### BELGIUM/FRANCE/ HOLLAND/ LUXEMBOURG

**Roland Central Europe N.V.**
Houtstraat 3, B-2260, Oevel (Westerlo) BELGIUM
TEL: (014) 575811

### CZECH REP.

**K-AUDIO**
Kardasovska 626.
CZ-198 00 Praha 9,
CZECH REP.
TEL: (2) 666 10529

### DENMARK

**Roland Scandinavia A/S**
Nordhavnsvej 7, Postbox 880,
DK-2100 Copenhagen
DENMARK
TEL: 3916 6200

### FINLAND

**Roland Scandinavia As, Filial Finland**
Elannontie 5
FIN-01510 Vantaa, FINLAND
TEL: (0)9 68 24 020

### GERMANY

**Roland Elektronische Musikinstrumente HmbH.**
Oststrasse 96, 22844
Norderstedt, GERMANY
TEL: (040) 52 60090

### GREECE

**STOLLAS S.A.**
**Music Sound Light**
155, New National Road
Patras 26442, GREECE
TEL: 2610 435400

### HUNGARY

**Roland East Europe Ltd.**
Warehouse Area 'DEPO' Pf.83
H-2046 Torokbalint,
HUNGARY
TEL: (23) 511011

### IRELAND

**Roland Ireland**
G2 Calmount Park, Calmount Avenue, Dublin 12
Republic of IRELAND
TEL: (01) 4294444

### ITALY

**Roland Italy S. p. A.**
Viale delle Industrie 8,
20020 Arese, Milano, ITALY
TEL: (02) 937-78300

### NORWAY

**Roland Scandinavia Avd. Kontor Norge**
Lilleakerveien 2 Postboks 95
Lilleaker N-0216 Oslo
NORWAY
TEL: 2273 0074

### POLAND

**MX MUSIC SP.Z.O.O.**
UL. Gibraltarska 4.
PL-03664 Warszawa POLAND
TEL: (022) 679 44 19

### PORTUGAL

**Roland Iberia, S.L.**
**Portugal Office**
Cais das Pedras, 8/9-1 Dto
4050-465, Porto, PORTUGAL
TEL: 22 608 00 60

### ROMANIA

**FBS LINES**
Piata Libertatii 1,
535500 Gheorgheni,
ROMANIA
TEL: (266) 364 609

### RUSSIA

**MuTek**
3-Bogatyrskaya Str. 1.k.l
107 564 Moscow, RUSSIA
TEL: (095) 169 5043

### SPAIN

**Roland Iberia, S.L.**
Paseo García Faria, 33-35
08005 Barcelona SPAIN
TEL: 93 493 91 00

### SWEDEN

**Roland Scandinavia A/S**
**SWEDISH SALES OFFICE**
Danvik Center 28, 2 tr.
S-131 30 Nacka SWEDEN
TEL: (0)8 702 00 20

### SWITZERLAND

**Roland (Switzerland) AG**
Landstrasse 5, Postfach,
CH-4452 Itingen,
SWITZERLAND
TEL: (061) 927-8383

### UKRAINE

**TIC-TAC**
Mira Str. 19/108
P.O. Box 180
295400 Munkachevo,
UKRAINE
TEL: (03131) 414-40

### UNITED KINGDOM

**Roland (U.K.) Ltd.**
Atlantic Close, Swansea Enterprise Park, SWANSEA
SA7 9FJ,
UNITED KINGDOM
TEL: (01792) 702701

## MIDDLE EAST

### BAHRAIN

**Moon Stores**
No.16, Bab Al Bahrain Avenue,
P.O.Box 247, Manama 304,
State of BAHRAIN
TEL: 17 211 005

### CYPRUS

**Radex Sound Equipment Ltd.**
17, Diagorou Street, Nicosia,
CYPRUS
TEL: (022) 66-9426

### IRAN

**MOCO INC.**
No.41 Nike St., Dr.Shariyati Ave.,
Roberoye Cerahe Mirdamad
Tehran, IRAN
TEL: (021) 285-4169

### ISRAEL

**Halilit P. Greenspoon & Sons Ltd.**
8 Retzif Ha'aliya Hashnya St.
Tel-Aviv-Yafo ISRAEL
TEL: (03) 6823666

### JORDAN

**AMMAN Trading Agency**
245 Prince Mohammad St.,
Amman 1118, JORDAN
TEL: (06) 464-1200

### KUWAIT

**EASA HUSAIN AL-YOUSIFI & SONS CO.**
Abdullah Salem Street,
Safat, KUWAIT
TEL: 243-6399

### LEBANON

**Chahine S.A.L.**
Gerge Zeidan St., Chahine Bldg., Achrafieh, P.O.Box: 16-5857
Beirut, LEBANON
TEL: (01) 20-1441

### OMAN

**TALENTZ CENTRE L.L.C.**
P.O. BOX 37, MUSCAT,
POSTAL CODE 113
TEL: 931-3705

### QATAR

**Al Emadi Co. (Badie Studio & Stores)**
P.O. Box 62, Doha, QATAR
TEL: 4423-554

### SAUDI ARABIA

**aDawliah Universal Electronics APL**
Corniche Road, Aldossary Bldg., 1st Floor, Alkhobar,
SAUDI ARABIA

P.O.Box 2154, Alkhobar 31952
SAUDI ARABIA
TEL: (03) 898 2081

### SYRIA

**Technical Light & Sound Center**
Rawda, Abdul Qader Jazairi St.
Bldg. No. 21, P.O.BOX 13520,
Damascus, SYRIA
TEL: (011) 223-5384

### TURKEY

**Ant Muzik Aletleri Ithalat Ve Ihracat Ltd Sti**
Siraselviler Caddesi
Siraselviler Pasaji No:74/20
Taksim - Istanbul, TURKEY
TEL: (0212) 2449624

### U.A.E.

**Zak Electronics & Musical Instruments Co. L.L.C.**
Zabeel Road, Al Sherooq Bldg., No. 14, Grand Floor, Dubai,
U.A.E.
TEL: (04) 3360715

## NORTH AMERICA

### CANADA

**Roland Canada Music Ltd. (Head Office)**
5480 Parkwood Way
Richmond B. C., V6V 2M4
CANADA
TEL: (604) 270 6626

**Roland Canada Music Ltd. (Toronto Office)**
170 Admiral Boulevard
Mississauga On L5T 2N6
CANADA
TEL: (905) 362 9707

### U. S. A.

**Roland Corporation U.S.**
5100 S. Eastern Avenue
Los Angeles, CA 90040-2938,
U. S. A.
TEL: (323) 890 3700

As of January 15, 2005 (ROLAND)

Roland Corporation

03348834 '05-3-2N