Roland®

groovebox MC-307

# REFERENCE MANUAL

Before using this unit, carefully read the sections entitled: "USING THE UNIT SAFELY" and "IM-PORTANT NOTES" (REFERRENCE MANUAL p. 2; p. 8). 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, REFERRENCE MANUAL should be read in its entirety. The manual should be saved and kept on hand as a convenient reference.
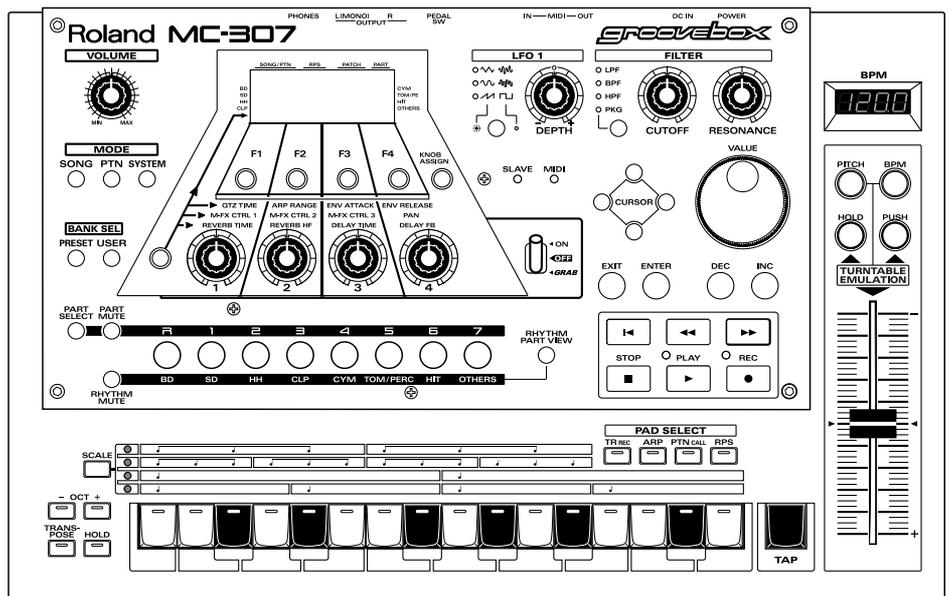
USING THE UNIT SAFELY

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

About ⚠ WARNING and ⚠ CAUTION Notices

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

About the Symbols

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

- ALWAYS OBSERVE THE FOLLOWING -

⚠ WARNING

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

....

- Do not open (or modify in any way) the unit or its AC adaptor.

....

- 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.

....

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

....

⚠ WARNING

- Avoid damaging the power cord. Do not bend it excessively, step on it, place heavy objects on it, etc. A damaged cord can easily become a shock or fire hazard. Never use a power cord after it has been damaged.

....

- 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 AC adaptor from the outlet, and request servicing by your retailer, the nearest Roland Service Center, or an authorized Roland distributor, as listed on the "Information" page when:
  - The AC adaptor, the power-supply cord, or the plug has been damaged; or
  - 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.

....

⚠ CAUTION

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

....

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

....

- Whenever the unit is to remain unused for an extended period of time, disconnect the AC adaptor.

....

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

....

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

....

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

....

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

....

- Before cleaning the unit, turn off the power and unplug the AC adaptor from the outlet (Quick Start p. 2).

....

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

....

Contents

Contents

IMPORTANT NOTES

In addition to the items listed under "USING THE UNIT SAFELY" on page 2, 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).

- The AC adaptor will begin to generate heat after long hours of consecutive use. This is normal, and is not a cause for concern.

- Before connecting this unit to other devices, turn off the power to all units. This will help prevent malfunctions and/or damage to speakers or other devices.

Placement

- This device may interfere with radio and television reception. Do not use this device in the vicinity of such receivers.

- Do not expose the unit to direct sunlight, place it near devices that radiate heat, leave it inside an enclosed vehicle, or otherwise subject it to temperature extremes. Excessive heat can deform or discolor the unit.

- 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 in another MIDI device (e.g., a sequencer).

- Unfortunately, it may be impossible to restore the contents of data that was stored in 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.

- 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.

Features of the MC-307

High-performance Synthesizer Sound Generator

A high-performance synthesizer module equivalent to the MC-505 is featured in the sound generator section, the key element for sound performance. A rich array of parameters, precision filters, and ADSR-style envelopes can be changed with the knobs, the buttons and the GRAB switch on the panel, allowing you to create sounds as easily as you could on an analog synthesizer. The MC-307 will also function as an 8-part multitimbral sound module.

Latest Patterns

240types of preset patterns ready to be used and 470types of patterns for RPS materials (one track of data extracted from preset patterns) are on board. Since the patterns cover a wide range, from techno to reggae, this instrument provides everything you need for most situations.

Leading-edge Patch Sets

The MC-307's carefully selected 800 sounds and 40 rhythm sets are just what you need for today's dance scene, and include great sounds from vintage instruments such as the TB-303, JUNO, JUPITER and TR-808/909. From the day you purchase the MC-307, you will be enjoying cutting-edge sounds that cannot be obtained on any other synthesizer.
Original sounds that you create can also be stored in internal memory for immediate access.

Three Digital Effect Units

High-performance DSP (digital signal processing) technology provides you with a wide range of effects. Three multi-effect units are provided: Reverb adds reverberation, Delay adds echo-like effects, and M-FX (general-purpose multi-effect unit) provides 25 types of effect that have been optimized for dance music.

Isolator and GRAB Switch

Offers a "GRAB switch," which gained wide acclaim after it appeared on the Roland DJ-2000/DJ-1000 DJ mixer. Used in conjunction with the powerful isolator, the switch enables real-time on/off operation.

Enhanced Real-time Operation Features

Four "assignable knobs" are provided for assigning desired functions. The user can assign desired parameters to enhance expressivity for real-time performance.

Use the Arpeggiator to Create Phrases

You can play arpeggios simply by pressing the keyboard pads. By changing the settings, you can perform a variety of different phrases.

RPS (Real-time Phrase Sequencing) for On-the-spot Addition of Phrases

A phrase can be played back simply by pressing a keyboard pad. This operation can be used to add phrases to a pattern, to give performance with RPS alone, and for many other purposes.

Function Equivalent to that of a Turntable

A "Turntable Emulation Block" is installed. You can synchronize with other sound modules simply with turntable-like action.

Easy Creation of Original Patterns

"Real-time recording" capability for recording ordinary keyboard performances and a "TR-REC" function for creating patterns with graphically arranged phrases are incorporated. The TR-REC function is enhanced with a scale editing function, providing a more convenient means of creating bass lines and melodies.

Front and Rear Panels

Top Panel
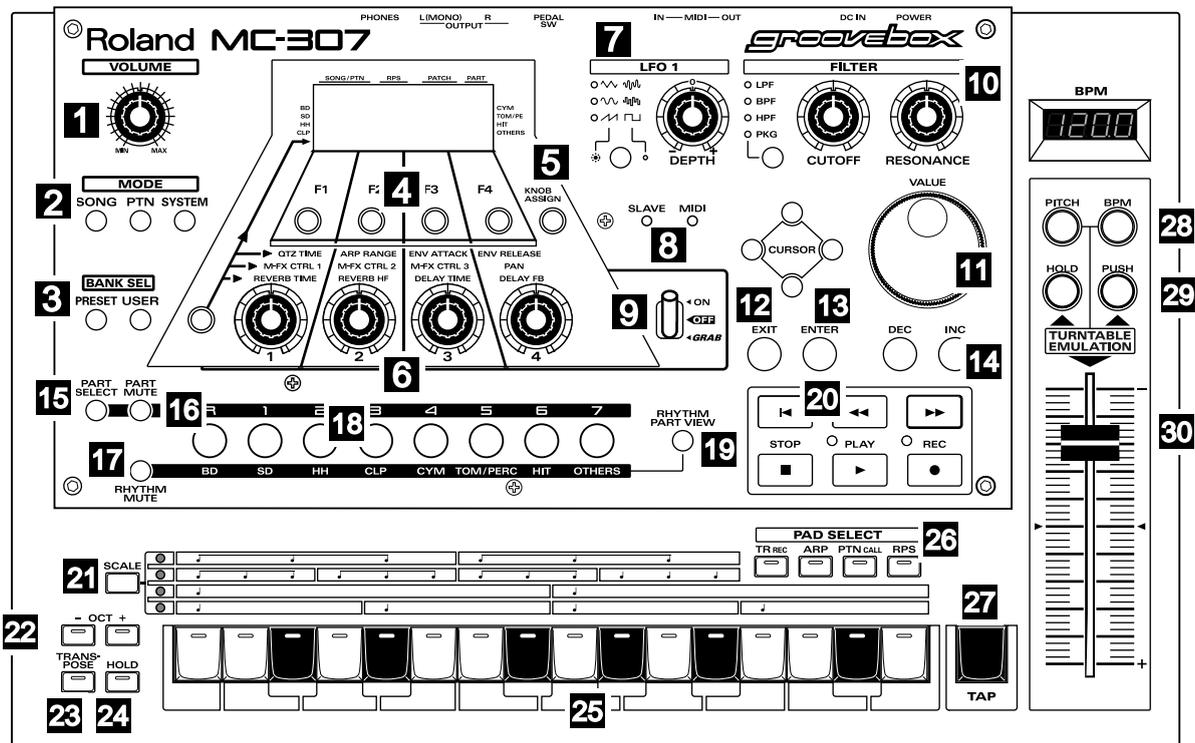
1. VOLUME Knob

Adjusts the overall volume level of the MC-307.

2. MODE Buttons (SONG, PTN and SYSTEM)

Switch the operating mode of the MC-307.

3. BANK SEL Buttons (PRESET and USER)

Select patterns and tones.

4. Function Button

Make sure that the setting page for the ARPEGGIO section is displayed.

5. Knob Assignment Button

Determines which functions should be assigned to "assignable knobs 1 to 4."

Instead of the functions listed on the panel, four optional functions can be assigned.

6. Assignable Knobs 1 to 4

Change such parameters as tones and effects in real time.

7. LFO 1 Button/Knob

Used to cyclically change musical intervals, the volume level and the filter.

8. MIDI/SLAVE Indicator

The MIDI indicator will light when MIDI messages are received from the MIDI IN connector. The Slave indicator will light when the MC-307 is set to the Slave setting (P. 119).

9. GRAB Switch

This switch can be used for real-time on/off operation of the reverb, delay and Multi-effect (M-FX) functions. (P. 62)

10. FILTER Button/Knob

Used for real-time operation of CUTOFF (P. 26) and RESONANCE (P. 27).

11. VALUE Dial

Used to set/change the settings on the display. This is convenient for making large changes in values. (If you want to make even larger changes in a value, hold down [INC] or [DEC] button and rotate this dial.)

12. EXIT Button

Mainly used to return to the previous screen.

13. ENTER Button

Use this to execute an operation.

14. INC and DEC Buttons

Used to set/change the displayed settings. Useful for setting precise values.

15. PART SELECT Button

Press this button to select the part that is to be controlled in real-time.

16. PART MUTE Button

Press this button to use the part mute function.

17. RHYTHM MUTE Button

Press this button to use the rhythm mute function.

18. R and 1 through 7 Buttons

Used to select a part, to mute a part and to mute a rhythm.

19. RHYTHM PART VIEW Button

Provides graphic display for confirming the data configuration of the rhythm part. (P. 15)

20. SEQUENCER Button (⏮ ⏪ ⏩ ■ ▶ ●)

Used for various operations including Reset, rewinding, fast-forwarding, stopping, Playing, and Recording of patterns and songs.

21. SCALE Button

Used to select note assignments for the TR-REC mode (P. 68).

22. OCT - / + Buttons

This is used for transposing the octave of the keyboard pad.

23. TRANSPOSE Button

Transposing the sound source.(The rhythm part is not subject to transposition.)

24. HOLD Button

Pressing this button is equivalent to pressing and holding down a keyboard pad, except you can release the pad.

25. Keyboard Pads

Normally, these pads are used as keyboard keys, but they can also be used as buttons to start phrases (RPS: P. 38) and for setting the TR-REC timing scale (P. 68).

26. PAD SELECT Button
(TR REC, ARP, PTN CALL, RPS)

Determines how the keyboard pads are to used.

27. TAP Button

Allows you to change the BPM to the timing you've used to tap this button.

28. PITCH and BPM Buttons

Used to select a slider and HOLD/PUSH function. Lighting the PITCH button enables musical intervals to be changed, while lighting the BPM button enables playback velocity to be changed. Turning both functions on implements a function similar to the pitch controller of the slider and turntable.

29. HOLD and PUSH Buttons

These emulate the acitions of pushing and holding a turntable to change its rotational speed.

30. TURNTABLE EMULATION Slider

Normally, this function is equivalent to increasing or decreasing the speed of the turntable. Used in conjunction with the PITCH/BPM button, it can be used for changing solely the pitch or the playback velocity.

Rear Panel
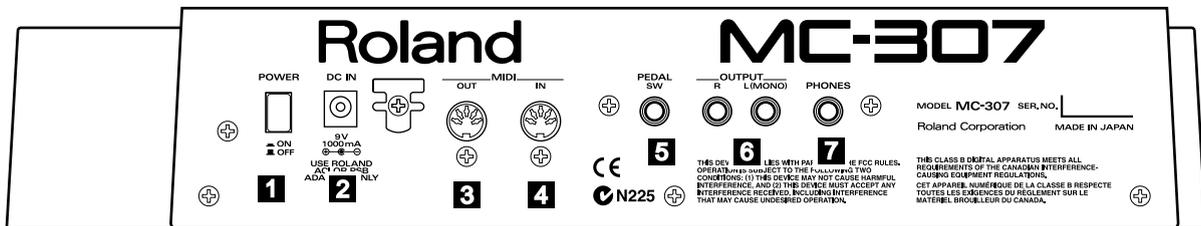
1. POWER Switch

This switch turns the power on/off.

2. DC IN Connector

Connect the included AC adaptor here.

NOTE

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

3. MIDI OUT Connector

This transmits MIDI messages from the MC-307 to external MIDI devices. In addition, if still at the factory settings, data arriving at MIDI IN is also transmitted.

4. MIDI IN Connector

This connector receives MIDI messages that are transmitted from external MIDI devices.

5. PEDAL SW Connector

By connecting an optional pedal switch (such as the DP-2) to this connector, you can use the pedal to perform operations on the MC-307.

6. OUTPUT L(MONO)/R Jacks

Provide output of the audio signals. Connect them to your keyboard amp, audio system, or mixer etc. Use audio cables (sold separately) to make connections.

7. PHONES Jack

Accepts connection of headphones.

Chapter 1 Introducing the MC-307

Basic structure of the MC-307

This section is an overview of the basic sections of the MC-307: the sequencer section, sound generator section, and controller section.
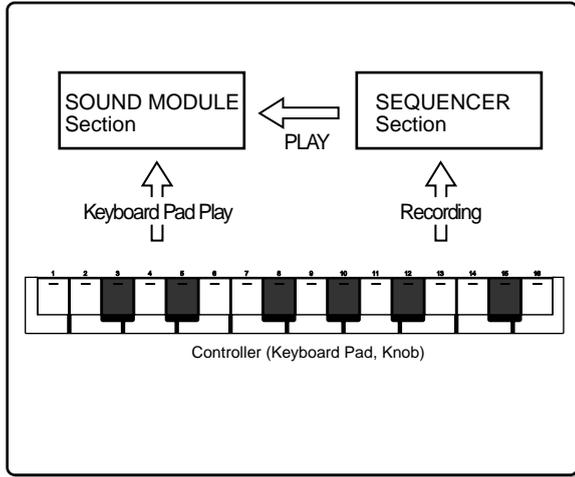
The sequencer section

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

Recording/playing a performance

The MC-307 comes with 240 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-307 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 R	Rhythm (Drum) Set
Part 1	Bass
Part 2	Piano
Part 3	Guitar

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 sound generator section

The sound generator is what actually produces the sound. The sounds are generated in accord with information arriving from the MC-307's controllers and sequencer. Performance data from an external MIDI device can also play the sound generator. The sound generator of the MC-307 is able to produce up to 64 notes simultaneously, more than enough for playing multiple parts at once.

Patches

A patch is analogous to a particular instrument, such as a piano or guitar. The MC-307 contains 800 preset patches, and you can enjoy virtually any type of sound simply by selecting one of these patches.

Rhythm Sets

A rhythm set allows you to play a different instrument from each note of the keyboard. The instruments will not sound the pitches of the scale. 40 preset rhythm sets are provided.

(Example)
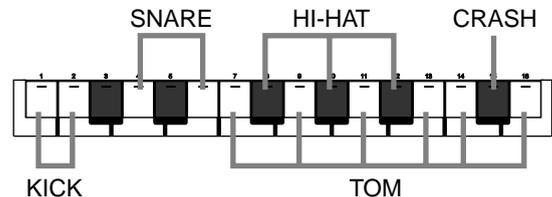
Parts

A part is analogous to an individual musician in a band or orchestra. There are eight parts, [R], [1]... [7], allowing you to use seven patches and one rhythm set to play a total of up to eight performances simultaneously.

Effects

The MC-307 provides three effect processors that can be used to apply various tonal effects to a patch or rhythm set: Reverb (reverberation), Delay (echo-like effects), and Multi-effects (choose from 25 effects such as equalizer or compressor). All three effect processors can be used simultaneously.

Patch editing

The sound of a preset patch or rhythm set can be modified to your liking. (For details refer to "Patch editing," p. 92.)

The controller section

Controllers refer collectively to the keyboard pads, the knobs and sliders on the panel, and pedal switches (separately sold) that can be connected to the rear panel. By operating these, you can perform or apply effects.

Knobs

The CUTOFF (P. 26), RESONANCE (P. 27), LFO 1 (P. 27), and assignable 1 - 4 (P. 28)knobs can be operated in real time to modify the sound.

Turntable emulation

These are sliders and buttons that allow you to perform in real time synchronization with sound sources such as a turntable. They make it easy for you to enjoy DJ performance. (P. 25)

GRAB switch

This switch allows you to turn reverb, delay, and multi-effects on/off in real time. (P. 62)

Keyboard pads

These perform the same function as a keyboard. They can also be used for RPS (P. 38) and arpeggiator (P. 31) performance.

Saving Settings

Perform the save procedure to retain the results of setting changes and recording performances. Turning the power off without saving results in the loss of the settings or recordings.

- **Patch**

  refer to Saving a Patch (p. 104).

- **Rhythm set**

  refer to Saving a Rhythm Set (p. 113).

- **Pattern**

  refer to Saving a Pattern (p. 23).

- **Song**

  refer to Saving the Song (p. 87).

- **Arpeggiator**

  refer to Saving Arpeggio Settings (Arpeggio Write) (p. 34).

- **Pattern set**

  refer to Saving a Pattern Set (p. 38).

- **RPS set**

  refer to Saving the Settings of an RPS Set (p. 41).

Basic Operations Common to General MC-307 Functions

You can efficiently operate the MC-307 by using the controls appropriate for the goal you have in mind. Refer to the following descriptions of the various operations and try to keep them in mind.

Changing Values

Use [VALUE] dial for making major value changes and [INC] or [DEC] button for incrementing or decrementing values by one. To change the value, use the display field in a black frame with characters displayed in white. This is called "**cursor**." To change more than one value on the display, move the cursor with [CURSOR] buttons to the relevant area.

(If you want to mato even larger changes in a value, hold down [INC] or [DEC] button and rotate this dial.)
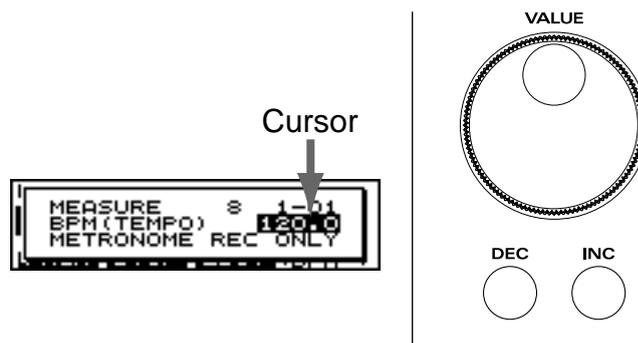
About the upper part of the display screen

The upper part of the display screen shows the pattern number (P. 17) / song number, RPS set number (P. 38), patch number (P. 21), and the currently selected part number. These items will always be shown, regardless of what is shown in the lower part of the display, so that you will always have the most important information at a glance.

Canceling the Previous Operation (Undo/Redo)

For songs and patterns, editing (track and microscopic editing) and recording operations can be canceled.

Before Recording/Editing

Recording/Editing   REDO   UNDO

After Recording/Editing
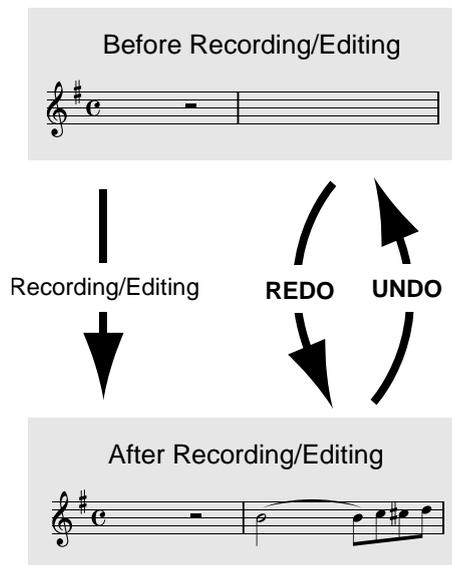
Procedure

1. Press [SYSTEM] button.

2. Press [F4 (UNDO)] button.

    The item subject to UNDO is displayed. For example, "UNDO MICROSCOPE" appears for undoing microscopic editing.

3. Press [F4 (EXEC)] button to execute this function, or press [EXIT] button to cancel.

Upon completion, a "COMPLETED!" message appears on the display and the screen returns to the initial screen that appears upon power up.

NOTE

UNDO can be executed for Pattern (track editing, microscope editing and recording) or Song (editing, recording).

MEMO

REDO is an operation of restoring the initial contents before executing UNDO. Repeating the steps above after executing UNDO executes REDO

Confirming Performance of Rhythm Part (Rhythm Part View)

For the rhythm part (PART R), a graphical display is available for confirming what kind of performances are recorded for the respective patterns. This operation is useful when you want to check how the rhythm part performance is configured.
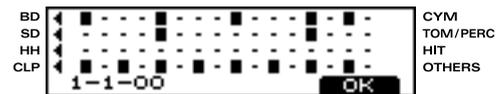
Procedure

1. Press [RHYTHM PART VIEW] button.

2. From the part buttons, [BD]–[OTHERS], select and press the button associated with the rhythm tone that you want to confirm.

    Either one of the rhythm tones appeared at the left or right section of the display can be selected for viewing.

    For example, the rhythm buttons [BD] and [CYM] button can be switched by pressing the appropriate button.

3. Press [►►] or [◄◄] button to select the location you want to be displayed.

    The display shows groups of numerals, such as "1-1-00," indicating "Measure-Beat-Clock."
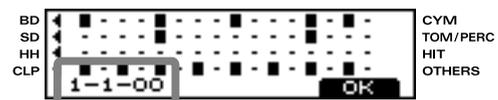
The following marks are displayed.

■ : Data exists

- : Data does not exist

*   *While this screen is displayed, pressing [SCALE] button changes the unit of one " ■ ."*

*   *For operations (a) and (c) below, press [►►] or [◄◄] button to switch the display between the first half and the second half of one measure.*

-   a. Displays half the length of one measure in sixteenth triplet.
-   b. Displays the length of one measure in eighth triplet.
-   c. Displays half of the length of one measure in thirty-second notes.
-   d. Displays the length of one measure in sixteenth notes.

*   *This function cannot be used if the System setting "RHY VIEW" (P. 122) is set to "MUTE CTRL."Switch the setting to "NORMAL" before you use this.*

Metronome Settings

The metronome can be set to automatic on/off according to the operating mode of the MC-307.

Procedure (Pattern/Song play screen)

1. Press [PTN] (or [SONG]) button.

2. Press [F4 (BPM)] button.

3. Press [CURSOR (up/down)] buttons to move the cursor over to "METRO NOME."

```
MEASURE    8  2-01
BPM(TEMPO)    120.0
METRONOME REC ONLY
```

4. Set up the mode using [VALUE] button dial or [INC/DEC] buttons.

Procedure (Realtime Recording screen)

1. Press [PTN] button.

2. Press [REC] button.

3. Press [F2 (REALTIME)] button.

4. Press [PLAY] button.
   Realtime Recording starts.

5. Press [F4 (BPM)] button.

6. [CURSOR (Up/Down)] button to move cursor over to "METRONOME."

7. Set up the mode using [VALUE] button dial or [INC/DEC] buttons.

Available Settings

- OFF: The metronome does not play, regardless of the operation of the MC-307.
- ON: The metronome plays, regardless of the operation of the MC-307.
- REC ONLY: The metronome plays only during recording.
- PLAY&REC: Sounds during playback and recording.

* *You can also set the volume of the metronome. For the procedure, refer to Setting up the volume level of the metronome (METRONOME LEVEL) (p. 119).*

Restoring the Factory Settings (FACTORY RESET)

This operation can restore the settings of the MC-307 to their factory settings.

NOTE

When Factory Reset is executed, the data in the MC-307's memory is lost. If there is any data in the MC-307 that you do not want to delete, use the Bulk Dump operation (P. 129) to save the data to an external MIDI sequencer or similar device.

Procedure

1. Press [SYSTEM] button.
   The menu screen for system set-up appears.

2. Press [F2 (UTIL)] button.

3. Press [CURSOR (down)] button.
   Go to the screen where "FACTORY RESET" appears.

4. Press [F1 (FACT)] button.
   The "FACTORY RESET" screen appears and an "ARE YOU SURE?" message appears.

```
FACTORY RESET

    ARE YOU SURE?
              EXIT EXEC
```

5. Press [F4 (EXEC)] button to execute factory reset.

After 6 minutes, factory reset is completed and the "COMPLETED!" message appears.

After a short while, the screen displayed immediately after startup appears.

Basic Functions of Patterns

A pattern consists of 1 to 32 measures of play that include patches and rhythm sets of up to 8 parts.

The MC-307 is provided with 240 preset patterns. In addition to these, an area for up to 200 user-created patterns is also available.

Playing Back Patterns

The MC-307 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**.

* ▮◀ ◀◀ ▶▶ buttons can also be used while playback is in progress.

Return to the previous measure.

Go to the beginning of the song.

Advance to the next measure.

STOP   ○ **PLAY**   ○ **REC**

Stop the Sequencer.

Play Back.

Use in recording.
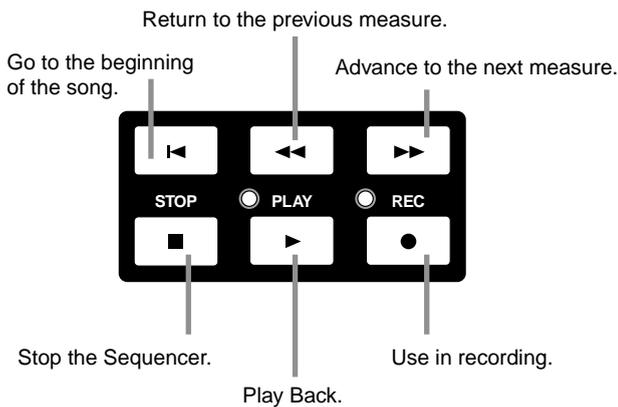
Playing back patterns continuously

Selecting the next pattern while a pattern is being played back, the new pattern is played back when playback of the current one is completed.

This technique is used to keep playing back patterns in sequence. The BPM (tempo) of the performance is determined by the tempo of the first Pattern that is played back.

Procedure

1. Press [PTN] button.

The pattern playback screen appears.

```
PATTERN          P:001
Psy Trance 1
PACH  STUP  EDIT  BPM
```

2. Press [PLAY] button to begin playback.

The pattern play screen appears.

```
001 ▶ 001
PACH  STUP  EDIT  BPM
```

3. Select the pattern using [VALUE] dial or [INC/DEC] buttons.

After playback of the current pattern is completed, the pattern selected in step 3 is played back.

* *Immediately before playback of a pattern is completed, [PTN] button blinking. At this term, the pattern cannot be changed; the MC-307 is already prepared to proceed to the next pattern.*

Range:

- P: 001 – P: 240
- P: 241 – P: 710(RPS Pattern)
- U: 001 – U: 200

MEMO

You can press [PTN] button that appears in the screen in "Step 2" of the procedure to switch to the screen that also shows the name of the selected Pattern.

```
NEXT: PSY TRANCE 1
P001 ▶ P001
PACH  STUP  EDIT  BPM
```

* Pressing [PTN] button when this screen is displayed returns you to the screen in Step2.

Chapter2

Playing Back at the Tempo Set for the Pattern

In order to play back patterns at the BPM (tempo) set up for the respective patterns, select a pattern while no pattern is being played back, then start playback.This secures playback at the optimal BPM for the pattern.

Procedure

1. Press [STOP] button to stop playback.

2. Press [PTN] button.

    This appears the screen for playing patterns.

3. Use [VALUE] dial or [INC/DEC] button to select the pattern.

4. Press [PLAY] button.

Playback begins.

Range:
- P: 001 – P: 240
- P: 241 – P: 710 (RPS Pattern)
- U: 001 – U: 200

On-the spot playback of the next pattern

It is also possible to play back the next pattern upon pressing of the button.This operation is useful for searching for a target pattern by checking patterns one by one.

Procedure

1. Press [PTN] button.

    The pattern playback screen appears.

2. Press [PLAY] button to begin playback.

    The pattern is played back.

3. Press [CURSOR (left/right)] buttons.

    The pattern immediately before or after the current one is played back right away.

   * When playback is stopped, you can use the [CURSOR (left, right)] buttons to select patterns by categories such as "techno," "house," and so on.

Range:
- P: 001 – P: 240
- P: 241 – P: 710(RPS Pattern)
- U: 001 – U: 200

Viewing the number of measures in a pattern

The measure number and the rhythm can be indicated on the display. This operation is useful when the BPM (tempo) cannot be easily measured due to muting of the rhythm part.

Procedure

1. Press [PTN] button.

2. Press [F4 (BPM)] button.

    A window appears and displays the measure number (MEAS) and the beat (BEAT) currently played back.

    Pattern length   Current Measure - Beat

    ```
    MEASURE      8  1-01
    BPM(TEMPO)   120.0
    METRONOME  REC ONLY
    ```
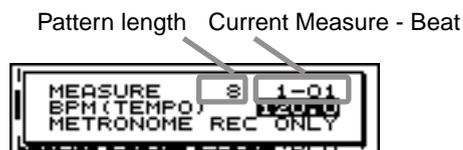
Press [EXIT] or [F4] button to close the window.

Changing BPM (Tempo)

NOTE

With some Preset Patterns, raising the BPM too high can cause sluggish performance.

Changing BPM with the Value Dial

A BPM value is specified for playback. This operation is useful when you have a BPM value for playback in mind.

Procedure

1. Press [PTN] button.

2. Press [F4 (BPM)] button.

    A window appears.

    ```
    MEASURE      8  1-01
    BPM(TEMPO)   120.0
    METRONOME  REC ONLY
    ```

3. Use [CURSOR (up/down)] buttons to move the cursor over to the BPM value.

4. Change the BPM value using [VALUE] dial or [INC/DEC] buttons.

After completing the settings, press [EXIT] or [F4] button to close the window.

Range: 20.0–240.0

Changing BPM with the TAP button

You can establish the BPM by tapping on the TAP button at the desired rhythm. This allows you to set the tempo using

your own sense of rhythm, even if you don't know the settings value.

Procedure

1. Press [TAP] button more than three times to change the tempo a quarter note at a time to obtain the BPM desired for playback.

This timing is adopted as the BPM used for playback.

* *You can also set the BPM by pressing the TAP button using eighth-note timing. refer to Changing the resolution of the tap tempo (TAP RESOLUTION) (p. 122).*

Range BPM: 20.0–240.0

Muting Parts and Rhythm Tones

Muting parts

Part R and Parts 1 to 7 can be muted individually.

PART   PART
SELECT MUTE
R 1 2 3 4 5 6 7
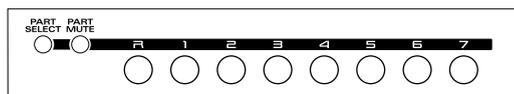
Procedure

1. Press [PART MUTE] button.

The part buttons, [R], [1] to [7], function as buttons for the part muting function.

2. Press the part button, [R], [1] to [7], for the part to be muted.

The tone of that part is muted. Press the button for the muted part again to cancel the muting function.

The part button indicator operates as follows:

- Lit: The part can be played back.
- Blinking: The part is muted.
- Extinguished: No performance is recorded in the part. (The indicator will come on after some data are entered through recording.)

* *Part 1 of Preset Pattern P: 001 to P: 240 does not contain any performance data. This part is useful for performances using the keyboard pads or the arpeggiator. (P. 31)(P. 38)*

* *Preset Pattern for RPS P: 241 to P: 710 contains performance only in Part 1 (or Part R) to be used for RPS.*

* *You can change the mute status of each part, and save the setting in a user pattern. (P. 23)*

Muting rhythm tones individually

Musical instruments used in Part R can be muted individually. These instruments are muted by instrument type such as bass drum (BD) and snare drum (SD).

BD SD HH CLP CYM TOM/PERC HIT OTHERS
RHYTHM
MUTE
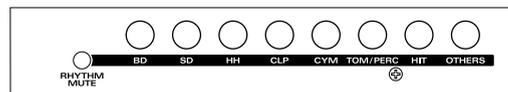
Procedure

1. Press [RHYTHM MUTE] button.

The [R], [1] to [7] PAD buttons change to the Rhythm Tone Mute function buttons ([BD]-[OTHERS]).

2. Press the part button, [BD]–[OTHERS], for the rhythm group to be muted.

The sound from that rhythm tone is muted. Press the button for the muted part again to cancel the mute.

The part button indicator operates as follows:

- Lit: The Rhythm group can be played back.
- Blinking: The Rhythm group is muted.
- Extinguished: No performance is recorded in the Rhythm group. (The indicator will come on after some data are entered through recording.)

MEMO

Association of rhythm groups and buttons for muting them

- BD: Bass Drum
- SD: Snare Drum
- HH: Hi-Hat
- CLP: Hand Claps
- CYM: Cymbal
- TOM/PERC: TomTom/Percussion
- HIT: hit such as a one-shot SFX sound.
- OTHERS: Other instruments

* *If you would like to know which tone is muted by muting a particular rhythm group?*
  ... refer to Preset Rhythm Set List (p. 159).

---

* *Using the part muting function to mute Part R mute all rhythm tones regardless of the settings for respective rhythm tones.*

Chapter2

Muting all parts in a single step

The following operation mutes all parts associated with [R], [1] to [7] buttons.

Procedure

1. While holding down [PART MUTE] button, press [RHYTHM MUTE] button.

All parts will be muted.

* *Then [PART MUTE] button's indicator blinks.*

* *Repeat step 1 to restore the state before muting.*

Setting a single part to the playback mode

Just one of the parts associated with [R], [1] to [7] part buttons is set to the playback mode.

Procedure

1. While holding down [PART MUTE] button, press the part button, [R], [1] to [7], for the part you want to play.

All the other parts will be muted.

Inverting the part being muted and that being played back

This function is used to set the part currently being played back to the muting mode and the part being muted to the playback mode.

Procedure

1. While holding down [PART MUTE] button, press [PART SELECT] button.

This sets the part being muted to the playback mode and the part being played back to the muting mode.

Using the muting mode for the next pattern (Mute Remain)

This operation is used to maintain the muting mode for playing back the next part. It is useful, for example, to play back the next pattern with the rhythm track muted by maintaining the current setting.

Procedure

1. Press [PTN] button.

The pattern playback screen appears.

2. Press [PLAY] button to begin playback.

The pattern is played back.

3. Press [PLAY] button again during playback.

"MR" is displayed in the center of the screen.

4. Select a pattern using [VALUE] dial or [INC/DEC] buttons.

After a while, the selected pattern is played back with the previous PART MUTE setting maintained.

* *Pressing the blinking [PLAY] button again cancels this function.*

Transposing During Playback

This operation changes the key by semitones.

Using [VALUE] dial or [INC/DEC] buttons

Procedure

1. Specify the transposition value by operating [VALUE] dial or [INC/DEC] buttons while holding down [TRANSPOSE] button.
The "REALTIME TRANSPOSE" screen is displayed while this button is held down.

2. Release [TRANSPOSE] button when the playback position reaches the point where transposition is desired. Then, the subsequent section is played back in transposed keys.

* *Press [TRANSPOSE] button to reset the transposed keys to the initial keys. The indicator of the button goes off and the state is switched to the mode without transposition.*

Range:

-12– +12 (semitones)

Using the keyboard pads

Procedure

1. 1. Press [OCT +] button (lighting the button) when setting a positive value; press [OCT -] button when setting a negative value (lighting the button).

2. Hold down [TRANSPOSE] button and press a keyboard pad to set the transpose value.

   The transpose value can be set in a range of -12– +12 semitones, above and below the C4 key (which will be keyboard pad [2] if Octave Shift is "0").

3. The transposition will be applied from the moment that you press the keyboard pad.

   To return to the original key, press [TRANSPOSE] button once again to make the button indicator go dark.

   - "Shifting the Keyboard Range in One-Octave Steps (Octave Shift)" (P. 24)

Selecting sounds

Selecting Patch/Rhythm Set

The MC-307's Patterns are composed of up to eight Parts, and different Patches (Part1 - 7: Patches, Part R = Rhythm set)can be selected for each Part. To change tones, first select the desired Part.

Procedure

First, select the part in which a patch is to be selected.

1. Press [PTN] button.

2. Press [F1 (PACH)] button.
   The names of the patches in the currently selected part are displayed.

```
PATCH          P:A001
Lead TB 1
EDIT CATG
```

3. Press [PART SELECT] button.
   The part buttons, [R], [1] to [7], function as the part selection buttons.

4. Press the part button, [R], [1] to [7], for the part containing the patch that you want to transpose.
   The part associated with the button pressed is selected and its name appears in the top right-hand corner.

Next select a patch.

5. Press [PRESET] button or [USER] button to make selection between preset patches and user patches.

6. Select a patch using [VALUE] dial or [INC/DEC] buttons.

Range:

- **Patches**

Preset	P: A001 - 128
	P: B001 - 128
	P: C001 - 128
	P: D001 - 128
	P: E001 - 128
	P: F001 - 128
	P: G001 - 032
User	U: A001 - 128
	U: B001 - 128

- **Rhythm sets**

Preset	P: A01 - 26
	P: B01 - 14
User	U 01 - 20

MEMO

If you would like to know what patches/rhythm sets are available?

- "Preset Patch List" (P. 155)
- "Preset Rhythm Set List" (P. 159)

Selecting a Patch by Category

Patches can be selected by category such as piano, organ, etc. (Part 1 - 7 only.)

Procedure

1. Press [PTN] button.
   The pattern playback screen appears.

2. Press [F1 (PACH)] button.
   The names of the patches in the currently selected part are displayed.

3. Press [F2 (CATG)] button.
   The category selection screen appears.

```
CATEGORY GROUP SELECT:
PIAN KEYS GUIT BASS
O    &ORG AR
```

4. Select a category using [VALUE] dial or [INC/DEC] buttons.

5. Press [ENTER] button.
   The screen contains patches in the selected category.

6. Select a patch using [VALUE] dial or [INC/DEC] buttons.

7. Press [ENTER] button.
   The patch is selected and the display returns to the initial patch display screen.

 * *Selection by category is also possible for real-time recording, for which the above procedure can be applied. (P. 64)*

Range:

CATEGORY:
PIANO, KEYS&ORGAN, GUITAR, BASS, ORCHESTRAL, BRASS, SYNTH, PAD, ETHNIC, RHYTHM&SFX, USER

Changing the settings of each part

You can modify the settings of each part to change how the pattern will sound. The six items listed in "Setting ranges" can be adjusted.

Procedure

1. Press [PTN] button.
   The pattern playback display will appear.

2. Press [F2 (STUP)] button.

3. Press [F1 (PART)] button.
   The "PART MIXER" display will appear.

4. Use [F1 (▼)] or [F2 (▲)] buttons to select the item you wish to set.

5. Use [CURSOR (left/right)] buttons to select the part for which you wish to make settings.

6. Use [VALUE] dial or [INC/DEC] buttons to make settings.

Range:

 - LEVEL (Part Level)
   Set the volume of the part.
   Range: 0–127

 - PAN (Part Pan)
   Set the left/right position of the part.
   Range: L64–0–63R

 - KEY SHIFT (Part Key Shift)
   Set the transposition of the part.
   Range: -48–0– +48

 - REVERB (Part Reverb Level)
   Set the amount of reverb for the part.
   Range: 0–127

 - DELAY (Part Delay Level)
   Set the amount of delay for the part.
   Range: 0–127

 - M-FX SW (Part M-FX Switch)
   Specify whether or not the part will use the multi-effect.
   Range: OFF, ON, RHY

 * *RHY can be selected only for a rhythm set. When RHY is selected, M-FX will be applied according to the setting for each individual tone of the rhythm set. If you select ON for a rhythm part, M-FX will be applied to all tones.*

- SEQ OUT (Sequencer Output Assign)

  Specify the output destination from the sequencer to the sound source.

  Range:

  - INT: Output to the internal sound generator.

  - EXT: Output to the MIDI OUT connector.

  - BOTH: Output to both of the above simultaneously.

MEMO

When these settings windows are displayed, each of the settings can be made using the assignable knobs 1-4.

- When Part R, 1, 2, or 3 is selected:

  The assignable knobs 1-4 are used for setting Parts R and 1-3, respectively.

- When Part 4, 5, 6, or 7 is selected:

  The assignable knobs 1-4 are used for setting Parts 4-7, respectively.

On the MC-307, the following parameters are saved for each pattern.

These parameters are collectively referred to as the "**Setup parameters**."

- Standard Tempo (P. 18)
- Patch/Rhythm Set Number * (P. 21)
- LEVEL * (P. 22)
- PAN * (P. 22)
- KEY SHIFT* (P. 22)
- REVERB LEVEL * (P. 22)
- DELAY LEVEL * (P. 22)
- M-FX SWITCH * (P. 22)
- SEQ OUT * (P. 23)
- REVERB settings (P. 42)
- DELAY settings (P. 44)
- M-FX settings (P. 46)
- Part Mute status * (P. 19)
- Rhythm Mute status (P. 19)

The "*" indicates parameters that are set independently for each part.

Saving a Pattern

When you have made the settings for patches used for a pattern and the mute mode, save the pattern as a user pattern.

NOTE

Unless saved, the data for any recorded or edited Pattern is lost when the power is turned off.

Procedure

Stop operation if the pattern is being played back or recorded.

1. Press [SYSTEM] button.

2. Press [F3 (WR)] button.

3. Press [F3 (PTN)] button.

The screen for specifying the pattern to be saved and the destination pattern appears.

```
PATTERN WRITE:
P:001 PSY TRANCE 1
        ↓
U:001 EMPTY PATTERN
                WR
```
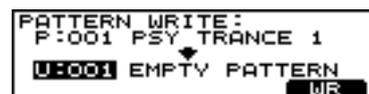
The pattern is saved under the pattern number selected here. Care is needed when selecting an appropriate pattern number since the pattern previously saved under that name is deleted.

4. Press [F4 (WR)] button.

   The pattern naming screen appears.

5. Use [VALUE]dial or [INC/DEC]button to specify characters.

   The following characters are available.

   space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | }

6. After characters have been specified, press [F4 (OK)] button.An "ARE YOU SURE?" message appears.

7. Press [F4 (EXEC)] button.

SAVE operation is executed.

  * *In step 5 above, upper-case or lower-case versions of the selected characters can be specified by pressing [CURSOR (up/down)] buttons.*

  * *In step 5, [F1] and [F2] buttons can be conveniently used for editing the name.*

  - [F1 (INS)]: Press to insert a character at the cursor position.

  - [F2 (DEL)]: Press to delete the character at the cursor position.

Chapter2

Chapter 3 Giving Variation to Pattern Playback

Playing Back with Keyboard Pads

1. Make sure that all the [ARP], [PTN CALL], [RPS] and [TR-REC] button indicators are dark.

   If any button is lit, press the button to light it up.

   PAD SELECT

   TR REC   ARP   PTN CALL   RPS

2. Press [PART SELECT] button.

3. Press the PART button [R], [1] to [7] for the part that you wish to play.

   * *The part selected by the PART SELECT button and PART buttons is referred to as the **Current Part**.*

4. Play the keyboard pads, and you will hear the sound of that part.

   ### <HOLD function>

   Pressing the [HOLD] button to turn on the indicator enables the sound to be played back even after the Keyboard pad is released. Pressing the [HOLD] button again turns the indicator and the function off.

   ### <Checking the parts that are sounding>

   When the [PART SELECT] button indicator is lit, the part indicators [R], [1] to [7] will light at the timing at which keyboard pads are played or notes of the pattern are played. This is convenient when you wish to know which parts are currently sounding.

   * When connecting an external MIDI keyboard, refer to "Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD) "(p. 123).

Shifting the Keyboard Range in One-Octave Steps (Octave Shift)

Octave Shift is a function that shifts the pitch of the keyboard pads in one-octave units. This lets you shift the range of the keyboard pads to the most convenient range for playing.

Normally when you press keyboard 2, the pitch of the C4 note (middle C) will sound. (Both OCT buttons dark.)

Procedure

1. Use [OCT - /+] button to shift the pitch range.

   The keyboard will be shifted in the - / + direction, and the button indicator will light.
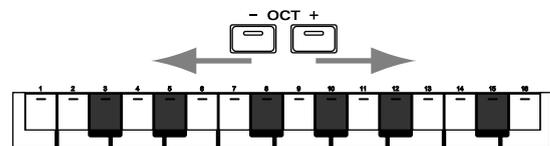
Range: -4 – +4

* *When operating the [OCT] button, pressing and holding it down for a moment displays the amount of current octave shift.*

* *Each time you press [OCT +] button, the range will be shifted upward by one octave. Each time you press [OCT -] button.*

* *Pressing the [OCT -] button and [OCT +] buttons at the same time resets octave shift to "0."*

Using with Turntable (Turntable Emulation)

What is the Turntable Emulation?

The MC-307 has a **TURNTABLE EMULATION slider**, just like a record player, for BPM adjustment, and **TURNTABLE HOLD/PUSH buttons** that make effects just like holding and turning the turntable possible.They enable start and tempo alignment during turntable playback.

Synchronizing the Turntable and the BPM

Use the slider control to synchronize the MC-307's BPM setting with the turntable.
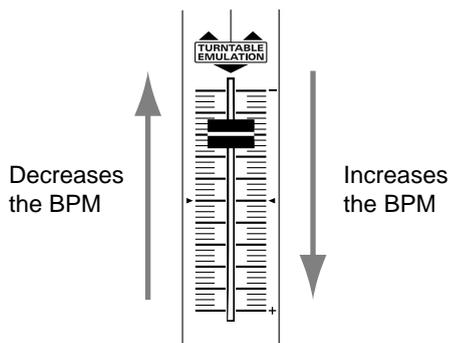
Set-up/operating procedure

1. Begin playback with the turntable.

2. Begin playback with the MC-307.

3. Confirm that both the [PITCH/BPM] buttons above the slider are lit.
   If not lit, press one or both buttons to turn the functions, lighting one or both buttons.

4. Move the TURNTABLE EMULATION slider.
   Moving the slider up reduces the BPM (slows down the tempo). Moving the slider down increases the BPM (speeds up the tempo).

MEMO

At the center point of the slider a "click" (where the slider catches slightly) can be felt. At this position, the BPM will be at its original value.

MEMO

In Step 3, if only the [PITCH] button is pressed and lit, then only the pitch is changed. If only [BPM] is pressed and lit, only the BPM changes.

Operation similar to touching a turntable ([HOLD] and [PUSH] buttons)

Synchronizing the Start with the Turntable Using the BPM button, synchronize the starting point with the turntable.
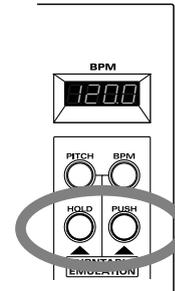
Procedure

1. Begin playback with the turntable.

2. Begin playback of the MC-307's Pattern (p. 5).

3. Confirm that both the [PITCH/BPM] buttons above the slider are lit.
   If not lit, press one or both buttons to turn the function, lighting the button or buttons.

4. If the MC-307's playback is running slower than the turntable's, press the [PUSH] button to speed up the performance.

5. If the MC-307's playback is running ahead of the turntable's, press the [HOLD] button to hold back the performance.

MEMO

In Step 3, if only the [PITCH] button is pressed and lit, then only the pitch is changed. If only [BPM] is pressed and lit, only the BPM changes.

Chapter3

Changing the Tone with the Knobs during Playback (REALTIME MODIFY)

The tone can be modified during playback using the knobs on the MC-307 panel. In addition, the items subject to modification can be changed using the four assignable knobs below the display.

MEMO

- Movement of the controls does not result in any effect unless the controls are adjusted beyond a certain range (a value of about 2 or 3).
- If Realtime Modify is used to change the parameters in a Pattern, then the Pattern reverts to its initial settings when you switch to the next Pattern.

Selecting a Part Subject to Modification

Select a part from Part R and Parts 1 to 7 for modifying the tone.

Procedure

1. Press the [PTN] button.

2. Press the [F1 (PACH)] button.
   The name of the patch in the currently selected part is displayed.

3. Press the [PART SELECT] button.
   The part buttons, [R], [1] to [7], function as the part selection buttons.

4. Press the part button, [R], [1] to [7], for the part containing the patch that you want to modify.

The part number of the selected part is displayed in the "PART" field in the top right-hand corner of the display.

Changing Brightness of the Tone (CUTOFF)

Sound consists of a large number of overtones at various frequencies. By using a filter, you can cause only a specific range of overtones to be passed or attenuated, thus modifying the brightness. The FILTER section lets you make settings that affect the brightness of the sound in this way.

Turning the CUTOFF knob clockwise produces a brilliant tone, while turning it counterclockwise produces a smoother, more rounded tone. Another effective use of this knob is to operate it during playback to add changes according to the BPM.

Procedure

1. Select a part, following the procedure described in "Selecting a part subject to modification."

2. Press the [FILTER] button.
   The filter type can be selected each time this button is pressed. For details, see "**Range**" described later.

3. Turn the [CUTOFF] knob.
   Turning it clockwise produces a brilliant tone, while turning it counterclockwise produces a smoother, more rounded tone.
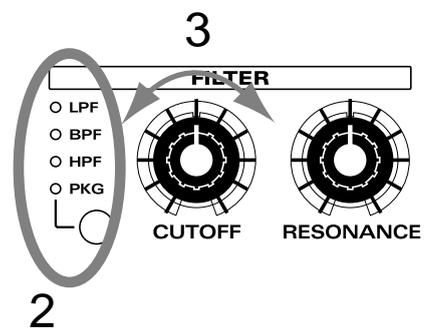
Range:

- LPF (Low Pass Filter)
  Rotating the knob clockwise will cause the sound to become brighter, approaching the original waveform. Rotating it counterclockwise will cut more of the high frequency overtones, making the sound darker.

  * *For some waveforms, you may not be able to hear any sound if you lower the value too far.*

- BPF (Band Pass Filter)
  Rotating the knob clockwise will raise the frequency area that is heard. Rotating the knob counterclockwise will cause only a progressively lower frequency area to be heard.

- HPF (High Pass Filter)
  When the knob is turned clockwise, the low frequency range will be cut more greatly, making the sound sharper. As the knob is rotated toward the left, the original sound of the waveform will be heard.

  * *For some waveforms, you may hear no sound if this value is closed to maximum.*

- PKG (Peaking Filter)
  When the knob is turned clockwise, the frequency area that is emphasized will rise. Rotating the knob counterclockwise will lower the frequency area that is emphasized.

NOTE

When using the filter functions, be careful not to raise the RESONANCE value too high. Setting the RESONANCE value too high may cause output at excessively high volume levels.
Some settings may damage your hearing, or your speakers. Please use caution.

MEMO

This procedure is equivalent to the CUTOFF operation of the Patch Edit function. (P. 92)

In addition, operating the knob with RESONANCE set to a greater value enhances the effect of the RESONANCE function on the tone.

Adding Character to the Sound (RESONANCE)

This setting emphasizes the overtones in the region of the cutoff frequency, adding character to the sound. This is one of the tone modifications highlighting the characteristics of the synthesizer sounds.

Procedure

1. Select a part, following the procedure described in "Selecting a part subject to modification."

2. Turn the [RESONANCE] knob.

   Turning it clockwise produces adds resonance to the tone.
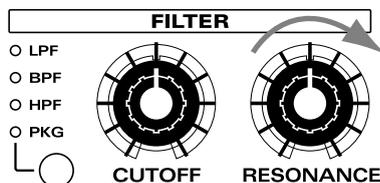
NOTE

Using the MC-307 with the Resonance Limiter settings (P. 115) value too high may cause output at excessively high volume levels.
Some settings may damage your hearing, or your speakers. Please use caution.

MEMO

This procedure is equivalent to the RESONANCE operation of the Patch Edit function. (P. 93)

Depending on the CUTOFF setting, increasing the RESONANCE setting may not achieve the intended effect. To make the effect more conspicuous, modify the CUTOFF setting as well and confirm the effect.

Applying Cyclic Changes to the Sound (LFO 1)

The LFO (Low Frequency Oscillator) applies cyclic change to the sound. Effects such as vibrato, wow and tremolo can be added by changing the pitch, cutoff frequency and volume level cyclically.

Procedure

1. Select a part, following the procedure described in "Selecting a part subject to modification." (P. 26)

Select a parameter subject to modification.

2. With the [LFO1] button held down, set a value using the [VALUE] dial or the [INC/DEC] buttons.

   While it is held down, the "LFO 1 ASSIGN" screen appears.
   When you have finished making your selection, release the button.

   * *Select from PITCH, FILTER and AMP. For details, see **Range of settings** described later.*

Next, determine the oscillation of LFO.

3. Press the [LFO1] button.

   An LFO waveform can be selected each time this button is pressed. For details, see **Range of settings** described later.
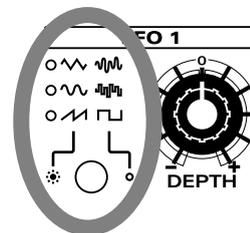
4. Turn the [DEPTH] knob under the [LFO1] button.

   Turning it enhances the LFO effect.

   (When the knob is in the center position, the LFO will have no effect.)

Range of settings:

Items subject to modification with [LFO]

- PITCH: Changes note intervals.

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- FILTER: Changes the cutoff frequency of the filter.
- AMP: Changes the amplifier volume level.

LFO Waveform
- TRI (triangle): The sound will be modulated continuously. This is a frequently-used waveform, and is suited for effects such as vibrato.
- SIN (sine wave): The sound will be modulated smoothly.
- SAW (sawtooth wave): When the sound reaches the upper value, it will return to the original position and begin rising again.
- RND (random): This setting causes the sound to change unpredictably, and is suitable for creating sound effects.
- S&H (sample & hold): This setting causes the sound to change unpredictably, and is suitable for creating sound effects.
- SQR (square wave): The sound will be modulated as if it were being switched between two positions.

MEMO

This procedure is equivalent to the [LFO1] operation of the Patch Edit function. With the Patch Edit function, the two waveforms shown below can also be selected.
- TRP (trapezoid wave): The sound will be modulated as if it were being switched between two positions. The curve at the transitions differs from square wave.
- CHS (chaos): This setting causes the sound to change unpredictably without regard to frequency, and is suitable for creating sound effects.

Changing Other Parameters (Assignable Knobs)

You can assign any parameter you wish to the **assignable knobs**. In this case, the settings for Knobs 1-4 are saved as a single set. This is referred to as a User set, with ten such User sets available for your use.

Using the parameters listed on the panel

On the panel, parameters are listed above the respective assignable knobs, allowing you to make selection.
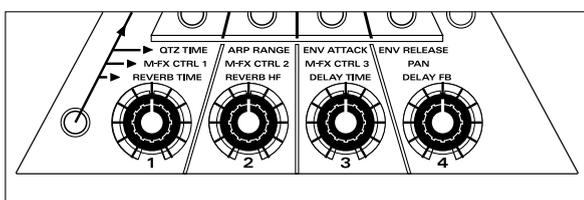
Procedure

1. Press the button to the left of the assignable knobs.
   Each time you press it, ">" in the figure comes on in sequence. Thus, you can select from the functions listed on the display. The available functions are listed in the column with ">" on.

2. Operate the knobs while playing back sounds.

Parameters for the respective knobs
- REVERB TIME:
  Changes reverb time. refer to "Adjusting the length of reverberation (TIME) "(p. 43).
- REVERB HF:
  Changes the tone of the reverb. refer to "Adjusting the tone of the reverberation (HF DAMP) "(p. 43).
- DELAY TIME:
  Changes delay time.
  refer to "Adjusting the delay interval (TIME) "(p. 45).
- DELAY FB: Changes delay feedback.
  refer to "Adjusting the number of repeats (FEEDBACK) "(p. 45).

- M-FX CTRL 1:
  Changes the CTRL1 parameter of Multi-effect. refer to "Defining Parameters in Detail "(p. 48).
- M-FX CTRL 2:
  Changes the CTRL2 parameter of Multi-effect.
- M-FX CTRL 3:
  Changes the CTRL3 parameter of Multi-effect.
- PAN:
  Changes Panpot (sound localization).
  refer to "Changing the settings of each part "(p. 22).

- QZT TIME:
  Specifies the strength of Quantize with timing. refer to "Modifying the Groove of a Pattern (Play Quantize) "(p. 34).
- ARP RANGE:
  Changes the key range of the arpeggiator by octave. refer to "Adding expression to the arpeggio (ACCENT RATE) "(p. 34).
- ENV ATTACK:
  Changes attack of Envelope. (TIME1).refer to "A-ENV (AMP ENVELOPE) parameters "(p. 96).
- ENV RELEASE:
  Changes release of Envelope. (TIME4).refer to "A-ENV (AMP ENVELOPE) parameters "(p. 96).

*   *In TR-REC (P. 68) and "Changing the Settings for Each Part" (P. 22), the above assignments cannot be used (the assignable knobs have other special functions when used for TR-REC and Part settings).*

*   *The assignable knobs can be used for user-defined settings while the arrow shown in the figure below is lit. For user-defined settings, desired parameters can be assigned to the knobs, allowing operation with the knobs. For details, see "Assigning and using desired parameters" described in the next section.*
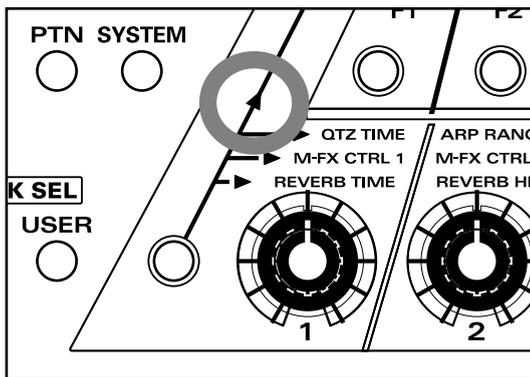
Assigning and using desired parameters

It is also possible to assign and use other parameters to assignable knobs as you desire.

Procedure

1. Press the button to the left of the assignable knobs, then select a user (one of the indicators above the knobs comes on.)

2. Press [KNOB ASSIGN] button.
    The "KNOB ASSIGN" screen appears.

3. Rotate the [VALUE] dial or press [INC/DEC] to select the User set to which the settings are to be assigned.

4. For the selected User set, the functions currently assigned to each knob will be shown.

5. Press the F1 - F4 button above the knob to be set up.
    The "KNOB 1 (2 - 4)ASSIGN PARAM" screen appears.

6. Select a group of functions to be assigned using the [VALUE] dial or the [INC/DEC] buttons.

7. Press [ENTER] button. Or, press the [F] button below the group name.
    The parameters for that function group are displayed. For details of the groups that can be selected, see "Range of settings" at the end of this section.

8. Select a parameter using the [VALUE] dial or the [INC/DEC] buttons, then press [ENTER] button.
    The function of the selected parameter is assigned to the knob.

You can work on the parameter by operating the knob.

Range of settings:

Groups that can be selected in step 5 and parameters that can be selected in step 5.

STUP (SETUP) Group
*   LV (LEVEL)
*   PAN (PAN)
*   KSFT (KEY SHIFT)
*   R-LV (REVERB LEVEL)
*   D-LV (DELAY LEVEL)
*   FXSW (M-FX SW)

REV (REVERB) Group
*   TYPE (TYPE)
*   TIME (TIME)
*   HF (HF DAMP)
*   FX->R(M-FX TO REV LEVEL)
*   R-LV (REVERB LEVEL)

DLY (DELAY) Group
*   TYPE (TYPE)
*   TIME (TIME)
*   FB (FEEDBACK)
*   HF (HF DAMP)
*   OUT (OUTPUT)
*   FX->D(M-FX TO DLY LEVEL)
*   D-LV (DELAY LEVEL)

M-FX (MULTI-FX) Group:
*   C1 - C11 (CONTROL 1 - 11)
    Parameters for C1-C11 of M-FX will differ depending on the selected multi-effect. For details on the parameters, refer to P. 45.

ARP (ARPEGGIO) Group:
*   STYL (STYLE)
*   MTIF (MOTIF)
*   PTN (BEAT PATTERN)
*   SHUF (SHUFFLE RATE)
*   ACNT (ACCENT RATE)
*   OCT (OCTAVE RANGE)

QTZ (QUANTIZE) Group:
*   TYPE (TYPE)
*   TMPL (TEMPLATE)
*   TIME (TIMING)

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- VELO (VELOCITY)

* *Before operating "QTZ Group" parameters or "ARP Group" parameters,turn on the Quantize or Arpeggiator functions respectively.*

ENV (ENVELOPE) Group:

PITCH ENVELOPE

- P[A] (Attack Time = TIME1)
- P[D] (Decay Time = TIME3)
- P[S] (Sustain Level = LEVEL3)
- P[R] (Release Time = TIME4)
- P-DP (PITCH ENVELOPE DEPTH)

FILTER ENVELOPE

- F[A] (Attack Time = TIME1)
- F[D] (Decay Time = TIME3)
- F[S] (Sustain Level = LEVEL3)
- F[R] ([Release Time = TIME4)
- F-DP (FILTER ENVELOPE DEPTH)

AMP ENVELOPE

- A[A] (Attack Time = TIME1)
- A[D] (Decay Time = TIME3)
- A[S] (Sustain Level = LEVEL3)
- A[R] (Release Time = TIME4)

* *The above TIME1, TIME3, LEVEL3, and TIME4 are envelope parameters. For example, "P[A]" controls "TIME1" of the pitch envelope.*

What are A, D, S, and R of the ENVELOPE?

These are parameters that determine time-variant changes in the PITCH, FILTER, and AMP. As shown in the diagram below, you can specify how change will occur, from the time a key is pressed until it is released.
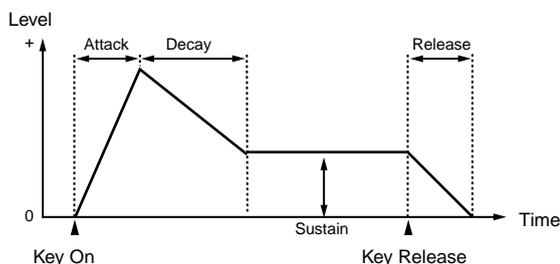
MEMO

Chapter 6 "Creating original sounds" provides more details on how to make envelope settings. For details refer to pp. 89, 91, 94, and 104.

PTCH (PITCH) Group:

- CRSE (COARSE TUNE)
- FINE (FINE TUNE)

AMP (AMP) Group:

- LV (TONE LEVEL)
- PAN (TONE PAN)
- RND (RANDOM PAN SW)

PRTA (PORTAMENT) Group:

- SW (SWITCH)
- TIME (TIME)
- SOLO (SOLO)

LFO 1 Group:

RATE (LFO 1 RATE)

MEMO

This is the procedure for restoring the settings of Patterns as they were when called up after the knobs have been used to change parameters with Realtime Modify.

- During playback: After selecting a different Pattern number, again select the number for the Pattern currently being played back. Doing this returns the performance back to the beginning of the Pattern, restoring the settings present at the time the Pattern was called up.

• When stopped: After selecting a different Pattern number, select the number for the Pattern you started with; the Pattern's previous settings are restored.

Saving Assignable Knob settings

When you press the [EXIT] button in the "KNOB ASSIGN" screen to close the screen, the contents that you set in "Assigning and using parameters" will automatically be saved in the user set of the number displayed in the screen. (While the data is being saved, the display will indicate "WRITING...")

* *An asterisk "*" will be displayed before the number of a set that has not been saved.*

* *The data will not be saved if you close the "KNOB ASSIGN" screen while a song or pattern is playing. Stop playback before you perform the operation.*

Playing Back in Arpeggio (Arpeggiator)

What is an Arpeggiator?

This is a function that lets you play arpeggios merely by continuing to press a keyboard pad.

You can play phrases that use the component notes of a chord, just by pressing the chord. With this function, you can easily produce phrases too rapid to play on the keyboard as well as those extremely enhanced with staccato.

Using the Arpeggiator

Activating the Arpeggiator function enables the keyboard pads to be used for the Arpeggiator function.

Procedure

1. Press [PTN] button.

2. Press the [ARP] button.

   The indicator of the button comes on and the ARPEGGIATGER function is activated.

3. Press the keyboard pads.

   Playback automatically starts in arpeggio style.

* *When the Arpeggiator function is used, playback is performed with the BPM of the currently selected pattern. Using the Arpeggiator while playing back a pattern performs playback at the same BPM.*

* *The phrase to be played back can be switched by changing the setting. For the switching method, see the next section, "Selecting Arpeggiator style."*

Selecting the Arpeggio Style

When you wish to make arpeggiator settings, you will first select an Arpeggio Style. When you select a style, optimal values will be set for the four parameters "Accent Rate," "Motif," "Beat Pattern," and "Shuffle Rate." You can adjust parameters such as Accent Rate and Octave Range to modify the pattern to your taste.

Procedure

1. With the [ARP] button held down, select a style using the [VALUE] dial or the [INC/DEC] buttons.

* *While it is held down, the "SYSTEM: ARPEGGIATOR" screen appears.*

Available Settings (Arpeggio style list**):**


```
SYSTEM:ARPEGGIATOR
STYLE
            SEQUENCE B
```
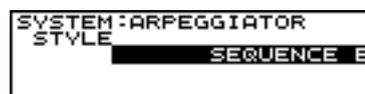
STYLE	Description
1/4	The rhythm will be divided in quarter notes.
1/6	The rhythm will be divided in quarter note triplets.
1/8	The rhythm will be divided in eighth notes.
1/12	The rhythm will be divided in eighth note triplets.
1/16	The rhythm will be divided in 16th notes.
1/32	The rhythm will be divided in 32nd notes.
PORTAMENTO A, B	A style using the portamento effect.
GLISSANDO	A glissando style.
SEQUENCE A - D	Styles for sequenced patterns.
ECHO	An echo-like style.
SYNTH BASS HEAVY SLAP LIGHT SLAP WALK BASS	Styles appropriate for bass playing.
RHYTHM GTR 1 - 5	Styles for guitar cutting. Styles 2–5 are effective when 3–4 notes are held.
3 FINGER	Three-finger guitar style.
STRUMMING GTR	A style simulating a guitar chord strummed upward (downward). Effective when 5–6 notes are held.
PIANO BACKING, CLAVI CHORD	Styles for keyboard instrument backing.
WALTZ, SWING WALTZ	Styles in triple meter.
REGGAE	A reggae-type style. Effective when 3 notes are held.
PERCUSSION	A style suitable for percussive instrument sounds.
HARP	The playing style of a harp.
SHAMISEN	The playing style of a Shamisen.

STYLE	Description
BOUND BALL	A style suggestive of a bouncing ball.
RANDOM	A style in which the notes sound in random order.
BOSSA NOVA	A style with bossanova guitar cutting. Hold 3–4 notes for best results. You can increase the BPM and use this as a Samba.
SALSA	Typical salsa style. Hold 3–4 notes for best results.
MAMBO	Typical mambo style. Hold 3–4 notes for best results.
LATIN PERCUSSION	A rhythm style with Latin percussion instruments such as Claves, Cowbell, Clap, Bongo, Conga, Agogo etc.
SAMBA	Typical samba style. Use for rhythm patterns or bass lines.
TANGO	Typical tango rhythm style. Hold the root, 3rd and 5th of a triad etc. for best results.
HOUSE	A style for house piano backing. Hold 3–4 notes for best results.
LIMITLESS	The settings of all parameters can be freely combined without restriction.
USER STYLE 1 - 10	Arpeggio settings can be modified and saved in one of these user styles.

Making More Detailed Settings

Set up more refined settings items for the selected style. First, select a style as instructed in the previous section, "Selecting Arpeggiator style," then follow the set-up procedure below.

Procedure

1. Press the [SYSTEM] button.

2. Press the [F1 (SYS)] button.

3. Press the [CURSOR (down)] button to access the screen for items 5 – 8.

4. Press [F1 (ARP)] button.
   The "SYSTEM: ARPREGGIATOR" screen appears.

5. Press the [F3 (▼)] or [F4 (▲)] button to select the window containing the parameter you want to set.

6. Press the [CURSOR (up/down)] buttons to move the cursor to the desired setting item.


```
SYSTEM:ARPEGGIATOR
MOTIF          SINGLE UP
BEAT PTN            1/4
SHUFFLE RATE        50%
        ▼       ▲
```

```
SYSTEM:ARPEGGIATOR
ACCENT RATE          0
OCTAVE RANGE         0
                ▲
```

7. Set a value using the [VALUE] dial or the [INC/DEC] buttons.

   * *For details of the respective settings, see the instructions below.*

Sequence of the notes in the chord (MOTIF)

Specifies the order in which the notes of the chord will be sounded.

* *The values which can be set will depend on the currently selected arpeggio style. For details on the possible values for each style, refer to "STYLE/MOTIF/BEAT PATTERN Correspondence Chart "(p. 158).*

Available Settings:

MOTIF	Description
SINGLE UP	Notes you press will be sounded individually, beginning from low to high.
SINGLE DOWN	Notes you press will be sounded
SINGLE UP&DW	Notes you press will be sounded individually, from low to high, and then back down from high to low.
SINGLE RANDOM	Notes you press will be sounded individually, in random order.
DUAL UP	Notes you press will be sounded two at a time, beginning from low to high.
DUAL DOWN	Notes you press will be sounded two at a time, beginning from high to low.
DUAL UP&DW	Notes you press will be sounded two at a time, from low to high, and then back down from high to low.
DUAL RANDOM	Notes you press will be sounded two at a time, in random order.
TRIPLE UP	Notes you press will sound three at a time, from low to high.
TRIPLE DOWN	Notes you press will sound three at a time, from high to low.
TRIPLE UP&DOWN	Notes you press will sound three at a time, from low to high and then back down from high to low.
TRIPLE RANDOM	Notes you press will sound three at a time, in random order.
NOTE ORDER	Notes you press will be sounded in the order in which you pressed them. By pressing the notes in the appropriate order you can produce melody lines. Up to 32 notes will be remembered.
GLISSANDO	Each chromatic step between the highest and lowest notes you press will sound in succession, repeating upward and downward. Press only the lowest and the highest notes.
CHORD	All notes you press will sound simultaneously.

MOTIF	Description
BASS+CHORD 1–5	The lowest of the notes you play will sound, and the remaining notes will sound as a chord.
BASS+UP 1–8	The lowest of the notes you play will sound, and the remaining notes will be arpeggiated.
BASS+RND 1–3	The lowest of the notes you play will sound, and the remaining notes will sound in random order.
TOP+UP 1–6	The highest of the notes you play will sound, and the remaining notes will be arpeggiated.
BASS+UP+ TOP	The highest and the lowest of the notes you play will sound, and the remaining notes will be arpeggiated.

Beat pattern

This allows you to select the Beat Pattern. It will affect the accent location and note length, causing the beat (rhythm) to change.

* *The values which can be set will depend on the currently selected arpeggio style. For details on the possible values for each style, refer to "STYLE/MOTIF/BEAT PATTERN Correspondence Chart "(p. 158).*

Range:

1/4, 1/6, 1/8, 1/12, 1/16 1–3, 1/32 1–3, PORTA-A 1–11, PORTA-B 1–15, SEQ-A 1–7, SEQ-B 1–5, SEQ-C 1, 2, SEQ-D 1–8, ECHO 1–3, MUTE 1–16, STRUM 1–8, REGGAE 1, 2, REF 1, 2, PERC 1–4, WALKBS, HARP, BOUND, RANDOM, BOSSA NOVA, SALSA 1–4, MAMBO 1–2, CLAVE, REV CLA, GUILO, AGOGO, SAMBA, TANGO 1–4, HOUSE 1, 2

* *If "PORTA-A 1–11, PORTA-B 1–15" is selected as the Beat Pattern, the Patch parameter Portamento Time (P. 102) will control the speed of portamento. Adjust the portamento time as appropriate for the playback BPM. (It is not necessary to turn portamento on.)*

Timing (SHUFFLE RATE)

This setting lets you modify the note timing to create shuffle rhythms. The range of settings is 50–90%. With a setting of 50%, notes will be spaced equally. As the value is increased, notes will become increasingly like dotted notes.

Range: 50–90 (%)

* *With the beat pattern setting of 1/4, there will be no shuffle effect even if the Shuffle Rate value is increased.*

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Adding expression to the arpeggio (ACCENT RATE)

By modifying the accent strength and note length, you can change the sense of groove of the arpeggio. Adjust this setting over the range 0–100.

Range: 0–100

Higher settings will strengthen the sense of groove. Lower settings will decrease the amount of expression.

Changing the octave range for playback in arpeggio style (OCTAVE RANGE)

You can specify the pitch range in which the arpeggio will be developed, in steps of one octave.

Range: -3– +3

Setting a value greater than zero causes playback to be performed in the range above the key range where the chord is being played.

Setting a value below zero causes playback to be performed in the range below the key range in which the chord is being played.

*   *If you want the arpeggio to consist only of the notes you hold, set this to 0.*

Saving Arpeggio Settings (Arpeggio Write)

Once an arpeggio style is created and saved, you can readily use it next time on by simply invoking it.

First, create an arpeggio style, referring to the previous section, "Defining more refined settings."

Procedure

Bring up the set-up screen for Arpeggiator.

1. Press the [SYSTEM] button.

2. Press the [F3 (WR)] button.

3. Select the screen with "5 ARPEGGIATOR" using the [CURSOR (up/down)] buttons.

4. Press the [F1 (ARP)] button.
    The "ARPEGIATOR WRITE" screen appears.

5. Select the destination user style in which the created style is to be saved using the [VALUE] dial or the [INC/DEC] buttons. Up to ten styles can be saved using USER STYLES 1 to 10.

6. Press the [F4 (OK)] button.
    An "ARE YOU SURE?" message appears.

7. Press [F4 (EXEC)] button.
SAVE operation is executed.

MEMO

Arpeggiator can also be played from an external MIDI keyboard, as well as from the keyboard pads.

-   refer to "Playing back arpeggio on the MC-307 using an external MIDI keyboard "(p. 134).

Modifying the Groove of a Pattern (Play Quantize)

What is a Play Quantize?

This function modifies the groove of the pattern playback data. With this function, you can change the play timings and velocities (volume) of playback data in the pattern to create a performance with a groove different from that of the original pattern.

The MC-307 provides three types of quantization (Grid, Shuffle, Groove), which you can use as appropriate for your situation. You can apply Play Quantize to a specified part while a pattern plays back, and make detailed timing adjustments in real time while you listen to the playback.
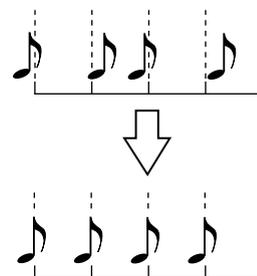
Correcting Inaccuracies in Rhythm (Grid Quantize)

Grid Quantize corrects notes according to the template with the playback timing of the pattern specified. You can correct timings alone to eliminate playing discord and to play back the pattern with accurate timing.

Procedure

1. Press the [SYSTEM] button.
    The menu screen for system setting appears.

2. Press the [F1 (SYS)] button.

3. Press the [CURSOR (up/down)] buttons to select the screen with "7 PLAY QUANTIZE" displayed.

4. Press [F3 (QTZ)] button.

The setting screen for Quantize appears.

5. Select the part for which Quantize is to be applied by pressing one of the [R], [1] to [7] part buttons.

Quantize is applied to the part whose button is blinking. Parts whose buttons are not lighted are not subject to quantize.

6. Press [F2 (GRID)] button.

Parameters of Grid Quantize appear in the lower part of the display.

```
SYSTEM:PLAY QTZ    GRID
TIMING              64
TEMPLATE             ♪
:OFF  :GRID :SHFL :GRV
```

7. Press the [CURSOR (up/down)] buttons to move the cursor to "TIMING."

8. Set up the degree of correction using the [VALUE] dial or the [INC/DEC] buttons.

A "0" value indicates no correction while "100" indicates that the notes are corrected according to the notes set up with RESOLUTION described below. The farther away from "0" and the closer to "100" the setting value is, the more accurate the timing.

9. Press the [CURSOR (up/down)] buttons to move the cursor to "TEMPLATE."

10. Select the note that is used as the reference note for correction using the [VALUE] dial or the [INC/DEC] buttons.

The pattern is played back according to the corrections made in the Grid Quantize operation.

* *The note value unit to which quantization will adjust the timing is called the Resolution. The timing of notes will be adjusted to the nearest grid interval of the note value you specify here. Set this to the length of the smallest note value that occurs in the pattern.*

Range:

TIMING: 0–100

TEMPLATE: ♬ ♬₃ ♪ ♪₃ ♩ ♩₃ ♩

Adding Swing to the Rhythm (Shuffle Quantize)

By applying Shuffle Quantize, you can adjust the timing of the backbeats of the pattern to create "bouncy" rhythms such as shuffle or swing.

Procedure

1. Referring to Steps 1 - 5 (P. 34) in the Grid Quantize operation , open the settings window, and select the part to be quantized.

2. Press the [F3 (SHFL)] buttons.

Parameters of shuffle quantize appear in the display.

```
SYSTEM:PLAY QTZ SHUFLE
TIMING              64
TEMPLATE             ♪
:OFF  :GRID :SHFL :GRV
```

3. Press the [CURSOR (up/down)] buttons to move the cursor to "TIMING."

4. Set up the degree to which the backbeats will bounce using the [VALUE] dial or the [INC/DEC] buttons.

A setting value of "50" indicates no bouncing (equivalent to using grid quantize). Generally, values around 60% to 66% achieve comfortable shuffling.

5. Press the [CURSOR (up/down)] buttons to move the cursor to "TEMPLATE."

6. Select the note that is used as the reference note for correction using the [VALUE] dial or the [INC/DEC] buttons.

The pattern is played back according to the corrections made in the shuffle quantize operation.

* *The note value unit to which quantization will adjust the timing is called the Resolution. The timing of notes will be adjusted to the nearest grid interval of the note value you specify here. Set this to the length of the smallest note value that occurs in the pattern.*

Range:

TIMING: 0 – 100

TEMPLATE: ♪ , ♩

Giving a Groove to the Rhythm (Groove Quantize)

Groove Quantize lets you select a template by which the playback timing and the velocity will be quantized. Simply by selecting a different template, you can give a variety of different-feeling grooves to a pattern.

The MC-307 contains 71 different types of quantization templates, each of which contains a different set of playback timing and velocity (dynamics) data.

* *The templates are for use with 4/4 time signatures. They will not produce the desired result when applied to other time signatures.*

Procedure

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1. Referring to Steps 1-5 in the Grid Quantize operation, open the settings window, and select the part to be quantized. (P. 34)

```
SYSTEM:PLAY QTZ GROOVE
TIMING              35
TMPL 01:DANCE-NM-L.AC
VELOCITY             1
:OFF ::GRID::SHFL: GRV
```

2. Press the [F4 (GRV)] button.
   Parameters of groove quantize appear in the display.

3. Press the [CURSOR (up/down)] buttons to move the cursor to "TIMING."

4. Set up the strength of correction using the [VALUE] dial or the [INC/DEC] buttons.
   A "0" value indicates playback according to the original. The closer to 100% the value is, the closer to the template timing the playback timing becomes.

5. Press the [CURSOR (up/down)] buttons to move the cursor to "TMPL."

6. Select a template using the [VALUE] dial or the [INC/DEC] buttons.
   Seventy-one types of templates are available, varying in category and rhythm. See "Template List" appearing later for details.

7. Press the [CURSOR (up/down)] buttons to move the cursor to "VELOCITY."
   A "0" value indicates playback according to the original. The closer to 100% the value is, the closer to the template velocity the playback velocity becomes.

The pattern is played back according to the corrections made in the Play Quantize operation.

Range:
- TIMING: 0 - 100
- VELOCITY: 0 - 100
- TMPL: (Refer to next page)

NOTE

The Play Quantize function only corrects note messages. It does not correct other messages. This means that if a pattern contains messages (such as pitch bend) that apply real-time change to the sound, quantization settings may cause the timing of these messages to no longer match the timing of the note messages, so that playback will be incorrect. When applying quantization, it is best to use a pattern which does not contain messages that apply real-time change to the sound.

Settings Range:

16 Beat Dance type

01:	DANCE-NM-L.AC	exact/low dynamics
02:	DANCE-NM-H.AC	exact/high dynamics
03:	DANCE-NM-L.SW	exact/light swing
04:	DANCE-NM-H.SW	exact/strong swing
05:	DANCE-HV-L.AC	dragging/low dynamics
06:	DANCE-HV-H.AC	dragging/high dynamics
07:	DANCE-HV-L.SW	dragging/light swing
08:	DANCE-HV-H.SW	dragging/strong swing
09:	DANCE-PS-L.AC	rushing/low dynamics
10:	DANCE-PS-H.AC	rushing/high dynamics
11:	DANCE-PS-L.SW	rushing/light swing
12:	DANCE-PS-H.SW	rushing/strong swing

16 Beat Fusion type

13:	FUSON-NM-L.AC	exact/low dynamics
14:	FUSON-NM-H.AC	exact/high dynamics
15:	FUSON-NM-L.SW	exact/light swing
16:	FUSON-NM-H.SW	exact/strong swing
17:	FUSON-HV-L.AC	dragging/low dynamics
18:	FUSON-HV-H.AC	dragging/high dynamics
19:	FUSON-HV-L.SW	dragging/light swing
20:	FUSON-HV-H.SW	dragging/strong swing
21:	FUSON-PS-L.AC	rushing/low dynamics
22:	FUSON-PS-H.AC	rushing/high dynamics
23:	FUSON-PS-L.SW	rushing/light swing
24:	FUSON-PS-H.SW	rushing/strong swing

16 Beat Reggae type

25:	REGGE-NM-L.AC	exact/low dynamics
26:	REGGE-NM-H.AC	exact/high dynamics
27:	REGGE-NM-L.SW	exact/light swing
28:	REGGE-NM-H.SW	exact/strong swing
29:	REGGE-HV-L.AC	dragging/low dynamics
30:	REGGE-HV-H.AC	dragging/high dynamics
31:	REGGE-HV-L.SW	dragging/light swing
32:	REGGE-HV-H.SW	dragging/strong swing
33:	REGGE-PS-L.AC	rushing/low dynamics
34:	REGGE-PS-H.AC	rushing/high dynamics
35:	REGGE-PS-L.SW	rushing/light swing
36:	REGGE-PS-H.SW	rushing/strong swing

8 Beat Pops type

37: POPS-NM-L.AC	exact/low dynamics
38: POPS-NM-H.AC	exact/high dynamics
39: POPS-NM-L.SW	exact/light swing
40: POPS-NM-H.SW	exact/strong swing
41: POPS-HV-L.AC	dragging/low dynamics
42: POPS-HV-H.AC	dragging/high dynamics
43: POPS-HV-L.SW	dragging/light swing
44: POPS-HV-H.SW	dragging/strong swing
45: POPS-PS-L.AC	rushing/low dynamics
46: POPS-PS-H.AC	rushing/high dynamics
47: POPS-PS-L.SW	rushing/light swing
48: POPS-PS-H.SW	rushing/strong swing

8 Beat Rhumba type

49: RHUMB-NM-L.AC	exact/low dynamics
50: RHUMB-NM-H.AC	exact/high dynamics
51: RHUMB-NM-L.SW	exact/light swing
52: RHUMB-NM-H.SW	exact/strong swing
53: RHUMB-HV-L.AC	dragging/low dynamics
54: RHUMB-HV-H.AC	dragging/high dynamics
55: RHUMB-HV-L.SW	dragging/light swing
56: RHUMB-HV-H.SW	dragging/strong swing
57: RHUMB-PS-L.AC	rushing/low dynamics
58: RHUMB-PS-H.AC	rushing/high dynamics
59: RHUMB-PS-L.SW	rushing/light swing
60: RHUMB-PS-H.SW	rushing/strong swing

Others

61: SAMBA 1	samba (pandero)
62: SAMBA 2	samba (surdo and timba)
63: AXE 1	axe (caixa)
64: AXE 2	axe (surdo)
65: SALSA 1	salsa (cascara)
66: SALSA 2	salsa (conga)
67: TRIPLETS	triplets
68: QUITUPLETS	quintuplets
69: SEXTUPLETS	sextuplets
70: 7 AGAINST 2	seven notes played over two beats
71: LAGGING TRI	lagging triplets

Calling up Patterns from the Keyboard Pads (Pattern Call)

The keyboard pads can be used as buttons for selecting patterns rather than keys. This function is referred to as **Pattern Call**.

A set of 16 keyboard pads associated with patterns is referred to as a **Pattern Set**, and up to 30 sets can be created.

Using the Pattern Call function

After creating a pattern set, register patterns in the pattern set for use.

Procedure

1. Press [PTN] button.

2. With the [PTN CALL] button held down, select a PTN SET using the [VALUE] dial or the [INC/DEC] buttons.

   * *While it is held down, the "SYSTEM: PTN SET" screen appears.*

3. Press the pad to which the desired pattern is assigned.
The pattern name appears.

   * *This function can be used even during playback.*

Registering a Pattern Set

First, assign the patterns you want to use to keyboard pads. A set of 16 keyboard pads is referred to as a **pattern set**.

As up to 30 pattern sets can be created, it is possible to select a pattern set that is suitable for the contents to be played back.

Procedure

1. Press the [PTN] button.

2. Select the pattern you want to assign to the pad using the [VALUE] dial or the [INC/DEC] buttons.

3. While holding down the [PTN CALL] button, press the keyboard pad to which you want the Pattern assigned. The assignment is set when "COMPLETED!" appears in the display.

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Saving a Pattern Set

Once a pattern set is created and saved, you can readily use it next time on simply by invoking it.

First, refer to the previous section, "Registering a pattern set," to assign patterns to it.

Procedure

Select a Pattern set you want to save.

1. With the [PTN CALL] button held down, select a PTN SET using the [VALUE] dial or the [INC/DEC] buttons.

Bring up the set-up screen for pattern sets.

2. Press the [SYSTEM] button.

3. Press the [F3 (WR)] button.

4. Select the screen with "6 PATTERN SET" using the [CURSOR (up/down)] buttons.

5. Press the [F2 (PSET)] button.

 * The pattern set naming screen appears.
 (*Pattern sets whose numbers are prefixed with an asterisk (*) are those which have not been saved after editing.*)

6. Specify characters using the [VALUE] dial or the [INC/DEC] buttons.

 The following characters can be selected:

 space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | } .

7. After characters have been specified, press [F4 (OK)] button.

 An "ARE YOU SURE?" message appears.

8. Press [F4 (EXEC)] button.

SAVE operation is executed.

 * *In step 6 above, upper- or lower-case versions of the selected characters can be specified by pressing the [CURSOR (up/down)] buttons.*

 * *In step 6, the [F1] and [F2] buttons can be conveniently used for editing the name.*
 [F1 (INS)]: Press to insert a character at the cursor position.
 [F2 (DEL)]: Press to delete the character at the cursor position.

Playing Back Phrases from the Keyboard Pads (RPS)

What is RPS (Real-time Phrase Sequencing)?

This function lets you immediately perform the Pattern assigned to the keyboard pad. The Pattern can be played continuously as long as the keyboard pad is held down.

You can play different phrases simply by pressing different notes. Since you can play back RPS patterns while a pattern is playing, this function is especially convenient during a live performance.

For example, if a drum fill-in pattern used by one pattern is assigned as an RPS, you can play back another pattern without a fill-in, and then add the fill-in simply by pressing a keyboard pad.

Using the Keyboard Pads to Play Back Patterns

On the MC-307, phrases assigned to each of the 16 keyboard pads are handled as one "RPS Set." You are free to re-assign the contents of an RPS set, and 60 sets can be stored. You can switch RPS sets even while a pattern is playing back.

refer to "Registering Phrases in Keyboard Pads "(p. 39).

Procedure

First, select an RPS set.

1. With the [RPS] button held down, select a RPS set using the [VALUE] dial or the [INC/DEC] buttons.

 * *While it is held down, the "SYSTEM: RPS SET" screen appears.*

 ```
 SYSTEM:RPS SET      U:01
 Trance  1
 ```

2. Press the keyboard pad to which a desired pattern is registered.

The pattern is played back.

 * *This function can be used even during playback.*

 ### RPS Hold

 If while playing back RPS you press [HOLD] button to make the indicator light, you can cause the RPS to continue playing even after you take your finger off the keyboard pad. An RPS which is pressed after [HOLD] button is lit will stop when you release your finger from

the keyboard pad.

If you connect a pedal switch (optional: DP-2, DP-6, FS-5U etc.) and set the System parameter "Pedal Assign" to "HOLD," the pedal switch can be used to hold the RPS. refer to "Setting up the pedal (PEDAL ASSIGN) "(p. 117).

RPS Modify

While you are pressing a keyboard pad to play an RPS, you can move the Patch parameter knobs to modify the sound of the RPS. If you are pressing two or more keyboard pads, You can modify the sound of the pad that was last pressed.

RPS playback timing

If you use RPS while a pattern is playing back, the phrase will start in synchronization with the beat of the pattern.

By changing the RPS TRIG QTZ setting, you can modify the timing at which the RPS will play back. refer to "Specifying the timing for RPS playback (RPS TRIGGER QTZ) "(p. 121).

Maximum simultaneous RPS playback

Even while a pattern is playing back, the MC-307 can play back up to 8 phrases simultaneously. However, if phrases with large amounts of data are played back simultaneously, the timing may lag behind or notes may be interrupted. If this occurs, decease the number of phrases that you play simultaneously.

* *RPS can also be played from an external MIDI keyboard, as well as from the keyboard pads.*
  refer to "Specifying the channel that will control RPS (RPS CTRL CH) "(p. 124).

Registering Phrases in Keyboard Pads

The phrases that are assigned to an RPS set can be re-assigned whenever you wish. You will find it convenient to assign your favorite or frequently-used phrases in one RPS set.

Procedure

1. Press the [PTN] button.
Select the pattern you want to assign to the pad using the [VALUE] dial or the [INC/DEC] buttons.

2. All parts other than the one played using RPS are muted with the MUTE button.

Next we must select the RPS set in which we will assign the phrase.

3. With the [RPS] button held down, select a RPS set using the [VALUE] dial or the [INC/DEC] buttons.

Assign patterns to keyboard pads.

4. Hold down[RPS] button, and press Keyboard pad you want to assign a pattern.
This completes keyboard pad and pattern assignment.

* *P: 241–P: 710 contain patterns which are prepared specifically for use with RPS. You might find it convenient to assign phrases from these patterns to use as fill-ins, or for other situations.*

Cautions when assigning an RPS

* *It is not possible to assign phrases of two or more parts to a single keyboard pad. You must mute all but one of the parts, the one with the desired phrase, before assigning it. If any of the extra parts have been left unmuted when you make your assignment, the "CANNOT ASSIGN!" message will appear in the display.*

* *If after assigning a phrase from a user pattern as an RPS, you then modify the playback data of the pattern which contains that phrase, be aware that any change to the phrase will also be reflected in the way it is played back by RPS. For example, if you delete the musical data of the pattern which contains the phrase that you assigned, there will be no sound when you attempt to play back that phrase by RPS.*

* *Even if you assign the phrase of a part that has a setting of "EXT" for its SEQ OUT (P. 23) parameter, the musical data of that phrase will not be transmitted from MIDI OUT.*

* *If you assign a phrase from a part that uses M-FX, the RPS*

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playback will use the M-FX settings of the pattern that is selected at that time. This means that what you hear when the RPS plays back may be somewhat different from the original phrase.

* If a rhythm part phrase is assigned, the Rhythm Mute settings will be ignored during RPS playback.

* Each phrase is played back by a special RPS part 1–16 which corresponds to each keyboard pad, but phrases assigned from a rhythm part will be played back using the rhythm part of the currently-selected pattern. For this reason, a different rhythm set than that of the registered pattern may sound in some cases. If the pattern changes so that a different rhythm set is selected, the sounds of the rhythm set which will play the RPS will also change.

Setting up a Part for RPS

Unlike ordinary pattern playback, RPS is played back using RPS parts that are specially set up for RPS. Patterns assigned to the pads [1] to [16] are used to play back the [1] to [16] RPS parts.

The settings for these RPS parts can be altered.

* See the following sections for descriptions of the respective parameters.

Procedure

Bring up the RPS setup screen.

1. Press the [SYSTEM] button.

2. Press the [F1 (SYS)] button.

3. Select the screen with "6 RPS PART" using the [CURSOR (up/down)] buttons.

4. Press the [F2 (RPS)] button.
   The "RPS PART" screen appears.

   (Example1: PATCH screen)

   (Example2: LEVEL screen)

5. Press the [F1 (▼)] or [F2 (▲)] buttons to select the screen to be edited.

6. Press a keyboard pad to select the RPS part to be edited.

7. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

PATCH (RPS Part Patch)

Select the Patch of the part.

Range:

- **Patches**

Preset	P: A001 - 128
	P: B001 - 128
	P: C001 - 128
	P: D001 - 128
	P: E001 - 128
	P: F001 - 128
	P: G001 - 032
User	U: A001 - 128
	U: B001 - 128

- **Rhythm sets**

Preset	P: A01 - 26
	P: B01 - 14
User	U: 01 - 20

LEVEL (RPS Part Level)

Sets up the volume level of the part.

Range: 0–127

PAN (RPS Part Pan)

Sets up localization of the part.

Range: L64–0–63R

KEY SHIFT (RPS Part Key Shift)

Sets up transposition of the part.

Range: -12–0–+12

REV LEVEL (RPS Part Reverb Level)

Sets up the reverb strength of the part.

Range: 0–127

DLY LEVEL (RPS Part Delay Level)

Sets up the delay strength of the part.

Range: 0–127

M-FX SW (RPS M-FX switch)

Specifies whether the Multi-effect function is to be used in the part.

Range: OFF, ON, RHY

* RHY can only be used for RPS parts using a rhythm set. If a part is set to RHY, M-FX effects are applied according to the settings of the respective tones in the rhythm set. Activating M-FX for a rhythm part causes the function to be applied to all tones.

Saving the Settings of an RPS Set

Once an RPS set is created and saved, you can readily use it next time on by simply invoking it.

First, refer to the previous section, "Registering a pattern set," to assign patterns to it.

Procedure

First, Select an RPS Set you want to save. (P. 38)

1. With the [RPS] button held down, select an RPS SET using the [INC/DEC] button or [VALUE] dial.

Bring up the RPS set-up screen.

2. Press the [SYSTEM] button.

3. Press the [F3 (WR)] button.

4. Select the screen with "7 RPS SET" using the [CURSOR (up/down)] buttons.

5. Press the [F3 (RPS)] button.
   The RPS set naming screen appears.

   * *RPS sets whose numbers are prefixed with an asterisk (*) are those which have not been saved after editing.*

6. Specify characters using the [VALUE] dial or the [INC/ DEC] buttons.
   The following characters are available.
   space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | }

7. After characters have been specified, press [F4 (OK)] button.
   An "ARE YOU SURE?" message appears.

8. Press [F4 (EXEC)] button.
SAVE operation is executed.

   * *In step 6, above, upper- or lower-case versions of the selected characters can be specified by pressing the [CURSOR (up/ down)] buttons.*

   * *In step 6, the [F1] and [F2] buttons can be conveniently used for editing the name.*
   [F1 (INS)]: Adds a character at the cursor position.
   [F2 (DEL)]: Deletes a character at the cursor position.

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Chapter 4 Setting Effects

Reverb

Reverb is an effect which adds reverberation and ambiance to the sound, creating an impression of spatial depth. It simulates the sound of music played in a concert hall. This section describes the settings for using the reverb function.

Switching Reverb On/Off

Switches the reverb function on and off. You can switch reverb on and off on any part regardless of the other settings you specified for this function.

Procedure

1. Press the [SYSTEM] button.
    The System Parameter menu screen appears.

2. Press the [F1 (SYS)] button.

3. Press the [CURSOR (up)] button to access the screen for items 1–4.

4. Press the [F1 (SND)] button.
    The "SYSTEM: SOUND" screen appears.

    ```
    SYSTEM:SOUND
    REVERB SW        ON
    DELAY SW         ON
    M-FX SW          ON
    SND :TUNE:  ▼
    ```

5. Use the [CURSOR (up/down)] buttons to move the cursor to "REVERB SW."

6. Set ON/OFF using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

NOTE

There are a number of places where settings can be made that affect the reverb level and related switches. If the effect does not work with the above settings, check whether:

- The effect is not applied when the GRAB switch is positioned at OFF if the MC-307 has been set to use the GRAB switch. To always make the effect take effect, put the GRAB switch at ON. (P. 62)
- After confirming that the value set for "REVERB: REVERB LEVEL" is not too low, proceed with making the setting. (P. 43)
- Confirm that the "Reverb Volume for Each Part" in the next item is not set too low.

Adjusting the Reverb Volume for Each Part (Part Reverb Level)

Procedure

1. Press the [PTN] button.
    The screen for playing patterns appears.

2. Press the [F2 (STUP)] button.
    The Setup Menu screen appears.

3. Press the [F1 (PART)] button.

4. Use [F1 (Down)] and [F2 (Up)] buttons to select the "PART MIXER: REV LEVEL" screen.

    ```
    PART MIXER:  R1234567
    REV LEVEL
        100
    ▼      ▲
    ```

5. Press the [PART SELECT] button, then press the part button ([R], [1] to[7]) for the part you want to set.

    *   *Instead, you can select the part with the [CURSOR (right/left)] buttons.*

6. Set a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 0 – 127

About Rhythm Tone Reverb SW

- refer to "Applying Multi-Effects for Each Part (Part M-FX Switch)" (p. 46)

About Rhythm Tone Reverb level

- refer to "SEND: REV SEND LEVEL" (p. 112)

Making Detailed Settings

Defines the settings for using reverb at a specific level.

Procedure

1. Press the [PTN] button.
    The screen for playing patterns appears.

2. Press the [F2 (STUP)] button.
    The Setup Menu screen appears.

3. Press the [F2 (REV)] button.

4. Use the [F3 (Down)] or [F4 (Up)] button to select the screen containing the following parameters you want to set.

```
REVERB:
 TYPE                    ROOM1
 TIME                        0
 HF DAMP                   200
REV  DLY            ▼
```

```
REVERB:
 REVERB LEVEL              0
 M-FX TO REV LEVEL         0
REV  DLY            ▲
```

5. Use the [CURSOR (up/down)] buttons to move the cursor to the parameter you want to set.

6. Set the parameter using the [VALUE] dial or the [INC/DEC] buttons.

Selecting the type (TYPE)

Available Settings:

- ROOM1:
  Reverb with short decay and high density.
- ROOM2:
  Reverb with short decay and low density.
- STAGE1:
  Reverb with much lingering reverberation.
- STAGE2:
  Reverb with strong early reflections.
- HALL1:
  Clear-sounding reverb.
- HALL2:
  Rich-sounding reverb.

Adjusting the length of reverberation (TIME)

You can adjust the time over which the reverberation will continue.

Range: 0–127

Adjusting the tone of the reverberation (HF DAMP)

Specifies the frequency at which the high frequency portions of the reverberation will be cut.

  *   *Lowering this setting will cause more of the upper frequency content to be cut, making the reverberation more muted.If this "BYPASS" is selected, the high frequency range will not be cut.*

Range: 200–8000 (Hz), BYPASS

Adjusting the overall reverb volume (REVERB OUTPUT LEVEL)

You can adjust the overall volume of reverb for the eight parts (rhythm part and parts 1–7).

Range: 0–127

Applying reverb Multi-effects sound (M-FX TO REV LEVEL)

Specifies the volume of the reverb that will be applied to the Multi-effect sound.

Applies reverb equally to each of the parts with Multi-effects set at ON regardless of the Part Reverb Level for each part.

Range: 0–127

  *   *This setting does not have any effect on a part with the Multi-effects switch (refer to "Applying Multi-Effects for Each Part (Part M-FX Switch)" (p. 46)) turned off.*

NOTE

CAUTION for applying Reverb for Each Rhythm tone.

  *   *When the Rhythm Part's "PART MIXER: M-FX SW" setting (P. 22)is set to "OFF" or "ON," then raising the PART MIXER: REV LEVEL setting applies reverb to each Rhythm Part evenly. When set to "RHY," the reverb is applied according to the reverb level settings for each individual Rhythm Tone.*

  *   *When using reverb settings for each Rhythm Tone individually, make sure that no settings value is set too low. If the value is set too low, then no reverb will be audible, even when the Rhythm Part's reverb level is raised.refer to "SEND: REV SEND LEVEL" (p. 112)*

Chapter4

Delay (Add echoes to the sound)

Delay is an effect which adds echoes to the sound. It is effective when applied to solo phrases or to densely rhythmic phrases. Described here is how to set the Delay effect.

Switching Delay On/Off

Procedure

1. Press the [SYSTEM] button.

   The System Parameter Menu screen appears.

2. Press the [F1 (SYS)] button.

3. Press the [CURSOR (up)] button to access the screen for items 1–4.

4. Press the [F1 (SND)] button.

   The "SYSTEM: SOUND" screen appears.

   ```
   SYSTEM:SOUND
   REVERB  SW          ON
   DELAY   SW          ON
   M-FX    SW          ON
   [SND] [TUNE]  [▼]
   ```

5. Place the cursor at "DELAY SW".

6. Set ON/OFF using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

NOTE

There are a number of places where settings can be made that affect the Delay level and related switches. If the effect does not work with the above settings, check whether:

- The effect is not applied when the GRAB switch is positioned at OFF if the MC-307 has been set to use the GRAB switch. To always make the effect take effect, put the GRAB switch at ON. (P. 62)

- After confirming that the value set for "DELAY: DELAY LEVEL" is not too low, proceed with making the setting. (P. 44)

- Confirm that the "DELAY Volume for Each Part" in the next item is not set too low.

Adjusts the Delay Volume for Each Part (Part Delay Level)

Procedure

1. Press the [PTN] button.

   The screen for playing patterns appears.

2. Press the [F2 (STUP)] button.

   The Setup Menu screen appears.

3. Press the [F3 (PART)] button.

4. Use the [F1 (▼)] and [F2 (▲)] buttons to select the "PART MIXER: DLY LEVEL" screen.

   ```
   PART MIXER:    R 1234567
   DLY LEVEL
              58
   [▼] [▲]
   ```

5. Press the [PART SELECT] button, then press the part button ([R], [1] to [7]) for the part you want to set.

   * *Instead, you can select the part with the [CURSOR (right/left)] buttons.*

6. Set a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 0–127

Making Detailed Settings

Defines the settings for using Delay at a specific level.

Procedure

1. Press the [PTN] button.
   The screen for playing patterns appears.

2. Press the [F2 (STUP)] button.
   The Setup Menu screen appears.

3. Press the [F3 (DLY)] button.

4. Use the [F3 (▼)] and [F4 (▲)] button to select the screen containing the following parameters you want to set.

   ```
   DELAY:
    TYPE          SHORT
    TIME            0.1
   [REV] [DLY]  [▼]
   ```

   ```
   DELAY:
    FEEDBACK          0
    HF DAMP         200
    OUTPUT          MIX
   [REV] [DLY]  [▼] [▲]
   ```

   ```
   DELAY:
    DELAY LEVEL       0
    M-FX TO DLY LEVEL 0
   [REV] [DLY]      [▲]
   ```

5. Using the [CURSOR (up/down)] buttons, move the cursor to the parameter you want to set.

6. Set the value using the [VALUE] dial or the [INC/DEC] buttons.

Selecting the type (TYPE)

Available Settings:

- SHORT: A delay which repeats at short intervals.
- LONG: A delay which repeats at long intervals. You can also synchronize the spacing of the repeats to the BPM of the pattern.

Adjusting the delay interval (TIME)

Adjusts the time from the original sound until when the delayed sound is heard (the interval between repeats).

Range:

TIME:

- When "TYPE" is SHORT: 0.1–275
- When "TYPE" is LONG:
  200–1000, ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩

  * *On the MC-307, it is not possible to set a delay time longer than 1000 ms (1 second). When the delay time is synchronized to the BPM, selecting a note value which would make the delay time exceed 1000 ms will cause the delay time to be halved, and the delay sound will be heard at 1/2 the specified interval. In addition, even if 1/2 the length would exceed 1000 ms, the delay time will be shortened to 1/4 the length.*

Adjusting the number of repeats (FEEDBACK)

Sets the amount of delayed sound to be repeated, as a proportion of the original sound.

Range: 0– +98 (%)

Adjusting the tone of the delay (HF DAMP)

Specifies the frequency at which the high frequency portions of the reverberation will be cut. Lowering this setting will cause more of the upper frequency content to be cut, making the reverberation more muted in tone.If this "BYPASS" is selected, the high frequency range will not be cut.

Range: 200–8000 (Hz), BYPASS

Setting the output destination for the post-reverb sound (OUTPUT)

Allows you to select a destination for the sound after reverb has been applied.Selecting LINE outputs the sound to the OUTPUT jacks on the rear panel; selecting REV outputs it to Reverb; or selecting LINE + REV outputs the sound to both the OUTPUT jacks and Reverb.

Range: LINE, REV, LINE+REV

Adjusting the overall delay volume (DELAY OUTPUT LEVEL)

This adjusts the volume of the delay sound for all eight parts (the rhythm part and parts 1–7).

Range: 0–127

Applying delay to the Multi-effects sound (M-FX TO DLY LEVEL)

Applies the Delay equally to each of the parts with Multi-effects set at ON regardless of the Part Delay Level for each part.

Range: 0–127

* *This setting does not have any effect on a part with the Multi-effects switch (refer to "Applying Multi-Effects for Each Part (Part M-FX Switch)" (p. 46)) turned off.*

NOTE

CAUTION for applying Reverb for Each Rhythm tone.

* *When the Rhythm Part's "PART MIXER: M-FX SW" setting (P. 22)is set to "OFF" or "ON," then raising the PART MIXER: REV LEVEL setting applies reverb to each Rhythm Part evenly. When set to "RHY," the reverb is applied according to the reverb level settings for each individual Rhythm Tone.*

* *When using reverb settings for each Rhythm Tone individually, make sure that no settings value is set too low. If the value is set too low, then no reverb will be audible, even when the Rhythm Part's reverb level is raised.refer to "SEND: REV SEND LEVEL" (p. 112)*

Chapter4

Multi-Effects (M-FX)

Multi-effects provides 25 different Effect Types, each of which let you apply a different effect. Described here is how to enter the M-FX-related settings.

Switching Multi-Effects On/Off

Procedure

1. Press the [SYSTEM] button.
   The System Parameter Menu screen appears.

2. Press the [F1 (SYS)] button.

3. Press the [CURSOR (up)] button to access the screen for items 1--4.

4. Press the [F1 (SND)] button.

5. Use [F3 (▼)] and [F4 (▲)] buttons to select the following screen.

   SYSTEM:SOUND
     REVERB SW   ON
     DELAY SW   ON
     M-FX SW   ON
   SND :TUNE: ▼

6. Move the cursor to the "M-FX SW."

7. Use the [VALUE] dial or the [INC/DEC] buttons to set a parameter.

8. Select the part you want to use Multi-effects on. For info on how that's done, see the subsequent section, "Applying Multi-Effects for Each Part (Part M-FX Switch)."

Range: OFF, ON

NOTE

There are a number of places where settings can be made that affect the M-FX level and related switches. If the effect does not work with the above settings, check whether:

- *If the M-FX OUTPUT LEVEL setting is low (P. 48 - P. 61), the sound of the patch/rhythm set to which M-FX is applied will not be heard.*

- *The effect is not applied when the GRAB switch is positioned at OFF if the MC-307 has been set to use the GRAB switch (P. 34). To always make the effect take effect, put the GRAB switch at ON.*

- *Confirm that the "DELAY Volume for Each Part" in the next item is not set too low.*

Applying Multi-Effects for Each Part (Part M-FX Switch)

Specifies whether to switch the M-FX on and off for each part.

Procedure

1. Press the [PTN] button.
   The screen for playing patterns appears.

2. Press the [F2 (STUP)] button.

3. Press the [F1 (PART)] button.

4. Use [F1 (▼)] and [F2 (▲)] buttons to select the "PART MIXER: M-FX SW" screen.

   PART MIXER: R1234567
     M-FX SW   D
              ON   M
                             R

5. Press the [PART SELECT] button, then press the part button ([R], [1] to [7]) for the part you want to set.

   * *Instead, you can select the part with the [CURSOR (right/ left)] buttons.*

6. Use the [VALUE] dial or the [INC/DEC] buttons to set a parameter.

Range:
- OFF: Switches Multi-effect off.
- ON: Switches Multi-effect on.
- RHY: Specify this to apply Multi-effect to each rhythm tone. You can select RHY for the rhythm parts only.

MEMO

To turn M-FX on/off for individual rhythm tones.
(refer to "SEND: M-FX SW" (p. 112))

Selecting the Multi-Effects Type

Procedure

1. Press the [PTN] button.
   The screen for playing patterns appears.

2. Press the [F2 (STUP) button.

3. Press the [F4 (M-FX)] button.
   The screen for selecting the types of Multi-effects appears.

```
M-FX TYPE:
  1 4BAND EQ
                    PRM
```
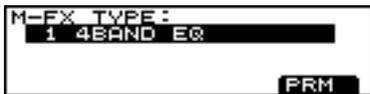
4. Use the [VALUE] dial or the [INC/DEC] buttons to select the type of Multi-effects.

5. Upon selection, press the [EXIT] button to return to the screen for playing the patterns.

Available Settings:

No	M-FX TYPE	Description
1	4BAND EQ	modify the tone
2	SPECTRUM	add character to the sound
3	ENHANCER	add sparkle to the sound
4	OVERDRIVE	distort the sound mildly
5	DISTORTION	distort the sound severely
6	LO-FI	simulate a "low-fidelity" sound
7	NOISE	add various types of noise
8	RADIO TUNING	simulate a radio being tuned
9	PHONO-GRAPH	simulate an old record
10	COMPRES-SOR	make the volume level more consistent
11	LIMITER	smooth out irregularities in volume
12	SLICER	apply successive cuts to the sound
13	TREMOLO	cyclic changes in volume
14	PHASER	modulate the sound
15	CHORUS	add spaciousness and depth to the sound
16	SPACE-D	add transparent depth
17	TETRA CHORUS	layer chorus sounds to add spaciousness
18	FLANGER	add metallic resonance to the sound
19	STEP FLANGER	add metallic resonance to the sound while changing the pitch in steps
20	SHORT DELAY	add echoes to the sound
21	AUTO PAN	automatically move the stereo location
22	FB PITCH SHIFTER	skew the pitch
23	REVERB	add reverberation
24	GATE REVERB	sharply cut the reverberation
25	ISOLATOR	Cuts off a specific range

Chapter4

Defining Parameters in Detail

Defines the Multi-effects settings and their parameters in detail.

Procedure

The following procedure is common to all types of Multi-effects. See P. 48 to P. 61 for details of the parameters.

1. Press the [PTN] button.

   The screen for playing patterns appears.

2. Press the [F2 (STUP)] button.

   The Setup Menu screen appears.

3. Press the [F4 (M-FX)] button.

4. Use the [VALUE] dial or the [INC/DEC] buttons to select the type of Multi-effects.

5. Press the [F4 (PRM)] button.

   The screen for playing patterns appears.

6. Use the [CURSOR (up/down)] buttons to move the cursor to the parameter you want to set.

7. Set the parameter using the [VALUE] dial or the [INC/DEC] buttons.

MEMO

Information such as [CTRL1] printed at the right of each parameter name in the following explanation are the names of the settings used when using the assignable knobs (P. 28) to operate these parameters.For example if you are using the "4 band EQ," and would like to use the assignable knobs to operate "LOW GAIN," assign "CTRL 2" to the knob.

1. 4 Band EQ (Modify the tone)

This is a 4 band (high, midrange x 2, low) stereo equalizer.
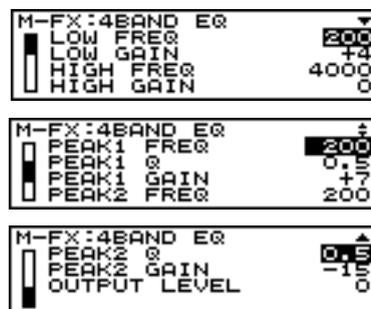
Available Settings:

- **LOW FREQ** (LOW Frequency) [CTRL 1]
  Determines the frequency of the low range.
  Range: 200, 400 (Hz)

- **LOW GAIN** [CTRL 2]
  Adjusts the volume of the low frequency range.
  Range:-15– +15

- **HIGH FREQ** (HIGH Frequency) [CTRL 3]
  Determines the frequency of the high range.
  Range:4000, 8000 (Hz)

- **HIGH GAIN** [CTRL 4]
  Adjusts the volume of the high frequency range.
  Range: -15– +15

- **PEAK1 FREQ** (Peaking 1 Frequency) [CTRL 5]
  Determines the frequency of midrange 1.
  Range: 200–8000 (Hz)

- **PEAK1 Q** (Peaking 1Q) [CTRL 6]
  Specifies the width of the frequency range affected by midrange 1. As this setting is increased, the affected area will become narrower.
  Range: 0.5–8.0

- **PEAK1 GAIN** (Peaking 1 GAIN) [CTRL 7]
  Adjusts the volume of midrange 1.
  Range: -15– +15

- **PEAK2 FREQ** (Peaking 2 Frequency) [CTRL 8]
  Determines the frequency of midrange 2.
  Range: 200–8000 (Hz)

- **PEAK2 Q** (Peaking 2Q) [CTRL 9]
  Specifies the width of the frequency range affected by midrange 2. As this setting is increased, the affected area will become narrower.
  Range: 0.5–8.0

- **PEAK2 GAIN** (Peaking 2 GAIN) [CTRL 10]
  Adjusts the volume of midrange 2.
  Range: -15– +15

- **OUTPUT LEVEL** [CTRL 11]
  Adjusts the output level from the 4 band EQ.
  Range: 0–127

2. Spectrum
(Add Character to the Sound)

This is a type of filter, which modifies the tonal character by boosting or cutting specific frequencies. It is similar to an equalizer, but when you wish to add character to the sound, the Spectrum effect will produce a more distinctive result.

```
M-FX:SPECTRUM        ▼
  LOW-HIGH GAIN      -2
  MIDDLE GAIN        +4
  BAND WIDTH          1
  OUTPUT PAN          0
```

```
M-FX:SPECTRUM        ▲
  OUTPUT LEVEL        0
```
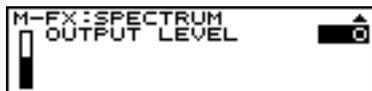
Available Settings:

- **LOW-HIGH GAIN** [CTRL 1]
  Specifies the volume change at 500 Hz and 8000 Hz.
  Range: -15– +15

- **MIDDLE GAIN** [CTRL 2]
  Specifies the volume change at 1250 Hz.
  Range: -15– +15

- **BAND WIDTH** [CTRL 3]
  Specifies the width of the bands in which the volume will be adjusted.
  Range: 1–5

- **OUTPUT PAN** [CTRL 4]
  Specifies the panning of the sound that is output from the Spectrum effect.
  Range: L64–63R

- **OUTPUT LEVEL** [CTRL 5]
  Specifies the volume that is output from the Spectrum effect.
  Range: 0–127

3. Enhancer
(Add Sparkle to the Sound)

By controlling the overtones of the high frequency range, this effect adds sparkle to the sound, giving it more definition.

Use this effect when you want to make a specific sound stand out from the rest of the ensemble, or to give it greater definition.

```
M-FX:ENHANCER        ▼
  SENS               13
  MIX                19
  LOW GAIN            0
  HIGH GAIN          +2
```

```
M-FX:ENHANCER        ▲
  OUTPUT LEVEL        0
```

Available Settings:

- **SENS** (Sensitivity) [CTRL 1]
  Adjusts the depth of the enhancer effect.
  Range: 0–127

- **MIX** (Mix Level) [CTRL 2]
  Determines the proportion at which the overtones generated by the enhancer will be mixed with the original sound.
  Range: 0–127

- **LOW GAIN** [CTRL 3]
  Adjusts the volume of the low frequency range.
  Range: -15– +15

- **HIGH GAIN** [CTRL 4]
  Adjusts the volume of the high frequency range.
  Range: -15– +15

- **OUTPUT LEVEL** [CTRL 5]
  Specifies the volume of the output from the Enhancer effect.
  Range: 0–127

Chapter4

4. Overdrive (Distort the Sound Mildly)

This simulates the soft distortion that occurs when you raise the gain of a vacuum tube amp. The effect also contains an amp simulator, and produces the natural distortion that is created by sounds played through a guitar amp. It is suitable for use with guitar and synth-bass sounds.
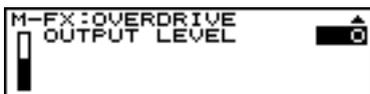
```
M-FX:OVERDRIVE          ▼
  INPUT LEVEL         118
  DRIVE               106
  AMP TYPE         3STACK
  OUTPUT PAN            0
```

```
M-FX:OVERDRIVE          ▲
  OUTPUT LEVEL          0
```

Available Settings:

- **INPUT LEVEL** [CTRL 1]

    Adjusts the level of the input signal.

    Range: 0–127

- **DRIVE** [CTRL 2]

    Adjusts the depth of distortion. This will also affect the volume.

    Range: 0–127

- **AMP TYPE** [CTRL 3]

    Selection for the type of guitar amp.

    Range

    SMALL:small amp

    BUILTIN:built-in type amp

    2STACK:large double amp stack

    3STACK:large triple amp stack

- **OUTPUT PAN** [CTRL 4]

    Specifies the stereo location of the sound that is output from the Overdrive effect.

    Range: L64–63R

- **OUTPUT LEVEL** [CTRL 5]

    Specifies the output volume from the Overdrive effect.

    Range: 0–127

5. Distortion (Distort the Sound Severely)

This effect produces a more severe distortion than the Overdrive effect. It also contains an amp simulator, and produces the natural sound of a guitar amp.
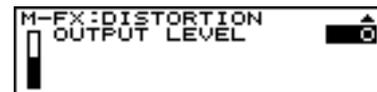
```
M-FX:DISTORTION         ▼
  INPUT LEVEL         118
  DRIVE                86
  AMP TYPE         3STACK
  OUTPUT PAN            0
```

```
M-FX:DISTORTION         ▲
  OUTPUT LEVEL          0
```

Available Settings:

- **INPUT LEVEL** [CTRL 1]

    Adjusts the level of the input signal.

    Range: 0–127

- **DRIVE** [CTRL 2]

    Adjusts the depth of distortion. This will also affect the volume.

    Range: 0–127

- **AMP TYPE** [CTRL 3]

    Determines the type of guitar amp.

    SMALL:small amp

    BUILTIN:built-in type amp

    2STACK:large double amp stack

    3STACK:large triple amp stack

- **OUTPUT PAN** [CTRL 4]

    Specifies the stereo location of the sound that is output from the Distortion effect.

    Range: L64–63R

- **OUTPUT LEVEL** [CTRL 5]

    Specifies the output volume from the Distortion effect.

    Range: 0–127

6. Lo-Fi
(Simulate a "Lo-Fidelity" Sound)

This effect intentionally degrades the audio quality to simulate a Lo-Fi sound. It is particularly effective on drums.

```
M-FX:LO-FI
 BIT DOWN              7
 SAMPLE RATE DOWN      4
 POST GAIN            +6
 LOW GAIN             -5
```

```
M-FX:LO-FI
 HIGH GAIN           -15
 OUTPUT             MONO
 OUTPUT LEVEL         94
```

Available Settings:

- **BIT DOWN** [CTRL 1]
  This setting lowers the audio quality.
  Range: 0–7
  The audio quality will worsen as this setting is increased.

- **SAMPLE RATE DOWN** [CTRL 2]
  This coarsens the output signal.
  Range: 32, 16, 8, 4
  The sound will become coarser as this setting is lowered.

- **POST GAIN** [CTRL 3]
  Adjusts the output signal.
  Range: 0, +6, +12, +18

- **LOW GAIN** [CTRL 4]
  Adjusts the boost or cut applied to the low frequency range.
  Range: -15– +15

- **HIGH GAIN** [CTRL 5]
  Adjusts the boost or cut applied to the high frequency range.
  Range: -15– +15

- **OUTPUT** [CTRL 6]
  Specifies how the sound will be output.
  Range: MONO, STEREO
  With a setting of "MONO," the output sound will be monaural.

- **OUTPUT LEVEL** [CTRL 7]
  Specifies the output volume from the Lo-Fi effect.
  Range: 0–127

7. Noise Generator
(Add Various Types of Noise)

In addition to a Lo-Fi effect, this effect also generates various types of noise such as hum, pink noise, and disk noise.

```
M-FX:NOISE
 NOISE TYPE            3
 NOISE LEVEL         116
 NOISE FILTER     BYPASS
 LO-FI LEVEL          10
```

```
M-FX:NOISE
 OUTPUT PAN            0
 OUTPUT LEVEL        127
```
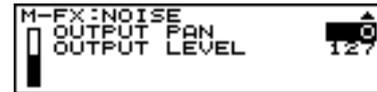
Available Settings:

- **NOISE TYPE** [CTRL 1]
  Determines the type of noise(s) that will be generated.
  Range: 1–18

- **NOISE LEVEL** [CTRL 2]
  Specifies the volume of the noise.
  Range: 0–127

- **NOISE FILTER** [CTRL 3]
  Adjusts the tone of the noise.
  Range: 200–8000 (Hz), BYPASS
  If you do not wish to filter the noise, select "BYPASS."

- **LO-FI LEVEL** [CTRL 4]
  Increasing this setting will make the original sound rougher.
  Range: 0–127

- **OUTPUT PAN** [CTRL 5]
  Specifies the stereo location of the sound output from the Noise Generator.
  Range: L64–63R

- **OUTPUT LEVEL** [CTRL 6]
  Specifies the output volume of the Noise Generator effect.
  Range: 0–127

Chapter4

Noise Type Table

	Hum (50Hz)	Hum (60Hz)	Pink	Disc EP	Disc LP	RND Disc
1						O
2			O			
3					O	O
4			O		O	O
5				O		O
6			O	O		O
7	O					
8	O		O			
9	O				O	O
10	O		O		O	O
11	O			O		O
12	O		O	O		O
13		O				
14		O	O			
15		O			O	O
16		O	O		O	O
17		O		O		O
18		O	O	O		O

For each setting, the type(s) of noise marked by "O" will be generated.

- Hum (50 Hz):   hum noise (50 Hz)
- Hum (60 Hz):   hum noise (60 Hz)
- Pink: pink noise
- Disc EP: disc noise (45 RPM)
- Disc LP: disc noise (33 RPM)
- RND Disc: disc noise generated at random

8. Radio Tuning (Simulate a Radio Being Tuned)

This effect simulates the sound of a radio being tuned.
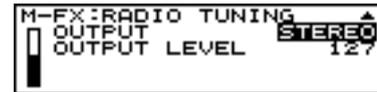
Available Settings:

- **RADIO DETUNE** [CTRL 1]
  Specifies the frequency being tuned.
  Range: 0–127

- **NOISE LEVEL** [CTRL 2]
  Specifies the volume of the tuning noise.
  Range: 0–127

- **LOW GAIN** [CTRL 3]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15

- **HIGH GAIN** [CTRL 4]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15

- **OUTPUT** [CTRL 5]
  Specifies how the sound will be output.
  Range: MONO, STEREO
  With a setting of "MONO," the output sound will be monaural.

- **OUTPUT LEVEL** [CTRL 6]
  Specifies the output volume of the Radio Tuning effect.
  Range: 0–127

MEMO

When you assign the "RADIO DETUNE" parameter to the Assignable knob (P. 29) and then control it, the MC-307 successfully simulates radio tuning.

9. Phonograph
(Simulates an Old Record)

This effect mutes the tone and adds disc noise to simulate the sound of music played on an old record player.

```
M-FX:PHONOGRAPH        ▼
  DISC TYPE           SP
  DISC NOISE LEVEL   116
  DEPTH              +11
  OUTPUT PAN           O
```

```
M-FX:PHONOGRAPH        ▲
  OUTPUT LEVEL       128
```
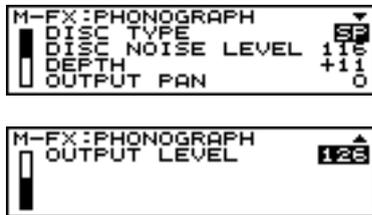
Available Settings:

- **DISC TYPE** [CTRL 1]
  Determines the type of disc noise.
  Range:
   LP: 33 RPM record
   EP: 45 RPM record
   SP: 78 RPM record
- **DISC NOISE LEVEL** [CTRL 2]
  Specifies the volume of the disc noise.
  Range: 0–127
- **DEPTH** [CTRL 3]
  Adjusts the tone.
  Range: 0– +20
  As this value is increased, the high range and low range will be cut, and the mid range will be emphasized.
- **OUTPUT PAN** [CTRL 4]
  Specifies the stereo location of the output from the Phonograph effect.
  Range: L64–63R
- **OUTPUT LEVEL** [CTRL 5]
  Specifies the output volume from the Phonograph effect.
  Range: 0–127

10. Compressor
(Make the Volume Level More Consistent)

This effect suppresses loud volume levels and boosts soft volume levels, making the volume more consistent.

```
M-FX:COMPRESSOR        ▼
  ATTACK               5
  SUSTAIN            116
  POST GAIN            O
  LOW GAIN            +6
```

```
M-FX:COMPRESSOR        ▲
  HIGH GAIN           +5
  OUTPUT LEVEL       127
```
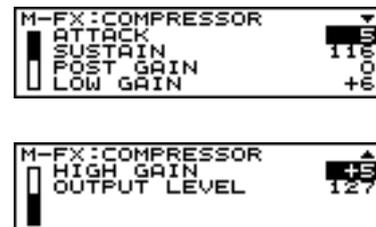
Available Settings:

- **ATTACK** [CTRL 1]
  Specifies the duration of the attack when sound is input.
  Range: 0–127
- **SUSTAIN** [CTRL 2]
  Specifies the time over which low-level sounds will be boosted to reach the specified volume.
  Range: 0–127
- **POST GAIN** [CTRL 3]
  Adjusts the output signal.
  Range: 0, +6, +12, +18
- **LOW GAIN** [CTRL 4]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15
- **HIGH GAIN** [CTRL 5]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15
- **OUTPUT LEVEL** [CTRL 6]
  Specifies the output volume from the Compressor effect.
  Range: 0–127

Chapter4

11. Limiter
(Smooth Out Irregularities in Volume)

This effect compresses the sound when it exceeds a specified volume level, thus preventing distortion.

```
M-FX:LIMITER           ▼
  THRESHOLD          88
▊ RATIO            1.5:1
  RELEASE             0
▊ POST GAIN          +6
```

```
M-FX:LIMITER           ▲
▊ OUTPUT PAN          0
  OUTPUT LEVEL      110
▊
```
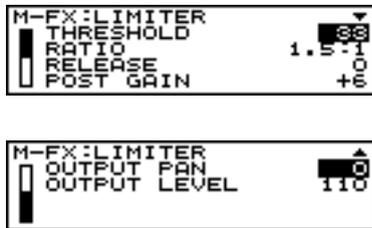
Available Settings:

- **THRESHOLD** (Threshold Level) [CTRL 1]
  Specifies the volume level at which compression will begin.
  Range: 0–127

- **RATIO** (Compression Ratio) [CTRL 2]
  Specifies the ratio of compression.
  Range: 1.5:1, 2:1, 4:1, 100:1

- **RELEASE** [CTRL 3]
  Specifies the time from when the volume drops below the Threshold Level until compression is no longer applied.
  Range: 0–127

- **POST GAIN** [CTRL 4]
  Adjusts the output signal.
  Range: 0, +6, +12, +18

- **OUTPUT PAN** [CTRL 5]
  Specifies the stereo location of the output from the Limiter effect.
  Range: L64–63R

- **OUTPUT LEVEL** [CTRL 6]
  Specifies the output volume of the Limiter effect.
  Range: 0–127

12. Slicer
(Apply Successive Cuts to the Sound)

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.

```
M-FX:SLICER            ▼
▊ TIMING PATTERN     20
  ACCENT PATTERN      1
  ACCENT LEVEL        5
▊ ATTACK             10
```

```
M-FX:SLICER            ▲
▊ OUTPUT LEVEL      110
  RATE
▊
```
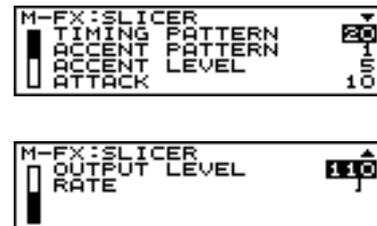
Available Settings:

- **TIMING PATTERN** [CTRL1]
  Select a pattern to specify the timing at which the sound will be cut.
  Range: 34 types

- **ACCENT PATTERN** [CTRL 3]
  Specifies the location of the accents.
  Range: 16 types

- **ACCENT LEVEL** [CTRL 4]
  Adjusts the volume of the accents.
  Range: 0–127
  As this setting is increased, the accent will be more pronounced.

- **ATTACK** [CTRL 5]
  Adjusts the attack speed of the sound.
  Range: 1–10
  As this setting is increased, the attack will become faster.

- **OUTPUT LEVEL** [CTRL 6]
  Adjusts the output volume from the Slicer effect.
  Range: 0–127

- **RATE** [CTRL 2]
  Determines the note value unit which will be cut.
  Available Settings: ♩ ♪ ♫

13. Tremolo (Cyclic Changes in Volume)

This effect cyclically modulates the volume to create tremolo.

```
M-FX:TREMOLO        ▼
 LFO TYPE         SQR
 DEPTH             0
 LOW GAIN        -10
 RATE            2.0
```

```
M-FX:TREMOLO        ▲
 HIGH GAIN         +1
 OUTPUT LEVEL     110
```

Available Settings:

- **LFO TYPE** [CTRL 1]
  Determines the waveform that will be used to modulate the sound.
  Range: TRI, TRP, SIN, SAW1, SAW2, SQR

- **DEPTH** [CTRL 2]
  Specifies the depth of modulation.
  Range: 0–127

- **LOW GAIN** [CTRL 3]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15

- **RATE** [CTRL 4]
  Specifies the frequency of modulation.
  Range: 0.1–10.0,

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ↔₃ ♩. ↔
  2MES 3MES 4MES 8MES 16MES

  * *If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.*

- **HIGH GAIN** [CTRL 5]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15

- **OUTPUT LEVEL** [CTRL 6]
  Specifies the output volume of the Tremolo effect.
  Range: 0–127

14. Phaser (Modulate the Sound)

By adding a phase-shifted sound to the original sound, this effect modulates the sound to add depth and a sense of rotation.

```
M-FX:PHASER         ▼
 MANUAL           290
 DEPTH            52
 RESONANCE         5
 RATE            2.0
```

```
M-FX:PHASER         ▲
 MIX              48
 OUTPUT PAN        0
 OUTPUT LEVEL     127
```

Available Settings:

- **MANUAL** [CTRL 1]
  Specifies the center frequency at which the sound will be modulated.
  Range: 100–8000 (Hz)

- **DEPTH** [CTRL 2]
  Specifies the depth of modulation.
  Range: 0–127

- **RESONANCE** [CTRL 3]
  This setting emphasizes the frequency range in the vicinity of the center frequency.
  Range: 0–127

- **RATE** [CTRL 4]
  Specifies the frequency of modulation. If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.
  Range: 0.1–10.0,

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ↔₃ ♩. ↔
  2MES 3MES 4MES 8MES 16MES

- **MIX** (Mix Level) [CTRL 4]
  Adjusts the proportion of the original sound that will be combined with the phase-shifted sound.
  Range: 0–127

- **OUTPUT PAN** [CTRL 5]
  Specifies the stereo location of the output from the Phaser effect.
  Range: L64–63R

- **OUTPUT LEVEL** [CTRL 6]
  Specifies the output volume of the Phaser effect.
  Range: 0–127

Chapter4

15. Chorus (Add Spaciousness and Depth to the Sound)

This effect creates an impression of multiple sound sources in unison (Chorus effect), giving spaciousness and depth to the sound.

```
M-FX:CHORUS           ▼
 PRE DELAY          1.3
 DEPTH               52
 PHASE               10
 RATE               2.0
```

```
M-FX:CHORUS           ▲
 FILTER TYPE        HPF
 CUTOFF            8000
 BALANCE       DO:100W
 OUTPUT LEVEL         0
```

Available Settings:

- **PRE DELAY** (Pre Delay Time) [CTRL 1]
  Specifies the time from the original sound until when the chorus sound is heard.
  Range: 0.0–100

- **DEPTH** [CTRL 2]
  Specifies the depth of modulation.
  Range: 0–127

- **PHASE** [CTRL 3]
  Adjusts the spaciousness of the sound. As this setting is increased, the sound will spread more toward left and right.
  Range: 0–180

- **RATE** [CTRL 4]
  Specifies the rate of modulation. If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.
  Range: 0.1–10.0, 2

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ⊲₃ ♩. ⊹
  MES 3MES 4MES 8MES 16MES

- **FILTER TYPE** [CTRL 5]
  Determines the type of filter that will be applied to the chorus sound.
  Available settings:
  OFF: A filter will not be used.
  LPF: The frequency range above the cutoff frequency will be cut.
  HPF: The frequency range below the cutoff frequency will be cut.

- **CUTOFF**(Cutoff Frequency) [CTRL 6]
  Specifies the cutoff frequency of the filter.
  Range: 200–8000 (Hz)

- **BALANCE** (Effect Balance) [CTRL 7]
  Adjusts the volume balance between the original sound and the chorus sound. With a setting of "D100:0W," no chorus sound will be output.

Range: D100:0W–D0:100W

- **OUTPUT LEVEL** [CTRL 8]
  Specifies the output volume from the stereo chorus.
  Range: 0–127

16. Space-D (Add Transparent Depth)

This is a type of chorus, but unlike a conventional chorus, it does not create a sense of modulation.

```
M-FX:SPACE-D          ▼
 PRE DELAY          1.3
 DEPTH               52
 PHASE               10
 RATE               2.0
```

```
M-FX:SPACE-D          ▲
 LOW GAIN           +3
 HIGH GAIN          +1
 BALANCE        D30:70W
 OUTPUT LEVEL        50
```

Available Settings:

- **PRE DELAY** (Pre Delay Time) [CTRL 1]
  Specifies the time from the original sound until the chorus sound is heard.
  Range: 0.0–100

- **DEPTH** [CTRL 2]
  Specifies the depth of modulation.
  Range: 0–127

- **PHASE** [CTRL 3]
  Adjusts the spread of the sound. As this value is increased, the sound will have a broader left/right spread.
  Range: 0–180

- **RATE** [CTRL 4]
  Specifies the rate of modulation. If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.
  Range: 0.1–10.0,

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ⊲₃ ♩. ⊹
  2MES 3MES 4MES 8MES 16MES

- **LOW GAIN** [CTRL 5]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15

- **HIGH GAIN** [CTRL 6]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15

- **BALANCE** (Effect Balance) [CTRL 7]
  Adjusts the volume balance between the original sound and the chorus sound. With a setting of "D100:0W" the chorus sound will not be heard.
  Range: D100:0W–D0:100W

- **OUTPUT LEVEL** [CTRL 8]

Specifies the output volume from the Space-D effect.
Range: 0–127

17. Tetra Chorus (Layer Chorus Sounds to Add Spaciousness)

This effect layers four chorus sounds to produce even more depth and spaciousness than a conventional chorus.

```
M-FX:TETRA CHORUS    ▼
 PRE DELAY          1.9
 DEPTH               52
 PRE DELAY DEVI       5
 RATE               2.0
```

```
M-FX:TETRA CHORUS    ▲
 DEPTH DEVI          -8
 PAN DEVI            16
 BALANCE        D30:70W
 OUTPUT LEVEL        50
```

Available Settings:

- **PRE DELAY** (Pre Delay Time) [CTRL 1]
  Specifies the time from the original sound until when the chorus sound is heard.
  Range: 0.0–100

- **DEPTH** [CTRL 2]
  Specifies the depth of modulation.
  Range: 0–127

- **PRE DELAY DEVI** (Pre Delay Deviation) [CTRL 3]
  Adjusts the difference in pre delay between each of the chorus sounds.
  Range: 0–20

- **RATE** [CTRL 4]
  Specifies the rate of modulation. If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.
  Range: 0.1–10.0,

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ♩₃ ♩.
  2MES 3MES 4MES 8MES 16MES

- **DEPTH DEVI** (Depth Deviation) [CTRL 5]
  Adjusts the difference in modulation depth between each of the chorus sounds.
  Range: -20– +20

- **PAN DEVI** [CTRL 6]
  Adjusts the pan difference between each chorus sound. As this value is increased, the sound will have a greater left/right spread.
  Range: 0–20

- **BALANCE** (Effect Balance) [CTRL 7]
  Specifies the volume balance between the original sound and the chorus sound. With a setting of "D100:0W," no chorus sound will be output.
  Range: D100:0W–D0:100W

- **OUTPUT LEVEL** [CTRL 8]
  Specifies the output volume from the Tetra Chorus effect.
  Range: 0–127

18. Flanger (Add Metallic Resonance to the Sound)

This creates a sharper and more mechanical sound than the phaser. It can add a metallic resonance to the sound, or produce an effect that sounds like an jet airplane taking off and landing.
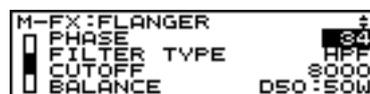
```
M-FX:FLANGER         ▼
 PRE DELAY          1.9
 DEPTH               52
 FEEDBACK            +5
 RATE               2.0
```

```
M-FX:FLANGER         ↕
 PHASE               34
 FILTER TYPE        HPF
 CUTOFF            8000
 BALANCE        D50:50W
```

```
M-FX:FLANGER         ▲
 OUTPUT LEVEL         0
```

Available Settings:

- **PRE DELAY** (Pre Delay Time) [CTRL 1]
  Specifies the time from the original sound until the flanger sound is heard.
  Range: 0.0–100

- **DEPTH** [CTRL 2]
  Specifies the depth of modulation.
  Range: 0–127

- **FEEDBACK** (Feedback Level) [CTRL 3]
  Specifies the proportion of the flanger sound that is fed back into the input.
  Range: 0– +98 (%)

- **RATE** [CTRL 4]
  Specifies the rate of modulation. If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.
  Range: 0.1–10.0,

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ♩₃ ♩.
  2MES 3MES 4MES 8MES 16MES

- **PHASE** [CTRL 5]
  Adjusts the width of the sound.
  Range: 0–180
  As this setting is increased, the left/right spread of the sound will increase.

- **FILTER TYPE** [CTRL 6]
  Determines the type of filter that will be applied to the flanger sound.

Available Settings:

OFF: A filter will not be used.

LPF: The frequency range above the cutoff frequency will be cut.

HPF: The frequency range below the cutoff frequency will be cut.

- **CUTOFF** (Cutoff Frequency) [CTRL 7]

  Specifies the cutoff frequency of the filter.

  Range: 200–8000 (Hz)

- **BALANCE** (Effect Balance) [CTRL 8]

  Adjusts the volume balance between the original sound and the flanger sound.With a setting of "D100:0W," no flanger sound will be output.

  Range: D100:0W–D0:100W

- **OUTPUT LEVEL** [CTRL 9]

  Specifies the output volume from the stereo flanger.

  Range: 0–127

19. Step Flanger (Add Metallic Resonance to the Sound While Changing the Pitch in Steps)

This is a flanger that changes the pitch of the sound in steps. The frequency of pitch change can also be synchronized to the BPM.
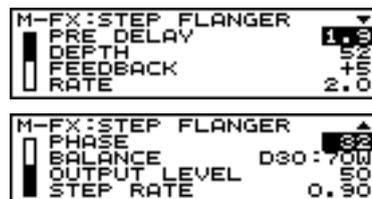
```
M-FX:STEP FLANGER        ▼
  PRE DELAY              1.9
  DEPTH                   52
  FEEDBACK                +5
  RATE                   2.0
```

```
M-FX:STEP FLANGER        ▲
  PHASE                   82
  BALANCE           D30:70W
  OUTPUT LEVEL            50
  STEP RATE             0.90
```

Available Settings:

- **PRE DELAY** (Pre Delay Time) [CTRL 1]

  Specifies the time from the original sound until the flanger sound is heard.

  Range: 0.0–100

- **DEPTH** [CTRL 3]

  Specifies the depth of modulation.

  Range: 0–127

- **FEEDBACK** (Feedback Level) [CTRL 4]

  Specifies the proportion of the flanger sound that is fed back into the input.

  Range: 0– +98 (%)

- **RATE** [CTRL 2]

  Specifies the frequency of modulation.If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the BPM of the pattern at intervals of the specified note value or measure.

  Range: 0.1–10.0,

  ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ○

  2MES 3MES 4MES 8MES 16MES

- **PHASE** [CTRL 5]

  Adjusts the spread of the sound.As this value is increased, the left/right spread of the sound will increase.

  Range: 0–180

- **BALANCE** (Effect Balance) [CTRL 7]

  Adjusts the volume balance between the original sound and the flanger sound.With a setting of "D100:0W," no flanger sound will be output.

  Range: D100:0W–D0:100W

- **OUTPUT LEVEL** [CTRL 8]

  Specifies the output volume of the Step Flanger effect.

  Range: 0–127

- **STEP RATE** [CTRL 6]

  Specifies the rate at which the pitch will change.If a note value is selected as the value of this parameter, the Step Rate will synchronize with the BPM of the pattern at intervals of the specified note value.

  Range:0.05–10.0 (Hz), ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩

20. Short Delay (Add Echoes to the Sound)

This is a short delay which allows you to set the left and right delay times independently. You can also move the panning of the delay sound in synchronization with the BPM.

```
M-FX:SHORT DELAY      ▼
TIME L              150
TIME R              125
HF DAMP          BYPASS
FEEDBACK             +5

M-FX:SHORT DELAY      ‡
LOW GAIN             +1
HIGH GAIN            +1
BALANCE        D50:50W
AUTO PAN          8MES

M-FX:SHORT DELAY      ▲
OUTPUT LEVEL          0
```

Available Settings:

- **TIME L** (Delay Time Left) [CTRL 1]
  Specifies the time from the original sound until the left delay sound is heard.
  Range: 0.1–190
- **TIME R** (Delay Time Right) [CTRL 2]
  Specifies the time from the original sound until the right delay sound is heard.
  Range: 0.1–190
- **HF DAMP** [CTRL 3]
  Determines the frequency at which the high frequency portions of the delay sound will be cut.
  Range: 200–8000 (Hz), BYPASS
  As this parameter is set to a lower frequency, more of the high range will be cut, making the delay sound more muted in tone.If you do not wish to cut the high frequency range, select "BYPASS."
- **FEEDBACK** (Feedback Level) [CTRL 4]
  Adjusts the number of delay repeats.
  Range: 0– +98 (%)
- **LOW GAIN** [CTRL 5]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15
- **HIGH GAIN** [CTRL 6]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15
- **BALANCE** (Effect Balance) [CTRL 7]
  Adjusts the volume balance between the original sound and the delay sound.
  Range: D100:0W–D0:100W
  With a setting of "D100:0W" no delay sound will be output.
- **AUTO PAN** [CTRL 8]
  This setting causes the panning of the delay sound to move in synchronization with the BPM.
  Range: OFF, ♪ ♪₃ ♩. ♪ ♩₃ ♩ ♩₃ ♩. ♩ ₃ ♩. ₀
  2MES, 3MES, 4MES, 8MES, 16MES
- **OUTPUT LEVEL** [CTRL 9]
  Specifies the output volume from the Short Delay effect.
  Range: 0–127

21. Auto PAN (Automatically Move the Stereo Location)

This effect automatically moves the stereo location of the sound. You can cause the sound to be panned left and right in time with low notes such as a Bass Drum, or in synchronization with the BPM of the pattern.

```
M-FX:AUTO PAN         ▼
LFO TYPE            SQR
BASS SENS        MODE2
DEPTH               30
RATE               9.1

M-FX:AUTO PAN         ▲
LOW GAIN            +2
HIGH GAIN           +1
OUTPUT LEVEL       127
```

Available Settings:

- **LFO TYPE** [CTRL 1]
  Determines the waveform that will be used to pan the sound to left and right.
  Range: TRI, TRP, SIN, SAW1, SAW2, SQR
- **BASS SENS** [CTRL 2]
  Make this setting when you wish to shift the panning at the timing of the bass notes.
  Range
  OFF: The panning will change at the speed specified by Rate.
  MODE1: The Rate value will increase at the timing of the bass notes.
  MODE2: The panning will change at the timing of the bass notes.
- **DEPTH** [CTRL 4]
  Specifies the depth of panning.
  Range: 0–127
- **RATE** [CTRL 2]
  Specifies the rate at which the pan will be moved.If a note value or measure is selected as the value of this parameter, the Rate will synchronize with the tempo of the pattern at intervals of the specified note value or measure.
  Range:
 0.1–10.0, ♪ ♪₃ ♩. ♪ ♩₃ ♩ ♩₃ ♩. ♩ ₃ ♩. ₀
  2MES 3MES 4MES 8MES 16MES
- **LOW GAIN** [CTRL 5]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15
- **HIGH GAIN** [CTRL 6]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15
- **OUTPUT LEVEL** [CTRL 7]
  Specifies the output volume of the AUTO PAN effect.
  Range: 0–127

* When the Bass Sensitivity parameter is set to "MODE2," the Rate setting will be ignored.

22. Feedback Pitch Shifter (Skew the Pitch)

This effect shifts the pitch of the original sound and layers it with the original sound. It can be used to play unison lines at an interval of an octave or fifth, or to layer a slightly pitch-shifted with the original sound to create a chorus effect.

```
M-FX:FB PITCH SHIFTER▼
█ COARSE          +12
  FINE            +80
  OUTPUT PAN        0
  PRE DELAY       3.0

M-FX:FB PITCH SHIFTER↕
  MODE              5
█ FEEDBACK        +18
  LOW GAIN        +15
  HIGH GAIN       +15

M-FX:FB PITCH SHIFTER▲
  BALANCE      D100:0W
█ OUTPUT LEVEL     118
```
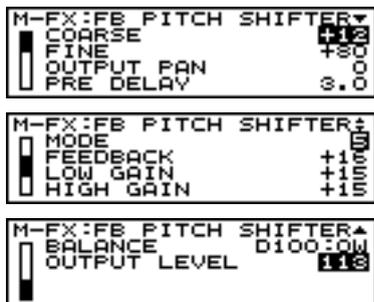
Available Settings:

- **COARSE** (Coarse Pitch) [CTRL 1]
  Specifies the amount of pitch shift relative to the original sound, in semitone steps.
  Range: -24– +12
- **FINE** (Fine Pitch) [CTRL 2]
  Adjusts the amount of pitch shift in 2-cent steps.
  Range: -100– +100
- **OUTPUT PAN** [CTRL 3]
  Determines the stereo location of the pitch-shifted sound.
  Range: L64–63R
- **PRE DELAY** (Pre Delay Time) [CTRL 4]
  Specifies the time from the original sound until the pitch-shifted sound is heard.
  Range: 0.0–100
- **MODE** (Pitch Shifter Mode) [CTRL 5]
  Specifies how the pitch will be shifted.As this setting is increased, the response will be slower, but the sound will be more stable.
  Range: 1–5
- **FEEDBACK** (Feedback Level) [CTRL 6]
  Specifies the proportion of the pitch-shifted sound that will be fed back into the input.
  Range: 0– +98 (%)
- **LOW GAIN** [CTRL 7]
  Adjusts the boost or cut of the low frequency range.
  Range: -15– +15
- **HIGH GAIN** [CTRL 8]
  Adjusts the boost or cut of the high frequency range.
  Range: -15– +15
- **BALANCE** (Effect Balance) [CTRL 9]
  Specifies the volume balance between the original sound and the pitch-shifted sound. When the setting is "D100:0W" the pitch-shifted sound will not be output.
  Range: D100:0W–D0:100W
- **OUTPUT LEVEL** [CTRL 10]
  Specifies the output volume of the Feedback Pitch Shifter effect.
  Range: 0–127

23. Reverb (Add Reverberation)

This effect adds reverberation and ambiance to the sound, creating spatial depth.

```
M-FX:REVERB          ▼
█ TYPE            HALL2
  TIME               90
  HF DAMP        BYPASS
  BALANCE       D70:30W

M-FX:REVERB          ▲
█ OUTPUT LEVEL      17
```
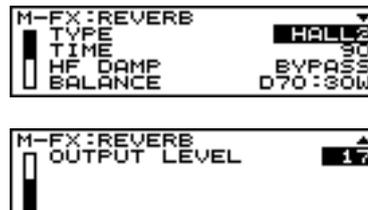
Available Settings:

- **TYPE** (Reverb Type) [CTRL 1]
  You can select one of the following six basic types of reverb.
  Available Settings:
  ROOM1:
  Reverb with short decay and high density.
  ROOM2:
  Reverb with short decay and low density.
  STAGE1:
  Reverb with much subsequent reverberation.
  STAGE2:
  Reverb with strong early reflections.
  HALL1:
  Clear-sounding reverb.
  HALL2:
  Rich-sounding reverb.
- **TIME** (Reverb Time) [CTRL 2]
  Specifies the duration of the reverberation.
  Range: 0–127
- **HF DAMP** [CTRL 3]
  Determines the frequency at which the high frequency portions of the reverberation will be cut. As this parameter is set to a lower frequency, more of the high range will be cut, making the delay sound more muted in tone. If this "BYPASS" is selected, the high frequency range will not be cut.
  Range: 200–8000 (Hz), BYPASS
- **BALANCE** (Effect Balance) [CTRL 4]
  Specifies the volume balance between the original sound and the reverberation.With a setting of "D100:0W" no reverb sound will be output.
  Range: D100:0W–D0:100W
- **OUTPUT LEVEL** [CTRL 5]
  Specifies the output volume from the reverb effect.
  Range: 0–127

24. Gated Reverb (Sharply Cut the Reverberation)

This is a type of reverb, in which the reverberation is cut off before the natural completion of its decay.

```
M-FX:GATE REVERB
TYPE          SWEEP2
TIME             330
BALANCE       D36:64W
OUTPUT LEVEL      30
```

Available Settings:

- **TYPE** (Gate Reverb Type) [CTRL 1]
  Select one of the following four basic types of gated reverb.
  Available Settings:
  NORMAL: Normal gated reverb
  REVERSE: Reverse-playback reverb
  SWEEP1: The reverberation will sweep from right to left.
  SWEEP2: The reverberation will sweep from left to right.

- **TIME** (Gate Reverb Time) [CTRL 2]
  Specifies the time from when the reverberation begins until it ends.
  Range: 5–330

- **BALANCE** (Effect Balance) [CTRL 3]
  Specifies the volume balance between the original sound and the reverberation. With a setting of "D100:0W" no reverb sound will be output.
  Range: D100:0W–D0:100W

- **OUTPUT LEVEL** [CTRL 4]
  Specifies the output volume of the Gate Reverb effect.
  Range: 0–127

25. Isolator (Cuts Off a Specific Range)

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

```
M-FX:ISOLATOR
LOW GAIN          0
MID GAIN        127
HIGH GAIN         0
PAN               0
```

```
M-FX:ISOLATOR
LEVEL           118
```

The Isolator parameters are, in general, effective when applied to the following musical instruments.

- LOW: Bass drums and basses
- MID: Vocals and the like
- HIGH: High-pitched musical instruments such as cymbals

A combination of the Isolator and the GRAB switch provides an instantaneous rhythm beating effect.

GRAB switch: refer to "How to Use the GRAB Switch to Set an Effect Function" (p. 62)

Available Settings:

- **LOW GAIN** [CTRL 1]
  Specifies the amount of low-frequency range to be cut.
  Range: 0–127

- **MID GAIN** [CTRL 2]
  Specifies the amount of mid-range to be cut.
  Range: 0–127

- **HIGH GAIN** [CTRL 3]
  Specifies the amount of high-frequency range to be cut.
  Range: 0–127

- **PAN** [CTRL 4]
  Specifies the stereo position of the sound output from the Isolator.
  Range: L64–0–63R

- **LEVEL** [CTRL 5]
  Determines the loudness output from the Isolator.
  Range: 0–127

Chapter4

Switching an Effect Function On and Off in Real Time (How to use the GRAB switch)

What is the GRAB Switch?

This switch, which you can use to turn on and off the Multi-Effects, Reverb, and Delay in real time, works the same way as the GRAB switch featured on the Roland DJ-2000 Professional DJ Mixer. Since the MC-307 features an even greater number of onboard effects, you can now create performances never before possible.
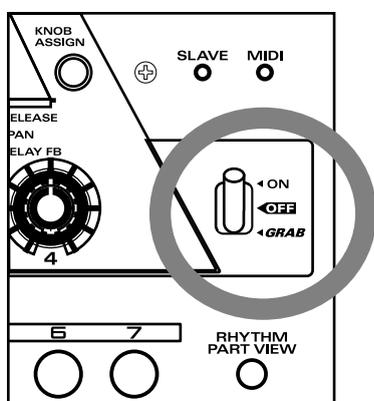
GRAB switch positions

The GRAB switch is set to one of the following three positions.

- **ON**: Switches the effect on.
- **OFF**: Switches the effect off.
- **GRAB**: Switches the effect on while the switch is set at this position. When you release it, it returns to the OFF position. Thus, set it to this position in time with the performance.

How to Use the GRAB Switch to Set an Effect Function

The GRAB switch setting determines which of the Reverb, Delay and Multi-effects functions is to be switched on and off.

Procedure

1. Press the [SYSTEM] button.

2. Press the [F1 (SYS)] button.

3. Press the [F2 (LCD)] button.

4. Press the [F3 (GRAB)] button.

The "SYSTEM: GRAB" screen appears.

5. Pressing the [CURSOR (up/down)] buttons, move the cursor to the effect name you want to control.

6. Set ON/OFF using the [VALUE] dial or the [INC/DEC] buttons.
   To enable the GRAB switch, set it to ON. To disable it, set it to OFF.

7. Press the [EXIT] button to close the screen.

The effect you selected is switched on and off when you control the [GRAB] switch.

> **NOTE**
>
> *This setting determines whether or not the effect is turned on or off with the GRAB switch, but it does not turn on and off the effect itself.*
> *To switch the actual effects on or off, refer to the following. (Refer to P. 42, P. 44, P. 46)*
>
> *The effect does not take effect with the GRAB switch set at ON or GRAB if you switched off the effect in the operation step described in "Switching Multi-Effects On/Off".*
>
>
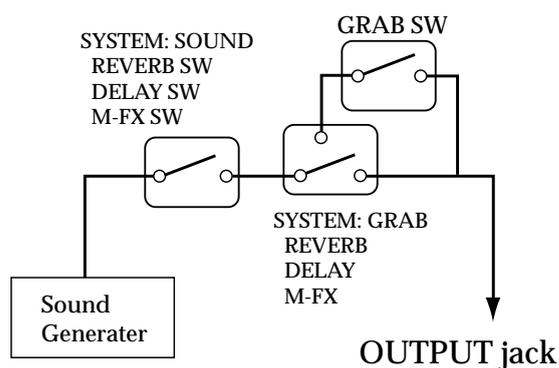
Creating Your Own Patterns

You can create your own original patterns just as you would record them on a tape recorder or MD recorder **(Realtime Recording)** or **TR-REC**.

Recording Your Music as You Play it (Realtime Recording)

This lets you use the MC-307's keyboard pads or an external MIDI keyboard for recording performances.

Procedure

──────── **Select recording pattern** ────────

1. Press the [PTN] button.
   The "PATTERN PLAY" screen appears.

2. Use the [VALUE] dial or the [INC/DEC] buttons to select the pattern number you want to record.

   * *If you want to record your performance with an empty pattern, execute Pattern Initialize here. (P. 128)*

──────── **Select recording part and patch** ────────

3. Press [PART SELECT] button.

4. Press the Part button for the part ([R], [1], ..., [7]) you want to record.
   Select the part to be recorded.

5. Press [F1 (PATCH)] button.

6. With the [VALUE] dial or [INC/DEC] button, select the Patch (Part "R" is the rhythm.)

──────── **Get Ready for recording** ────────

7. Press the [REC] button.
   The "REC MODE SELECT" screen appears.

   ```
   REC MODE SELECT:
        REAL    TR-
        TIME    REC
         ▼       ▼
   ```

8. Press the [F2 (REALTIME)] button.
   The "REALTIME REC STANDBY" screen appears.

   Use this screen to enter the settings for recording.

   ```
   REALTIME REC STANDBY:
   BEAT                4/4
   MEASURE LENGTH        1
   BPM               120.0
   PACH  STUP     ▼
   ```
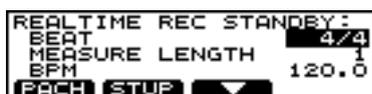
9. Use the [CURSOR (up/down)] buttons to move the cursor to the position next to the function you want to set.

10. Set your preferences using the [VALUE] dial or the [INC/DEC] buttons.

Setting Range

The preferences you are to set in Step 10 and the range of settings are as shown below.

BEAT:
Range:2/4–7/4, 5/8–7/8, 9/8, 12/8, 9/16, 11/16, 13/16, 15/16, 17/16, 19/16

* *Only blank Patterns can be selected.*

- **MEASURE LENGTH**:
Specifies the length of the pattern.
Range: 1–32

* *Although Patterns can be lengthened after they have been recorded, the settings cannot be used to shorten Patterns.*
(To shorten a pattern, use the DELETE command under TRACK EDIT (p. 78) to delete one or more measures.)

- **BPM**: Specifies the initial setting of the BPM.
(To modify this setting later on, change the playback BPM (P. 18) and save the pattern.)
Range: 20.0–240.0

- **COUNT IN**: Determines the number of counts to be sounded before starting recording. If you set Count In to WAIT NOTE, recording starts when you press a keypad the first time.
Range: OFF, 1MEAS, 2MEAS, WAIT NOTE

- **METRONOME:** The METRONOME MODE can be set to automatic on/off according to the operating mode of the MC-307.
Range:

OFF:	The metronome does not play, regardless of the operation of the MC-307.
ON:	The metronome plays, regardless of the operation of the MC-307.
REC ONLY:	The metronome plays only during recording.
PLAY&REC:	Sounds during playback and recording.

- **LOOP REST**: When set to On, one blank measure will be inserted before the MC-307 returns to the beginning of pattern.This is a useful for preventing the phrase at the end of the last measure from being recorded.
Range: OFF, ON

- **INPUT QTZ TIMING**:
This specifies the Input Quantize timing. The effect diminishes the closer to 0% you set the value. When set to 100%, the timing conforms exactly to the position of the beat set in the INPUT QTZ TEMPLATE.
Range: 0–100 (%)

- **INPUT QTZ TMPL**: Adjusts the recording results to the precise rhythm. Specifies the smallest beat of your music by note.
Range: OFF, ♫ ♪₃ ♪ ♩₃ ♩ ♩₃ ♩

*   *You can select a patch for a recording part here, see next "Selecting a patch to use from all lists" and "Selecting a patch by category."If you do not want to do so, proceed to step 11.*

─────────── **Perform Recording** ───────────

11. Press the [PLAY] button.
Recording starts. Now, play on the keyboard pads or external MIDI keyboard.

```
REALTIME REC:   VELO
M=  8  1-02       127
PACH STUP ERAS BPM
```

*   *When you reach the last measure, the material is recorded again, starting from Measure 1. Further performance data is added as recording is repeated.*

12. When recording is finished, press the [STOP] button.

Selecting a patch

a. Selecting a patch to use from all lists

Using the Recording screen, carry out the following operations.

1. Press the [F1 (PACH)] button.

2. Press the [F1 (LIST)] button.
The "PATCH SELECT" screen appears.

```
PATCH SELECT:  1/1056
P:A001 LEAD TB 1
P:A002 DIST TB 1
P:A003 DIST SQR TB
P:A004 DIST TB 2
```

3. Select a patch using the [VALUE] dial or the [INC/DEC] buttons.

4. Upon selection, press [ENTER] button to return to the screen you selected in Step 1.

b. Selecting a patch to use by category

Using the Recording screen, carry out the following operations.

1. Press the [F1 (PACH)] button.

2. Press the [F2 (CATG)] button.
The "CATETORY GROUP SELECT" screen appears.

```
CATEGORY GROUP SELECT:
PIAN KEYS GUIT BASS
O   &ORG AR
```

3. Use the [VALUE] dial or the [INC/DEC] buttons to select the category of the patch you want to select.

4. Press the [F1]–[F4] buttons below the category you selected.
A list of patches included in that category appears.

5. Select a patch using the [VALUE] dial or the [INC/DEC] buttons.

6. Upon selection, press [ENTER] button to return to the PATCH screen.

Part and effect settings in the Recording screen

You can make part and effect settings without stopping realtime recording.

1. Begin realtime recording. (P. 63)

2. Press the [F2 (STUP)] button.
In this screen, you can choose whether to make part settings or effect settings. For details refer to the respective explanations.

-   [F1 (PART)]:
    Set part parameters. (P. 22)
-   [F2 (REV)]
    Set reverb parameters. (P. 42)
-   [F3 (DLY)]
    Set delay parameters. (P. 44)
-   [F4 (M-FX)]
    Set M-FX parameters. (P. 46)

*   *When you operate these parameters while recording, your operations will be recorded in real time.*
    (Changes in the "TYPE" of REVERB, DELAY, or M-FX cannot be recorded.)

*   *If you simply wish to make part settings, without recording these parameters, refer to the following "Rehearsal function," and operate the parameters in rehearsal mode.*

Trial play without stopping recording (Rehearsal)

The MC-307 is capable of temporarily interrupting recording without stopping Realtime Recording. This feature is called "Rehearsal function." With this function, you can repeat trial playing and recording in turn and save time repeating recording and stopping operations.

Procedure

1. Taking steps 1 through 7 in "Recording your music as you play it (Realtime Recording) "(P. 63), starts recording.

2. During recording, press [REC] button.
   The [REC] indicator flashes to indicate that the MC-307 is in the Rehearsal mode.

   REC REHEARSAL: VELO
   M= 8 1-03   127
   PACH STUP ERAS BPM

   Now, play a phrase to rehearse your music before recording.

3. After you finish trial playing, press [REC] button again.
   The MC-307 returns to the Recording mode.

4. Record your play.

Changing the recording part while you record

When recording multiple parts, you can record the performances of different parts without having to stop between each one.
When creating Patterns, this allows you to keep recording one part after another, with no break in the flow.

Procedure

1. Start Realtime Recording.
   - refer to Recording Your Music as You Play it (Realtime Recording) (p. 63).

2. Press the Part button for the part ([R], [1], ..., [7]) you want to record.
   This part is recorded.

Next, change the part to be recorded.

3. Press the Part button for the next part you want to record.
   In this way, you can continue to record the necessary parts.

Recording an arpeggio performance

You can turn on the arpeggiator and record its phrases in a part.

NOTE

Before you perform the following procedure, turn ARPEGGIO SYNC (p. 120) "ON." If you fail to do this, it will not be possible to record in sync with the sequencer.

Procedure

1. Press the [ARP] button to turn on the arpeggiator so that you can play the desired phrases. (refer to Playing Back in Arpeggio (Arpeggiator) (p. 31).)

2. Press the [HOLD] button.

3. Press a chord (or a single key) with the keyboard pads. When you release the keyboard pads, the arpeggiator continues playing.

4. Press [REC] button.
   The MC-307 enters the Recording Standby mode. The arpeggiator now stops playing.

5. Press the [F2 (REALTIME)] button.

6. Press the [PLAY] button.
   Recording starts. The arpeggiator starts playing at the beginning of measure 1 and is recorded in the part.

7. When recording is completed, press [STOP] button.

8. Press [ARP] button to turn off the arpeggiator.

Recording knob movements

It is possible to record the operations you do to change timbres (patches) while playing a music as the performance information.

Procedure

First, specify the part in which the knob movements are to be recorded.

1. Press the [PART SELECT] button.
   The PART buttons [R], [1] to [7] are used to select the parts.

2. Press the PART button, [R], [1] to [7], for the part for which the knob movements are to be recorded.
   The target part is specified.

3. Start recording.
   (refer to Recording Your Music as You Play it (Realtime Recording) (p. 63).)

4. Move the knobs to your music.
   The actions of controlling the knobs are recorded.

Chapter5

5. When you have finished recording, press [STOP] button.

* *The following parameters are not recorded as performance data.*

   (The values selected before recording is completed are stored as the initial values for the pattern.)
   - REVERB TYPE
   - DELAY TYPE
   - M-FX TYPE

Erasing unwanted data while you record (Real-Time Erase)

This is a function used to erase data with the keyboard pads or knobs during realtime recording. Unwanted data can be efficiently erased using this function.

Procedure

First, specify the part on which Realtime Erase is to be executed.

1. Press the [PART SELECT] button.
   The PART buttons [R], [1] to [7] are used to select the parts.

2. Press the PART button corresponding to the part for which Realtime Erase is to be executed.
   The target part is specified.

3. Set the MC-307 to the Recording mode.
   (refer to Recording Your Music as You Play it (Realtime Recording) (p. 63).)

4. Press the [F3 (ERAS)] button.
   The MC-307 enters the Realtime Erase mode.

```
REALTIME ERASE:
ALL

M=    8  1-02
                EXIT BPM
```

5. Select the type of data you want to erase using the [VALUE] dial or the [INC/DEC] buttons.

* *To erase the data on the knobs or part mixer, use the relevant knobs on the panel to specify it.*

* *For more information on the types of data that can be selected, refer to "Range of Settings" at the end of this section.*

6. Data is deleted as long as the [REC] button is pressed.

7. To return to recording mode, press [F3 (EXIT)] or [EXIT].

Available Settings:

Parameters you can specify in Step 5.
- ALL: All musical data in the recording part will be erased.

- NOTE: Notes in the specified range will be erased.
- PC: Program changes will be erased.
- CC: All control changes will be erased.
- BEND: Pitch bend will be erased.
- P-AFT: Polyphonic aftertouch will be erased.
- C-AFT: Channel aftertouch will be erased.
- SYS-EX: System exclusive data messages will be erased.
- TEMPO: Tempo data (BPM data) will be erased.
- MUTE: Mute data will be erased.
- CC#0–CC#127:   Control changes of the selected controller number will be erased.

* *If you specify NOTE, all note data that occurs while you hold down the [REC] button will be erased. If you wish to erase note data for specific notes, hold down keyboard pads to indicate the range of data that you wish to erase. For example, if you hold down the C2 and G2 keys, all data in the range of C2–G2 will be erased while you hold down the keyboard pads.*

Parameters you can specify using the knobs in Step 5

The parameters you can erase are those which you entered using the [FILTER CUTOFF] knob, [FILTER RESONANCE] knob, [FILTER] button, [LF01 DEPTH], [LFO1] button (wave select) or Assignable knobs [1] through [4]. Turning these knobs in Step 5 allows you to specify the parameters used with them to be erased.

* *For the parameters you can assign to the Assignable knobs, see P. 28.*

Recording the mute controls

The action of turning the MUTE CTRL button on and off while you are playing can be recorded in real time. Such actions are recorded on a special track called the Mute Control Part.

Procedure

The MUTE data is recorded in the mute control part. The [RHYTHM PART VIEW] button can be used as the mute control part button through the following setting. To do so, switch the MUTE CTRL BUTTON on by following the procedure below.

1. Press the [SYSTEM] button.

2. Press the [F1 (SYS)] button.

3. Press the [F3 (SEQ)] button.

4. Press the [F4 (PRM4)] button.

5. Using the [CURSOR (up/down)] buttons, move the cursor to RHY VIEW.

6. Set "MUTE CTRL" using the [VALUE] dial or the [INC/DEC] buttons.

Now, the [RHYTHM PART VIEW] button can be used as the [MUTE CTRL] button.

Next, record your music.

7. Press the [PTN] button.

8. Press the [REC] button.

9. Press the [F2 (REALTIME)] button.
    The display changes to the Realtime Recording Standby screen.

10. Press the [PART SELECT] button.

11. Press the [RHYTHM PART VIEW] button.
    (Since this button has been set to be used as the MUTE CTRL button, the MUTE CTRL part is recorded.

12. Press the [PLAY] button.

Recording starts.

13. Press [PART MUTE] button.

14. Pressing the [PART] buttons [R], [1] to [7], record the muting operations.

15. When you have finished recording, press [STOP] button.

    *   *To restore the original function of the [RHYTHM PART VIEW] button, repeat Steps 1 through 4 and set it to "NORMAL" in Step 6.*

Recording changes in BPM

You can record the operations used to change the BPM while playing music.

Procedure

Since a change in the BPM is recorded in the MUTE CTRL part, the operating procedure is identical to the previous one, "Recording the Mute Settings." When you started recording, record changes in the BPM using the [VALUE] dial, the [INC/DEC] buttons or the [TAP] button.

*   *The BPM is set to its setup parameter (i.e., the BPM is effective just after pattern selection) in "Recording your music as you play it on the keyboard pads (Realtime Recording)" (P. 63).*

NOTE

Tempo changes made in Turntable Emulation are not recorded.

NOTE

BPM changes are recorded as "TEMPO Data" in the MICROSCOPE window (P. 72).

Chapter5

Recording Data Entered in Sequence

What is the TR-REC?

TR-REC is a way of recording in which the keyboard pads are used as timing scale buttons for inputting note messages.

By pressing the keyboard pads, turning the pad lights on or off, you can input and delete notes. This lets you place sounds with whatever timing you want very simply.

TR-REC for Rhythm Parts

Procedure
First, Select Part R and choose the Rhythm Set to be played.

1. Press the [PART SELECT] button.

2. Press the [R] Part button.
   Part R is selected.

3. Press the [F1 (PATCH)] button.

4. Rotate the [VALUE] dial or press [INC/DEC] to select the Rhythm Set.

———— Make the preparations for recording ————

5. Press the [PTN] button.

6. Press the [REC] button.
   The "REC MODE SELECT" screen appears.

   ```
   REC MODE SELECT:
        REAL   TR-
        TIME   REC
          ▼      ▼
   ```

7. Press the [F3 (TR-REC] button.
   The "TR-REC STANDBY" screen appears.

   ```
   TR-REC STANDBY:
   BEAT                  4/4
   MEASURE LENGTH          4
   BPM                 120.0
   PACH
   ```
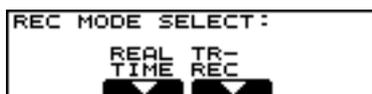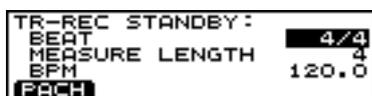
8. Using the [CURSOR (up/down)] buttons, move the cursor to the position next to the function you want to set.

9. Set your preference using the [VALUE] dial or the [INC/DEC] buttons.

Available Settings
- **Beat**:
  Range: 2/4–7/4, 5/8–7/8, 9/8, 12/8, 9/16, 11/16, 13/16, 15/16, 17/16, 19/16

  * *Only blank Patterns can be selected.*

- **Measure Length**:
  Determines the length of the pattern.

Range: 1–32

* *Although Patterns can be lengthened after they have been recorded, the settings cannot be used to shorten Patterns.*
  (To shorten a pattern, use the DELETE command under TRACK EDIT (p. 78) to delete one or more measures.)

- **BPM**:
  Specifies the initial setting of the BPM.
  (To modify this setting later on, change the BPM for playing (P. 18) before saving the pattern.)
  Range: 20.0–240.0

.If you want to select a patch for a recording part here, see the subsequent "Selecting a patch from all lists" If you do not want to do so, proceed to step 6.

———————— Now, start recording. ————————

10. Press the [PLAY] button.
    The "TR-REC" screen appears.

    ```
    TR-REC:  LEN= 4    C 4
                         64
    01-01        1  ♪   80
    PACH          VIEW BPM
    ```

    The MC-307 is ready for recording. You can play back your music in a loop.

11. Press [SCALE] to select the scale. Each time you press the button, you will cycle through the available scales. Make the indicator light for the desired scale. The recording input area is determined by the scale that you select.

SCALE

Range:
- ♪ : Keyboard pads [1]–[16] will correspond to a recording input area of one measure, and can be used to enter 16th notes.

- ♪ : Keyboard pads [1]–[16] will correspond to a recording input area of two beats, and can be used to enter 32nd notes.

- ♪₃ : Keyboard pads [1]–[12] will correspond to a recording input area of 1 measure, and can be used to enter 8th note triplets.

- ♪₃ : Keyboard pads [1]–[12] will correspond to a recording input area of two beats, and can be used to enter 16th note triplets.

Specify the lengths of rhythm tones and notes and their loudness.

12. Press the [TR-REC] button to turn off the indicator. The keyboard pads have been switched to work as ordinary keys (i.e., keys used to specify the scale).

(Example) OCTAVE SHIFT = -1

13. By pressing the relevant keyboard pads, select the rhythm tones you want to enter.

* By pressing the [OCT (-/+)] button, you can use Rhythm tones other than those of the octave for the keyboard pads currently being played.

* For more on the correspondence between each Rhythm tone and Mute button, refer to P. 159.

14. Upon selection of rhythm tones, press the [TR-REC] button second time to return the MC-307 to the Recording mode.
(Now, the keyboard pads have been switched back to the mode in which you set the note input timing.)

15. Using Assignable knob [3], determine the type of note for the note message to be entered.

Available Settings: ♪ ♪ ♪₃ ♪ ♪₃ ♪ ♩₃ ♩ ♩ 𝅝

16. Using Assignable knob [4], determine the gate time (length of sound) for the note message to be entered. You determine this value in proportion to the gate time and the length of note appearing on the display. For example, if you want 80%, enter the note message whose length is 80% of the note you selected in Step 9.

Available Settings: 5 - 200%

17. Using Assignable knob [2], determine the velocity (loudness) for the note message to be entered. The higher the value, the louder the sound.

Available Settings: 1 - 127

18. Press the button corresponding to the timing at which you want to enter the note message to illuminate its indicator and then enter the data.To erase the data, press the button to turn off its indicator.

* *Use the [◄◄] or [►►] buttons to shift the position of the measure (or the position in the measure) to be recorded.*

When a rhythm divided into sixteenth notes or eighth note triplet has been selected with the [SCALE] button, one press of the [◄◄] or [►►] button causes the position of the measure to shift one measure.
When a rhythm divided into 32nd notes or sixteenth note triplet has been selected with the [SCALE] button, one press of the [◄◄] or [►►] buttons causes the position of the measure to shift half a measure.

19. When recording has finished, press the [STOP] button.

Procedure for selecting rhythm set

Using the Recording screen, carry out the following operations.

Procedure

1. Press the [PACH] button.
The "RHYTHM" screen appears.

2. Select a rhythm set using the [VALUE] dial or the [INC/DEC] buttons.

3. Upon selection, press the [EXIT] button to return to the Recording screen.

Chapter5

TR-REC for Parts 1–7

In Parts 1-7, as with the Rhythm Part, only the rhythm, at a single pitch, is recorded. Following this, you can alter the pitches of any notes you want to change.

Inputting Only the Timing at a Single Pitch

Procedure

Before recording, first make all the necessary settings.

1. Referring to Steps 1-9 in "TR-REC for Rhythm Parts" (P. 68), make the recording settings.

Begin recording.

2. Press the [PLAY] button.
   The "TR-REC" screen appears.

   ```
   TR-REC:   LEN= 4│ C 4
                            64
   01-01       1│♪  80
   PTCH        VIEW BPM
   ```

   The MC-307 is now enabled for recording.
   Simultaneously, looped playback of the performance being input can be heard.

3. Press [SCALE] to select the scale.
   The scale is switched each time the button is pressed. Press the button until the indicator for the scale you want to use is lit. The recording input range is determined according to the scale selected.
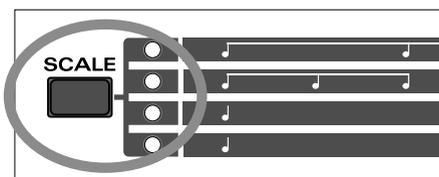
Next, set the pitch, duration, and volume for the sounds being input.

4. Press the [TR-REC] button, turning off the button light. The function of the keyboard pads is switched, so they now can be used to specify keyboard scales (instead of input timing).

5. Press the keyboard pads to select the pitches for the sounds being input.
   * By pressing the [OCT (-/+)] button, you can input pitches other than those in the octave for the keyboard pads currently being played.
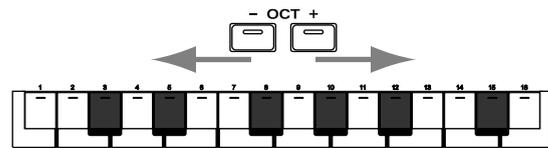
6. Upon selection of note, press the [TR-REC] button second time to return the MC-307 to the Recording mode.
   (Now, the keyboard pads have been switched back to the mode in which you set the note input timing.)
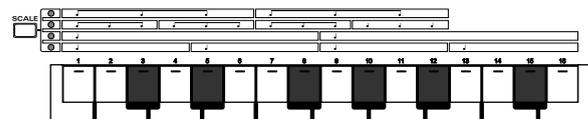
7. Using Assignable knob [3], determine the type of note for the note message to be entered.

8. Using Assignable knob [4], determine the gate time (length of sound) for the note message to be entered.

9. Using Assignable knob [2], determine the velocity (loudness) for the note message to be entered.

10. Press the button corresponding to the timing at which you want to enter the note message to illuminate its indicator and then enter the data. To erase the data, press the button to turn off its indicator.

    * *Use the [◄◄] or [►►] buttons to shift the position of the measure (or the position in the measure) to be recorded.*

    When a rhythm divided into sixteenth notes or eighth note triplet has been selected with the [SCALE] button, one press of the [◄◄] or [►►] button causes the position of the measure to shift one measure.
    When a rhythm divided into 32nd notes or sixteenth note triplet has been selected with the [SCALE] button, one press of the [◄◄] or [►►] buttons causes the position of the measure to shift half a measure.

11. When recording has finished, press the [STOP] button.

This completes input of the note rhythm. Next up is editing of the pitch.

Change the pitch of a note you input.

When you finish inputting the timing, use the following procedure to input the pitch or chord.

Procedure

1. Press the [PTN] button and then the [REC] button.
The "REC MODE SELECT" screen will appear.

2. Press the [F3 (TR-REC)] button.
The "TR-REC STANDBY" screen will appear.

3. Press the [PLAY] button.
The "TR-REC" screen will appear.

Specify the note type, duration, and velocity.

4. You can use assignable knob [3] to specify the note type of the note message that will be input, assignable knob [4] to specify its gate time (duration), and assignable knob [2] to specify the velocity (volume).

* *For the setting values in step 4, refer to P. 68.*

Until this point, the keyboard pads act as a scale to specify the timing of the notes.

Specify the note you entered in "Inputting only the timing at a single pitch," the pitch of which you wish to change.

.

Next, specify the timing of the note that you wish to change.

5. Hold down the [F3 (VIEW)] button, and specify the note using keyboard pads [1]–[16].
The "CHORD INPUT" screen will appear.
A screen will appear in which you can input a pitch or chord for the specified note.
The selected location will be displayed in the screen.

```
CHORD INPUT     1-4-24
|||||||||||||||||||||||
CLR       CENTER      OK
```
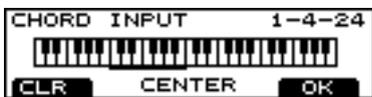
The keyboard pads now provide a pitch input function.

Next, specify the pitch or input the chord. In the "CHORD INPUT" screen, the keyboard pads are used to specify pitches.

6. Use the [OCT (-/+)] buttons to find the keyboard pad that is lit.
This is the note that you input in "Inputting only the rhythm at a single pitch."

7. Press the button that you found in step 9, getting the light to go out.

The note will be deleted.

* *By pressing the [F1 (CLR)] button, you can delete all notes located at that timing.*

8. Press the keyboard pad for the desired pitch to input a note message.
A note message at the pitch that is lit will be input. The screen will show the note message that you input

```
CHORD INPUT     1-4-24
||||||||||||||||||||||||
CLR     CENTER       OK
```

9. When you are finished inputting, press the [EXIT] button to return to the "TR-REC" screen.

* *By pressing [CURSOR (right)] in step 12, you can move to the next location where a note has been input. By pressing [CURSOR (left)], you can move to the previous location where a note has been input.*

10. Repeat steps 5–12 to edit note messages that are at different timings.

11. When you are finished with all editing, press the [STOP] button.

MEMO

After inputting note data, you can select a pitch in the screen of step 3 to check the timing at which notes of that pitch were input. The input timing of notes at other pitches can be checked by changing the value at the location shown in the illustration.

Example: If you input this phrase.....

C2   C2   A#1 G1

```
TR-REC:   LEN= 4:  C 2
01-01        1     ♪ 80
PACH        VIEW  BPM
```

it will be displayed as follows.   ○ : lit

C2

A#1

G1

Chapter5

Individually Editing Performance Data (Micro Edit)

You can edit the performance data in the completed pattern on a piece-by-piece basis.

CAUTION: The data in any patterns you've edited will be lost if the MC-307's power is turned off. If you wish to keep the pattern that you created, you must use the Pattern Write operation. (refer to Saving the Pattern (p. 83).)

Basic Operation

Invoke the microscope screen. You will find a list of performance data on it. To check it, scroll using the [VALUE] button, [INC/DEC] button and [CURSOR (up/down)] buttons.

Procedure

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which you want to edit.

3. Press the [F3 (EDIT)] button.
   The "PATTERN EDIT" screen appears.

4. Press the [F3 (MICRO SCOPE)] button.
   The "MICROSCOPE" screen appears. Use this screen to view or edit the data.

(Example) Microscope screen

Note name   Velocity

MICROSCOPE   PART-2
1-1-00 2 4 104 0-22
1-1-24 2 4 104 0-22
INS DEL MOVE VIEW

Position   Gate time
(Measure - Beat - Clock)   (Beat - Clock)
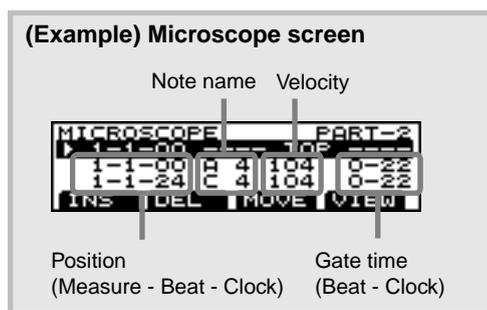
Press the [CURSOR (left)] button several times until the entire line looks like a black band. Using the [VALUE] dial or the [INC/DEC] buttons, display the data in the order in which it was entered.

Musical Data Handled in Microscope Mode

The Microscope lets you view and edit the following 9 types of musical data (MIDI message).

NOTE

Data that plays a sound.

Available Settings:

- Note name: C-1–G9
- Velocity: 1–127
- Gate time: 0-1 – 99-0

* You can also input NOTE and VELO by playing an external MIDI keyboard. Move the cursor to each setting, and use an external MIDI keyboard to play the desired note or velocity.

CC (Control Change)

These MIDI messages correspond to various control numbers, and are used apply effects such as modulation or portamento. These are used mainly to operate knobs and the part mixer.

* *If you would like to know more about the function of each controller number...*
- "Transmit/Receive Setting List" (P. 192)

* *If you want to know which control change the MC-307 sound generator can receive?*
- "MIDI Implementation" (P. 194)

Range:

- CC#:   0–127 (Controller Number)
- VALUE: 0–127

PC (Program Change)

These MIDI messages are used to select sounds (patches).
The sound corresponding to the program number will be selected.
If you want to know the patch numbers corresponding to the program numbers, refer to Preset Patch List (p. 155).

Range:

- PC#: 1–128 (Program Number)

P-BEND (Pitch Bend)

MIDI messages which change the pitch while you are playing.

Range: -8192– +8191

P-AFT (Polyphonic Aftertouch)

These MIDI messages apply aftertouch to individual notes.

Range:

- NOTE: C-1 – G9 (Note)
- VALUE: 0 – 127

C-AFT (Channel Aftertouch)

These MIDI messages apply aftertouch to an entire MIDI channel.

Range: 0 – 127

TEMPO (Tempo Change)

This data controls the tempo (BPM). This is used only in the MUTE CTRL part.

Range: 20.0 – 240.0

MUTE

This is Mute data for each part and rhythm group. It is used only in the Mute Control part.

 * In the Microscope, mute data is displayed as "*".

Range:

Part Group: PART-R, PART-1 – PART-7,
BD, SD, HH, CLP, CYM, TOM/PERC, HIT, OTHERS
Value: OFF, ON

SYS-EX (System Exclusive)

These are MIDI messages unique to the MC-307. Part of the beginning of the data appears in the microscope. For a complete view of the data, press the [CURSOR (right)] button.

System Exclusive messages begin with an F0 and end with an F7 and the data is expressed in hexadecimal (00–7F) form.

 * *The System Exclusive messages in the MC-307 except for some of the parameters are compatible with those in the MC-505 and JX-305. Of the messages contained in the MIDI implementation, those common to the MC-505 and JX-305 can interchange data with the MC-307.*

 * *The MC-307 is capable of receiving bulk dumps from the MC-505 . On the other hand, the MC-505 may fail to receive the bulk dumps from the MC-307 due to differences in the number of patches.*

Procedure

1. Invoke the microscope screen (P. 72) and using the [VALUE] dial, position the cursor at the System Exclusive message you want to change.

2. Press the [CURSOR (left)] button several times.

The display changes to the System Exclusive input screen.
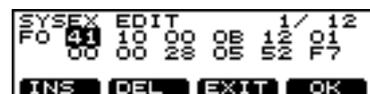
3. Use the [CURSOR (left/right)] buttons to the cursor to the position you want to change.

4. Change the value using the [VALUE] dial or the [INC/DEC] buttons.

 At this time, you can use the keyboard pads to enter a hexadecimal number. The hexadecimal digit entered by each pad is as follows.

5. Pressing [F4 (OK)] button finalizes the edited data.

When the settings have been finalized, you will return to the normal Microscope display.If you do not want to finalize it, press the [EXIT] button.

 * *It is not possible to change the F0 that begins the message or the F7 that ends it.*

 * *By pressing [F2 (INS)] button you can add the data at the cursor location.*

 * *Instead, you can add data by positioning the cursor at F7 and entering a value from the keyboard pad.*

 * *By pressing [F3 (DEL)] button you can delete the data at the cursor location.*

To cancel the operation without changing the data, press [EXIT] button.

About the checksum

When inputting a Roland Type IV exclusive message, you must input a checksum immediately before the F7. Since the MC-307 will calculate the checksum automatically, there is no need for you to modify the checksum value. When you input a new exclusive message, you can simply input an arbitrary number immediately before F7, and the MC-307 will calculate the correct number automatically.

 * If you do not want the checksum to be calculated automatically, set the AUTO CHECKSUM setting (p. 119) to "OFF."

Modifying Performance Data Values

Changes existing data settings.

Procedure

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which you want to edit.

3. Press the [F3 (EDIT)] button.
   The "PATTERN EDIT" screen appears.

4. Press the [F3 (MICRO SCOPE)] button.
   The "MICROSCOPE" screen appears.

5. Use the [CURSOR (up/down)] buttons to select the data whose setting is to be modified.

6. Use the [CURSOR (left/right)] buttons to move the cursor to a setting as shown below.

```
MICROSCOPE         PART-2
 1-1-00 ---- TOP ----
 1-1-00 CC    74     37
 1-1-00 A 1 104  O-22
[INS ][DEL ][MOVE][VIEW]
```

7. Change a value using the [VALUE] dial or the [INC/DEC] buttons.

Inserting Musical Data (Insert Event)

Specify the position at which you want to insert data and select the type of data to add.

Procedure

———— Invoke the microscope screen. ————

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which you want to edit.

3. Press the [F3 (EDIT)] button.
   The "PATTERN EDIT" screen appears.

4. Press the [F3 (MICROSCOPE)] button.
   The "MICROSCOPE" screen appears.

—— Specify the position at which data is to be inserted. ——

5. Pressing the [CURSOR (left/right)] buttons, position the cursor at the measure, beat or clock.

6. Determine the insertion position using the [VALUE] dial or the [INC/DEC] buttons.

```
MICROSCOPE         PART-2
 1-1-00 CC    74     37
 1-1-02 *
 1-1-04 A 1   43   O-22
[INS ][DEL ][MOVE][VIEW]
```

———— Insert the data. ————

7. Press the [F1 (INS)] button.

The screen for selecting the types of data to be inserted appears.

Example1: R, 1 - 7 Part

```
INSERT EVENT
 NOTE       P-BEND
 PC         P-AFT
 CC         C-AFT
           [EXIT ][ OK ]
```

Example2: MUTE CTRL part

```
INSERT EVENT
 SYS-EX
 TEMPO
 MUTE
           [EXIT ][ OK ]
```

8. Select the type of data using the [VALUE] dial or the [INC/DEC] buttons.

   * For the types of data you can enter, see "Setting Range" at the end of this section.

9. Upon selection, press the [F4 (OK)] button.

   * When you have selected SYS-EX (System Exclusive), the following message appears. Using the same procedure as the one for Change Event, enter hexadecimal numbers by pressing the keyboard pad and [ENTER] button in turn.

Available Settings:

When the microscope is in the range from [R], [1] to [7]:

- NOTE: Note
- PC: Program Change
- CC: Control Change
- BEND: Pitch Bend
- P-AFT: Polyphonic Aftertouch
- C-AFT: Channel Aftertouch
- When the microscope is MUTE CTRL:

When the microscope is in the "MUTE CTRL:"

- SYS-EX: System exclusive
- TEMPO: Tempo change message
- MUTE: Mute message

Deleting Musical Data (Delete Event)

Specify the data to be deleted and execute Delete Event.

Procedure

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which you want to edit.

3. Press the [F3 (EDIT)] button.
   The "PATTERN EDIT" screen appears.

4. Press the [F3 (MICROSCOPE)] button.
   The "MICROSCOPE" screen appears.

5. Using the [CURSOR (up/down)] buttons, select the data to be deleted.

6. Press the [F2 (DEL)] button.

The "DELETE EVENT" message appears and the performance data is deleted.

Moving Musical Data (Move Event)

Specify the data to be moved and determine the destination before executing Move Event.

Procedure

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which you want to edit.

3. Press the [F3 (EDIT)] button.
   The "PATTERN EDIT" screen appears.

4. Press the [F3 (MICROSCOPE)] button.
   The "MICROSCOPE" screen appears.

5. Using the [CURSOR (up/down)] buttons, select the data to be moved.

6. Press the [F3 (MOVE)] button.
   The "MOVE EVENT" screen appears.

```
MOVE EVENT
  1-1-00 A 4 104  0-22

  ARE YOU SURE?
            EXIT EXEC
```
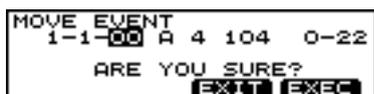
7. Using the [CURSOR (left/right)] buttons, determine the measure, beat and clock for the destination.
   then, Using the [CURSOR (up/down)] buttons, set the value.

8. Pressing the [F4 (EXEC)] button.

Move Event is executed.

Viewing Desired Performance Data Only (View Filter)

With this function, you can view specific data to facilitate searching for the desired performance data.

Procedure

1. Press the [PTN] button.

2. Press the [F3 (EDIT)] button.
   The "PATTERN EDIT" screen appears.

3. Press the [F3 (MICROSCOPE)] button.
   The "MICROSCOPE" screen appears.

4. Press the [F4 (VIEW)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to the data you want to set.

   * *For the types of data you can specify, see "Setting Range" at the end of this section.*

6. Use the [VALUE] dial or the [INC/DEC] buttons to set the data to On and off.

7. When you finish setting, press the [EXIT] button.

The data you turned off does not display in the "MICROSCOPE" screen.

Available Settings:

- NOTE
- PROGRAM CHANGE
- CONTROL CHANGE
- PITCH BEND
- POLY AFTER: Polyphonic Aftertouch
- CHANNEL AFTER: Channel Aftertouch
- SYS-EX: System Exclusive
- TEMPO
- MUTE

Chapter5

Editing Patterns (Pattern Edit)

The process of editing the musical data in a pattern is called Pattern Editing. You can modify the content of the musical data in a pattern, or combine various patterns to create an entirely different pattern.

CAUTION: The data in any patterns you've edited will be lost if the MC-307's power is turned off. If you wish to keep the pattern that you created, you must use the Pattern Write operation. (refer to Saving the Pattern (p. 83).)

Copying a Portion of a Pattern (Copy)

A specific portion of a pattern can be copied to another pattern.

Procedure

First, select the original pattern to be copied.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the original pattern to be copied.

Invoke the screen for executing Copy.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
   The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left, right)] button to invoke the screen displaying "COPY."

6. Press the [F1 (COPY)] button.
   The setup screen for the source appears.

Specify the pattern range to be copied.

7. Select the part to be copied by pressing the relevant PART button, [R], [1] to [7].

8. Move the cursor to "FROM" by pressing the [CURSOR] buttons, and then select the measure at the beginning of the portion of the pattern to be copied using the [VALUE] dial or the [INC/DEC] buttons.

   * If SETUP is selected, the setup parameter for the pattern is also copied.

9. Move the cursor to "FOR" by pressing the [CURSOR] buttons, and then specify the number of measures to be

copied from the beginning of the portion of the pattern to be copied using the [VALUE] dial or the [INC/DEC] buttons.

   * If you selected SETUP in Step 9 and only want to copy the setup parameter, select "-" with FOR.

10. Move the cursor to "STATUS" by pressing the [CURSOR] buttons, and then select the data to be copied from the copy source data using the [VALUE] dial or the [INC/DEC] buttons.

11. Press the [F4 (OK)] button.
    The setup screen for the destination appears.

Enter the settings for the copy destination pattern.

12. To select the copy destination part, press the relevant PART button, [R], [1] to [7] or [RHYTHM PART VIEW]. If you specified two or more parts as the copy source, this step is not required. (They will be copied to the same copy destination parts as the copy source parts.)

   * By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

13. Move the cursor to "PTN" by pressing the [CURSOR] buttons, and then select the pattern number to which the part is to be copied using the [VALUE] dial or the [INC/DEC] buttons.

14. Move the cursor to "MEAS" by pressing the [CURSOR] buttons, and then select the measure number at the beginning of copy destination using the [VALUE] dial or the [INC/DEC] buttons.

15. Move the cursor to "MODE" by pressing the [CURSOR] buttons, and then select the copying mode using the [VALUE] dial or the [INC/DEC] buttons.
    To copy the portion of a pattern with the data written at the destination left intact, select "MIX." To copy it with that data overwritten, select "REPL."

16. Move the cursor to "TIMES" by pressing the [CURSOR] buttons, and then select the number of copying operations using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute copying.

17. Press the [F4 (OK)] button.
    A screen asking you whether or not you want to execute copying appears.

18. Press the [F4 (EXEC)] button.

Copying is executed and, upon completion, the normal display reappears.

Available Settings:

SOURCE

FROM: SETUP, 1 – 32 (Maximum)

FOR: 1 – 31 (Maximum), ALL

DESTINATION

PTN: P:001–P:710, U:001–U:200

MEAS: 1 – 31 (Maximum), END

STATUS:

- ALL   All musical data

- NOTE   Note

- PC   Program Change

- CC   Control Change

- BEND   Pitch Bend

- P-AFT   Polyphonic Aftertouch

- C-AFT   Channel Aftertouch

- SYS-EX   System Exclusive

- TEMPO Tempo (BPM)

- MUTE   Mute

MODE: REPL, MIX

TIMES: 1 – 32 (Maximum)

NOTES

* *It is not possible to specify a number of measures that would cause the length of the pattern to exceed 32 measures when the Copy was executed.*

* *If more than one part was selected as the copy source, the data will automatically be copied to the same parts as the copy source.*

* *If [MUTE CTRL] was selected as the copy source part, only [MUTE CTRL] can be selected as the copy destination part.*

* *It is not possible to copy between patterns that have different time signatures.*

Erasing Unwanted Data (Erase)

Erases part (or all) of a pattern.

Procedure

Select a pattern for which Erase is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Erase is to be executed. Invoke the screen for executing Erase.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left, right)] button to invoke the screen displaying "ERASE."

6. Press the [F2 (ERAS)] button.
The screen for editing Erase appears.
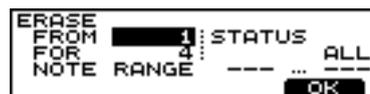
7. Select the part to be edited using the relevant PART button, [R], [1] to [7] or [RHYTHM PART VIEW].

* By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

8. Move the cursor to "FROM" by pressing the [CURSOR] buttons, and then select the measure at the beginning of the portion of the pattern to be erased using the [VALUE] dial or the [INC/DEC] buttons.

9. Move the cursor to "FOR" by pressing the [CURSOR] buttons, and then specify the number of measures to be erased from the beginning of the portion of the pattern using the [VALUE] dial or the [INC/DEC] buttons.

10. Move the cursor to "STATUS" by pressing the [CURSOR] buttons, and then select the data to be erased from the portion of the pattern using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute erasing.

11. Press the [F4 (OK)] button.
A screen asking you whether to not you want to execute erasing appears.

12. Press the [F4 (EXEC)] button.
The Erase operation is carried out, and the normal display reappears.

* *If you selected "STATUS" in Step 10, you can specify the range of note numbers to be erased.*

Chapter5

To do so, move the cursor to "NOTE RANGE" by pressing the [CURSOR (down)] button before entering the range using the [VALUE] dial or the [INC/DEC] buttons.

* ***

```
ERASE
FROM        1 STATUS
FOR         4       NOTE
NOTE RANGE C#4 ... C#5
                    OK
```
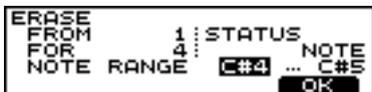
Available Settings:

FROM: F1–the last measure number

FOR: 1–ALL (ALL ... All measures)

STATUS:

- ALL   All musical data
- NOTE   Note
- PC   Program Change
- CC   Control Change
- BEND   Pitch Bend
- P-AFT   Polyphonic Aftertouch
- C-AFT   Channel Aftertouch
- SYS-EX   System Exclusive
- TEMPO   Tempo (BPM)
- MUTE   Mute

Deleting Unwanted Measures (Delete Measure)

This operation deletes unwanted measures from a pattern, and moves any subsequent measures toward the beginning to close the gap. If, in a part, the deleted measures are followed by data, the musical data of that part will be shortened. If all parts were specified for the delete operation, the pattern itself will become shorter.

Procedure

Select the pattern for which Delete is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern on which Delete is to be executed. Invoke the screen for executing Delete.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button. The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left, right)] button to invoke the screen displaying "DELETE."

6. Press the [F3 (DEL)] button. The screen for editing Delete appears.
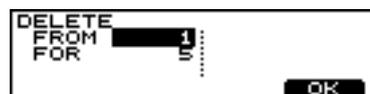
```
DELETE
FROM        1
FOR         5
                    OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7] or [RHYTHM PART VIEW].

   * By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

8. Move the cursor to "FROM" by pressing the [CURSOR] buttons, and then select the measure at the beginning of the portion of the pattern to be deleted using the [VALUE] dial or the [INC/DEC] buttons.

9. Move the cursor to "FOR" by pressing the [CURSOR] buttons, and then specify the number of measures to be deleted from the beginning of the portion of the pattern using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute delete.

10. Press the [F4 (OK)] button. A screen asking you whether or not you want to execute delete appears.

11. Press the [F4 (EXEC)] button. Delete is executed and, upon completion, the normal display reappears.

Available Settings:

FROM: 1–32 (Maximum)

FOR: 1–32 (Maximum), ALL

Inserting Blank Measures (Insert Measure)

A blank measure is inserted in the Pattern between the specified measure and the measure following it. If you wish to add more musical material in the middle of a pattern, use this operation to insert blank measures before recording the additional material. The timing of the inserted measure will be the same as that of the measures located at the preceding positions.

Procedure

Select a pattern for which Insert is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Insert is to be executed.

Invoke the screen for executing Insert.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
   The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left, right)] button to invoke the screen displaying "INSERT."

6. Press the [F4 (INS)] button.
   The screen for editing Insert appears.
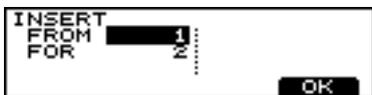
```
INSERT
FROM        1
FOR         2
                    OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7] or [RHYTHM PART VIEW].

   * By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

8. Move the cursor to "FROM" by pressing the [CURSOR] buttons, and then select the measure at the beginning of the measures to be inserted using the [VALUE] dial or the [INC/DEC] buttons.

9. Move the cursor to "FOR" by pressing the [CURSOR] buttons, and then specify the number of measures to be inserted from the beginning of the measures using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute insert.

10. Press the [F4 (OK)] button.
    A screen asking you whether or not you want to execute insert appears.

11. Press the [F4 (EXEC)] button.
    Insert operation is executed and, upon completion, the normal display will reappear.

Available Settings:

FROM: 1–32 (Maximum)

FOR: 1–32 (Maximum)

Transposing the Pitch (Transpose)

Transposes the note number (pitch) for each part in a pattern. You can specify a transposition of up to +/-2 octaves.

Procedure

Select a pattern for which Transpose is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Insert is to be executed. Invoke the screen for executing Transpose.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
   The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left)] button to invoke the screen displaying "TRANSPOS."

6. Press the [F1 (TRNS)] button.
   The screen for editing Transpose appears.
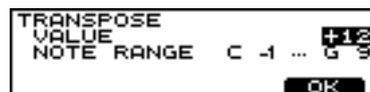
```
TRANSPOSE
VALUE              +12
NOTE RANGE  C -1 ... G 9
                    OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7].

8. Press the [CURSOR (up)] button to move the cursor to "VALUE."

9. Using the [VALUE] dial or the [INC/DEC] buttons, specify the amount of transposition. As the value is increased (or decreased) by one, the amount increases (decreases) by a semitone.

   * You can also specify this by pressing a keyboard pad.

10. Press the [CURSOR (down)] button to move the cursor to "NOTE RANGE."

11. Using the [VALUE] dial or the [INC/DEC] buttons, specify the range of the note messages to be transposed.

Now, execute Transpose.

12. Press the [F4 (OK)] button.

A screen asking you whether or not you want to execute Transpose appears.

13. Press the [F4 (EXEC)] button.

Transpose is executed and, upon completion, the normal display reappears.

Range:

VALUE: -24–0– +24

NOTE RANGE: C -1–G 9

Chapter5

Modifying the Strength of Notes (Change Velocity)

This operation modifies the velocity (strength) of the notes recorded in the pattern. Increasing the velocity values will cause the notes to be played more strongly. This operation can be used to increase or decrease the note dynamics.

Procedure

Selects a pattern for which Change Velocity is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern on which Change Velocity is to be executed.

Invoke the screen for executing Change Velocity.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
   The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left)] button to invoke the screen displaying "VELOCITY."

6. Press the [F2 (VELO)] button.
   The screen for editing Change Velocity appears.
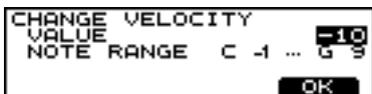
```
CHANGE VELOCITY
VALUE              -10
NOTE RANGE   C -1 ... G 9
                      OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7].

8. Press the [CURSOR (up)] button to move the cursor to "VALUE."

9. Using the [VALUE] dial or the [INC/DEC] buttons, specify the amount by which velocity is to be changed.

10. Press the [CURSOR (up)] button to move the cursor to "NOTE RANGE."

11. Using the [VALUE] dial or the [INC/DEC] buttons, specify the range of the note messages to be changed velocity.

   * You can also specify this by pressing a keyboard pad.

Now, execute change velocity.

12. Press the [F4 (OK)] button.
    A screen asking you whether or not you want to execute Transpose appears.

13. Press the [F4 (EXEC)] button.

Change Velocity is executed and, upon completion, the normal display reappears.

Range:

VALUE: -99–0– +99

NOTE RANGE: C -1–G 9

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

   * *If you wish to change velocity only a specific range of notes, press the keyboard pad to specify the desired range. If you do not specify the note range, all notes will be transposed.*

Modifying the Note Length (Change Gate Time)

This operation modifies the gate time (duration) of the notes recorded in the pattern. This can be used to make the overall performance more staccato or tenuto.

Procedure

Select the pattern for which Change Gate Time is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Change Gate Time is to be executed.

Invoke the screen for executing Change Gate Time.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
   The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left)] button to invoke the screen displaying "GATETIME."

6. Press the [F3 (GATE)] button.
   The screen for editing Change Gate Time appears.

```
CHANGE GATETIME
VALUE              +2
NOTE RANGE   C -1 ... G 9
                      OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7].

8. Press the [CURSOR (up)] button to move the cursor to "VALUE."

9. Using the [VALUE] dial or the [INC/DEC] buttons, specify the amount by which gate time is to be changed.

10. Press the [CURSOR (down)] button to move the cursor to "NOTE RANGE."

11. Using the [VALUE] dial or the [INC/DEC] buttons, specify the range of the note messages to be changed Gate Time.

   * You can also specify this by pressing a keyboard pad.

Now, execute Change Gate Time.

12. Press the [F4 (OK)] button.

A screen asking you whether or not you want to execute Change Gate Time appears.

13. Press the [F4 (EXEC)] button.

Change Gate Time is executed and, upon completion, the normal display reappears.

Range:

VALUE: -99–0– +99

NOTE RANGE: C-1–G 9

Shifting the Timing Slightly (Shift Clock)

Shifts the timing of musical data recorded in a pattern forward or backward in 1-clock steps (1/96 of a beat). Use this when you wish to slightly shift the overall timing.

Procedure

Select the pattern for which Shift Clock is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Shift Clock is to be executed.

Invoke the screen for executing Shift Clock.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (left/right)] buttons to invoke the screen displaying "CLOCK."

6. Press the [F4 (CLK)] button.
The screen for editing Shift Clock appears.
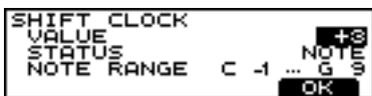
```
SHIFT CLOCK
VALUE                    +3
STATUS                 NOTE
NOTE RANGE    C -1 ... G 9
                         OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7] or [RHYTHM PART VIEW].

* By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

8. Move the cursor to "VALUE" by pressing the [CURSOR] buttons, and then select the amount of shift clock using the [VALUE] dial or the [INC/DEC] buttons.

9. Move the cursor to "STATUS" by pressing the [CURSOR] buttons, and then select the kind of data the [VALUE] dial or the [INC/DEC] buttons.

Now, execute Shift Clock.

10. Press the [F4 (OK)] button.

A screen asking you whether or not you want to execute Shift Clock appears.

11. Press the [F4 (EXEC)] button.

Shift Clock is executed and, upon completion, the normal display reappears.

Available Settings:

VALUE: -99–0– +99

STATUS:

- ALL   All musical data
- NOTE   Note
- PC   Program Change
- CC   Control Change
- BEND   Pitch Bend
- P-AFT   Polyphonic Aftertouch
- C-AFT   Channel Aftertouch
- SYS-EX   System Exclusive
- TEMPO   Tempo (BPM)
- MUTE   Mute

* *If you selected "STATUS" in Step 9, you can specify the range of the note numbers to be erased.*
  To do so, move the cursor to "NOTE RANGE" by pressing the [CURSOR (down)] button before entering the range using the [VALUE] dial or the [INC/DEC] buttons.
  (You can also specify this by pressing a keyboard pad.)

* *The pattern which would otherwise be moved earlier than the beginning of the music data will be placed at the beginning.the pattern would otherwise be moved beyond the end of the pattern, it will be placed at the end.*

Chapter5

Thinning Out Unneeded Data (Data Thin)

Since messages such as pitch bend or control change use continuously changing values, they can occupy an unexpectedly large amount of memory. The Data Thin operation lets you thin out such data in a way that will not affect the audible result, yet will reduce the amount of data. This allows you to use the memory of the MC-307 more efficiently.

Procedure

Select the pattern for which Data Thin is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Data Thin is to be executed.
Invoke the screen for executing Data Thin.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (right)] button to invoke the screen displaying "DATA THIN."

6. Press the [F1 (THIN)] button.
The screen for editing Data Thin appears.
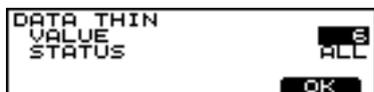
```
DATA THIN
VALUE          8
STATUS         ALL
               OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7] or [RHYTHM PART VIEW].

* By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

8. Move the cursor to "VALUE" by pressing the [CURSOR] buttons, and then select the amount of Data thin using the [VALUE] dial or the [INC/DEC] buttons.

9. Move the cursor to "STATUS" by pressing the [CURSOR] buttons, and then select the kind of data using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute Data Thin.

10. Press the [F4 (OK)] button.
A screen asking you whether or not you want to execute Data Thin appears.

11. Press the [F4 (EXEC)] button.

Data Thin is executed and, upon completion, the normal display reappears.

Available Settings:

VALUE: 0– +99

STATUS: ALL, CC, BEND, P-AFT, C-AFT

- CC: Control Change
- BEND: Pitch Bend
- P-AFT: Polyphonic Aftertouch
- C-AFT: Channel Aftertouch

Creating a Quantized Pattern (Edit Quantize)

You can modify the musical data of a pattern according to the Play Quantize settings.

Normally, Play Quantize does not affect the contents of the musical data, but only modifies the timing at which the pattern is played back. Executing Edit Quantize allows you to create data to which Play Quantize is applied.

Procedure

First select a pattern, and use Play Quantize (p. 34) to select GRID, SHUFFLE, or GROOVE. (If one of these is not selected, the display will indicate "NO QTZ SELECTED," and it will not be possible to carry out the procedure.) The following Edit Quantize operation will be executed with this setting.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Edit Quantize is to be executed.
Invoke the screen for executing Edit Quantize.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.
The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (right)] button to invoke the screen displaying "QUANTIZE."

6. Press the [F2 (QTZ)] button.
The screen for editing Edit Quantize appears.

```
EDIT QUANTIZE
SELECT QUANTIZE PART
               OK
```
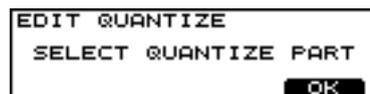
7. Select the part to be edited using the relevant PART button, [R], [1] to [7].

Now, execute Edit Quantize.

8. Press the [F4 (OK)] button.
A screen asking you whether or not you want to execute Edit Quantize appears.

9. Press the [F4 (EXEC)] button.

The Edit Quantize operation will be carried out, and the normal display will reappear.

Converting the Note Timing of a Pattern (Reclock)

You can double or halve the timing of the musical data recorded in a pattern. For example, you can convert a four-measure pattern of BPM=120 to two measures so it will play back identically at a BPM of 60. When you wish to connect patterns of radically differing BPM, it is a good idea to use the Reclock operation to match the timing values of the two patterns.

Procedure

Select the pattern for which Reclock is to be executed.

1. Press the [PTN] button.

2. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern for which Reclock is to be executed.

Invoke the screen for executing Reclock.

3. Press the [F3 (EDIT)] button.

4. Press the [F2 (TRACK EDIT)] button.

The screen for selecting Pattern Edit appears.

5. Press the [CURSOR (right)] button to invoke the screen displaying "RECLOCK."

6. Press the [F3 (RCLK)] button.

The screen for editing Reclock appears.
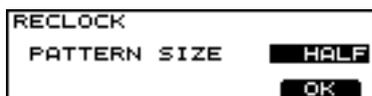
```
RECLOCK
  PATTERN SIZE    ▮HALF
                    OK
```

7. Select the part to be edited using the relevant PART button, [R], [1] to [7] or [RYHTHM PART VIEW].

* By pressing the [RHYTHM PART VIEW] button you can specify the MUTE CTRL PART.

8. Set how to change the music division using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute Reclock.

9. Press the [F4 (OK)] button.

A screen asking you whether or not you want to execute Reclock appears.

10. Press the [F4 (EXEC)] button.

The Reclock operation will be carried out, and the

normal display will reappear.

Available Settings:

PATTERN SIZE:

- HALF (Timing values will be halved)
- DOUBLE (Timing values will be doubled)

Saving the Pattern

When you've created a pattern you like, do this to save it as a User Pattern.

NOTE

Unless saved, the data for any recorded or edited Pattern is lost when the power is turned off.

Procedure

If you are playing a pattern, stop it.

1. Press the [SYSTEM] button.

2. Press the [F3 (WR)] button.

3. Press the [F3 (PTN)] button.

4. Using the [INC/DEC] button or the [VALUE] dial, select the save destination pattern.

Since the pattern will be saved in the number you selected here.

5. Press the [F4 (WR)] button.

The screen for naming a pattern appears.

6. Select characters used to name the pattern using the [VALUE] dial or the [INC/DEC] buttons.

The following characters are available.

space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | }

7. Upon completion, press the [F4 (OK)] button.

An "ARE YOU SURE?" message appears.

8. Press the [F4 (EXEC)] button.

Saving Pattern is executed.

* *In Step 6, pressing the [CURSOR (up/down)] buttons allows you to select upper-case (or lower-case) characters.*

* *In Step 6, the [F1] through [F2] buttons are useful in editing pattern names.*
[F1 (INS)]: Press to insert a character at the cursor position.
[F2 (DEL)]: Press to delete the character at the cursor position.

Chapter5

Playing and Recording Songs

A set of patterns that are connected in the order of playback is called a "song."

When you play back a song, the patterns will change automatically in sequence, so it will not be necessary for you to select patterns yourself. You can register up to 50 patterns in each song, in the order in which they are to be played back.

Playing Back a Song

Procedure

1. Press [SONG] button.

The number and name of the selected song are displayed.

2. Use the [VALUE] dial or [INC/DEC] button to select the song number that you wish to play.

The song is now selected.

3. Press the [PLAY] button, and the song will begin playing. When song playback begins, the display will indicate the current pattern and the next pattern, just as during pattern playback. And you can also change the BPM and display the measures in the pattern using the same procedure as during pattern playback. (P. 18)

4. Press the [STOP] button, and song playback will stop.

Cautions for song playback

Songs do not actually contain the musical data of the patterns; they contain only the order in which the patterns are to be played back. This means that if you modify a pattern that has been registered in a song, the playback of the song will also be affected. If you delete all of the musical data of the pattern, playback will stop at the moment that pattern is selected.

Fast-forward and rewind

Each time you press the [►►] button, the cursor moves to the beginning of the next pattern.

Each time you press the [◄◄] button, the cursor moves to the beginning of the previous pattern.

By pressing [I◄] button, you can return to the beginning of the song. Also, you can press [■] button while the song is stopped to return to the beginning.

Currently playing step and pattern number readout

In the SONG screen you can press the [ENTER] button to display the step and pattern number.

This screen will also appear when you use the [◄◄] or [►►] buttons to move through the steps.

Current Step, Current Pattern

Song Length (Number of Step)

MEMO

You can press [PTN] button that appears in the screen in "Step 3" of the procedure to switch to the screen that also shows the Pattern name.

* Pressing [PTN] button when this screen is displayed returns you to the screen in Step 3.

Return to the beginning of the song and play it back

When the currently playing pattern finishes playing, you can return to step 1 and play it back.

You will find it convenient to play a few measures and set the turntable and BPM. Then, when the BPM is correct, play back from step 1.

Procedure

1. Play back the song.

2. If you want to return to step 1, press the [PLAY] button. The screen will indicate "TP."

When the pattern that was playing in step 2 has finished playing, it will return to step 1 and play.

Recording a Song

Enter patterns one by one and specify the order in which they are to be played back. The patterns are numbered in the order in which they are entered and are called **steps**.

Procedure

1. Press the [SONG] button.

2. Use the [VALUE] dial or the [INC/DEC] buttons to select the song number you want to record.

3. Press the [REC] button.

   The [REC] indicator lights up, indicating that the MC-307 is ready for recording.

   ```
   SONG REC        U:25
     STEP  1    PTN ▄▄▄▄▄
     [-----------------]
   [PACH][STUP]      [OK]
   ```
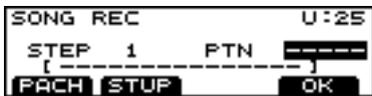
4. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern to be played at this step.

5. Press the [ENTER] button.

Next step number appears.

   ```
   SONG REC        U:25
     [STEP  2]  PTN ▄▄▄▄▄
     [-----------------]
   [PACH][STUP]      [OK]
   ```

6. Using the [VALUE] dial or the [INC/DEC] buttons, select the pattern to be played at this step.

7. Press the [ENTER] button.

8. Enter the patterns from step 3 onward.

When you have finalized the last step, press the [STOP] button to complete recording.

Editing a step

After recording several steps, you can press the [◄◄] or [►►] buttons in the SONG REC screen to move through the steps.

Auditioning a pattern

After selecting a pattern during recording, you can press [PLAY] button to audition that pattern. As in Pattern mode, you can select different patterns while you audition them. To stop the auditioning, press [STOP] button.

Assigning a pattern with modified Setup parameters

While auditioning a pattern, you can modify the mute, part mixer and effect settings, etc. for that part and press [ENTER] or [F4 (OK)] button to assign the part with those settings. This will not affect the original pattern in any way, since the setup parameters for each pattern are stored as part of the song data.

Using this function, you can modify the mute settings or M-FX type of one single pattern and create a song just by developing the same pattern in different ways.

Editing Songs (Song Edit)

Clearing All Steps (Clear All Steps)

Empties all steps entered. This function is useful when you wish to create a song from the beginning.

Procedure

Select the song whose steps are to be erased.

1. Press the [SONG] button.

2. Select the song using the [VALUE] dial or the [INC/DEC] buttons.

   Invoke the screen for executing Edit.

3. Press the [F3 (EDIT)] button.

   The screen for editing songs appears.

Execute Clear All Steps.

4. Press the [F1 (CLR)] button.

   An "ARE YOU SURE?" message appears.

5. To execute Clear All Steps, press the [F4 (EXEC)] button.

   To cancel Clear All Steps, press the [F3 (EXIT)] button.
   The display returns to the previous screen.

Deleting Unwanted Steps (Step Delete)

Deletes unwanted steps from a song and moves all subsequent steps forward to fill the gap.

Procedure

Select the song whose steps are to be erased.

1. Press the [SONG] button.

2. Select the song using the [VALUE] dial or the [INC/DEC] buttons.

   Invoke the screen for executing Edit.

3. Press the [F3 (EDIT)] button.

   The screen for editing songs appears.

Execute Delete.

4. Pressing the [CURSOR (left/right)] buttons, [INC/DEC] button or using [VALUE] dial, move the cursor to the step you want to delete.

5. Press the [F2 (DEL)] button.

Step Delete is executed.

Copying a Song (Song Copy)

You can copy song data to another song. This function is useful for playing two or more songs in sequence or for combining two or more songs.

Procedure

1. Press the [SONG] button.

2. Select the song copy source using the [VALUE] dial or the [INC/DEC] buttons.

   Invoke the screen for executing Copy.

3. Press the [F3 (EDIT)] button.

   The screen for selecting Song Edit appears.

4. Press the [F4 (COPY)] button.

   The screen for editing Copy appears.

   Select the number of the copy destination song and the position at which copying is to start.

5. Move the cursor to "SONG" by pressing the [CURSOR] buttons, and then select the copy destination using the [VALUE] dial or the [INC/DEC] buttons.

6. Move the cursor to "STEP" by pressing the [CURSOR] buttons, and then specify the step number at the beginning of the song to be copied using the [VALUE] dial or the [INC/DEC] buttons.

Now, execute Song Copy.

7. Press the [F4 (OK)] button.

Song Copy is executed.

Range:

DEST SONG: U01 – U50

STEP: 1 – 50 (Maximum)

* *If the copy destination contains data, Song Copy is executed, overwriting it.*

* *You cannot specify a number of steps that would cause the copied song to have more than 50 patterns.*

Saving the Song

After you've created a song you like, do this to save it as a User Song.

When you want to save a song with its settings changed, save it by following procedure. If you modified a song setting but do not want to save it, you can use it as it is the next time you power up the MC-307 as long as you do not execute this function.

Procedure

If you are playing a song, stop it.

1. Press the [SYSTEM] button.

2. Press the [F3 (WR)] button.

3. Press the [F4 (SONG)] button.
   The screen for specifying the destination songs. In the copy source song, the song you selected in Step 1 is displayed.
   (Any song number prefixed with an asterisk indicates that the song has been edited but not yet saved.)

4. Using the [INC/DEC] button or the [VALUE] dial, select the save destination song.
   Since the song will be saved in the number you selected here, be sure to select an appropriate number. The saved song will be erased.

5. Press the [F4 (WR)] button.
   The screen for naming a song appears.

6. Select characters used to name the pattern using the [VALUE] dial or the [INC/DEC] buttons.
   The following characters are available.
   space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | }

7. Upon completion, press the [F4 (OK)] button.
   An "ARE YOU SURE?" message appears.

8. Press the [F4 (EXEC)] button.

Saving the Song is executed.

  * *In Step 7, pressing the [CURSOR (up/down)] buttons allows you to select upper-case (or lower-case) characters.*

  * *In Step 7, the [F1] and [F2] buttons are useful in editing pattern names.*
    [F1 (INS)]: Press to insert a character at the cursor position.
    [F2 (DEL)]: Press to delete the character at the cursor position.

Chapter5

Chapter 6 Making Original Patches

You can create desired patches by changing various parameters for creating tones (tone parameters). This operation is referred to as patch editing (or rhythm editing). With this operation, you can set up specific parameters for each tone and rhythm tone.

Editing Patches

You can think of a patch as an element equivalent to a single musical instrument. In order to give more tone diversity to patches, the patch playback function is configured to enable combined playback of four basic timbres, referred to as tones. Thus, a patch that achieves playback of a piano-strings ensemble can be developed, for instance.

Changing the Basic Waveform of the Sound (WAVE/FXM)

In the WAVE/FXM, you can make settings related to the waveform that is the basis for a synthesizer's sound. FXM (Frequency Cross Modulation) uses a specific waveform to apply frequency modulation to the selected waveform, creating complex overtones. This is useful for creating dramatic sounds or sound effects.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for rhythm set editing appears.

4. Press the [CURSOR (up)] button.

5. Press the [F1 (WAVE)] button.

6. To edit the parameters in the "WAVE:", press [F1 (WAVE)] button. To edit the parameters in the "FXM", press [F2 (FXM)] button.
   One of the editing screens appears.
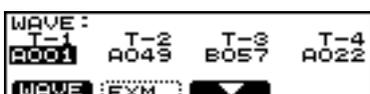
7. Press the [F3 (▲)]/[F4 (▼)] buttons to select the parameter to be edited.

8. Press the [CURSOR (right/left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

9. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

10. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- WAVE: WAVE, TONE SWITCH and GAIN
- FXM: SWITCH, COLOR and DEPTH

* *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

WAVE parameters

WAVE:

You can make settings related to the waveform that is the basis for a synthesizer's sound.

And you can select a waveform, the basis of the sound, for each tone.

Selection of the basic waveform is the fundamental part of sound creation. It is recommended that a tone as close as possible to the one you envision be selected.

Range: A001–A254, B001–B251, C001–C236

MEMO

When this setting screen is displayed, you can press the [RHYTHM PART VIEW] button to switch to a screen that displays the wave name of the currently selected tone.

To return to the original screen, press the [RHYTHM PART VIEW] button once again.

* *This function cannot be used if the System setting "RHY VIEW" (P. 122) is set to "MUTE CTRL."Switch the setting to "NORMAL" before you use this.*

* *If you would like to know what waveforms are available...*
- > "Waveform List"(P. 167)

WAVE: TONE SWITCH

Turn this "ON" if you want the tone to sound, or "OFF" if you do not want the tone to sound.

In order to make the best use of the available polyphony, unused tones should be turned "OFF."

Range: OFF, ON

WAVE: GAIN

This boosts the waveform. Raising this setting 6 dB will double the gain. If you are using the booster to distort the sound, setting this to the maximum value will be effective.

Range: -6, 0, +6, +12

If you would like to learn more about booster gain settings...

- refer to Booster (p. 100).

FXM parameters

FXM: SWITCH

FXM (Frequency Cross Modulation) uses a specific waveform to apply frequency modulation to the selected waveform, creating complex overtones. This is useful for creating dramatic sounds or sound effects.

When you wish to use FXM, turn this "ON."

Range: OFF, ON

FXM: COLOR

Select one of four types of frequency modulation for FXM to apply.

As this value is increased, the sound will become rougher. Lower values will produce a metallic sound.

Range: 1–4

FXM: DEPTH

Adjusts the depth of frequency modulation produced by FXM.

As this value is increased, modulation will be applied more deeply. As the value is decreased, modulation depth will decrease.

Range: 1–16

Changing the Pitch (PITCH and ENVELOPE)

In the PITCH and ENVELOPE, parameters concerning the pitch are defined. The ENVELOPE includes parameters concerning pitch changes relative to time.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order.
   The menu screen for patch editing appears.

4. Press the [CURSOR (up)] button, then press [F2 (PICH)] button.

   ```
   1 WAVE/FXM
   2 PITCH/ENVELOPE
   3 FILTER/ENVELOPE
   4 AMP/ENVELOPE        ▼
   WAVE PICH FLTR AMP
   ```

5. To edit parameters in the "PITCH:", press [F1 (PICH)] button.
   To edit parameters in the "P-ENV" (PITCH ENVELOPE), press [F2 (PENV)] button.

   One of the editing screens appears.

   ```
   PITCH:COARSE TUNE
   T-1      T-2      T-3      T-4
   0       +12       0        0
   PICH PENV     ▼
   ```

6. Press the[F3 (▲)]/[F4 (▼)]buttons to select the parameter to be edited.

7. Press the [CURSOR (right/left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

8. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

9. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- PITCH: COARSE TUNE, FINE TUNE, RANDOM PITCH, KEY FOLLOW
- P-ENV: ENV DEPTH, VELO SENS, VELO TIME1, 4, TIME KEY FOLLOW, TIME1–4, LEVEL1–4

* *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

PITCH parameters

PITCH: COARSE TUNE

Adjust the pitch of each tone in semitone steps.

Higher settings will raise the pitch. Lower settings will fall the pitch.

Range: -48– +48 semitones

PITCH: FINE TUNE

You can adjust the pitch of each tone in 1-cent steps (1/100th of a semitone).

The greater the value, the higher the pitch, and the smaller value, the lower the pitch.

Range: -50– +50

Making the sound more spacious

If you select the same waveform for two tones, set the same

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Coarse Tune value for both tones and then use Fine Tune to create a slight pitch difference between the two tones, the sound will appear more spacious (the Detune effect).

PITCH: RANDOM PITCH

This applies a degree of randomness to the pitch of each note.

As this value is increased, a greater degree of randomness will be applied. As this value is decreased, there will be less randomness.

With a value of "0" there will be no effect.

Range: 0–1200

PITCH: KEY FOLLOW

This setting causes the pitch to be affected by the key pad location.

Unless you are creating a special type of sound, you will normally leave this at "+100."

With positive (+) settings, the pitch will rise as you play higher notes (i.e., notes toward the right of the keyboard). With negative (-) settings, the pitch will fall as you play higher notes.

Range: -100– +200

- +100: As on a conventional keyboard instrument, the pitch will rise one octave when you move 12 notes upward on the keyboard.
- +200: The pitch will rise two octaves when you move 12 notes upward on the keyboard.
- 0: The pitch will be the same regardless of which note you play.
- 100: The pitch will fall one octave when you move 12 notes upward on the keyboard.

When you are creating sounds of instruments that naturally have minimal change in pitch, such as percussion instruments, it is effective to set Pitch Key Follow to a setting of "+10" or "+20."

P-ENV (PITCH ENVELOPE) parameters

P-ENV: ENV DEPTH (ENVELOPE DEPTH)

Here's how you can adjust the depth of the Pitch Envelope.

Increasingly positive (+) settings will produce a greater width of pitch change. Negative (-) settings will invert the shape of the envelope, causing the pitch to change in the opposite direction.

Range: -12– +12

P-ENV: VELO SENS (VELOCITY SENSE)

This setting lets you control the Pitch Envelope depth by the force with which you play the external MIDI keyboard.

With positive (+) settings, the pitch will change more greatly as you play the keyboard more strongly. With negative (-) settings, the pitch will change less as you play the keyboard more strongly.

When TIME is set to a positive (+) value, softly-played notes will have little pitch change, and strongly-played notes will have greater pitch change.

Range: -100– +150

P-ENV: VELO TIME1, 4 (VELOCITY SENSE TIME 1 and TIME 4)

The strength with which a keyboard key on an external MIDI keyboard pressed is used to control TIME 1, while the speed at which the key is released is used to control TIME 4.

- VELO TIME 1
  Range: -100– +100
  With positive (+) settings, TIME1 will become faster as you play the keyboard more strongly. With negative (-) settings, TIME1 will become slower as you play the keyboard more strongly.
- VELO TIME 4 (Amplifier Envelope Velocity TIME 4 Sensitivity)
  Range: -100– +100
  With positive (+) settings, releasing the keyboard more quickly will cause TIME4 to be faster. With negative (-) settings, releasing the keyboard more quickly will cause TIME4 to be slower.

P-ENV: TIME KEY FOLLOW

This setting causes the pitch envelope times (TIME 2/3/4) to be affected by the keyboard pad position.

Higher settings will produce a greater change relative to the C4 key envelope.

With positive (+) settings, times will become shorter as you play higher notes. With negative (-) settings, times will become longer as you play higher notes.

Range: -100– +100

> **NOTE**
>
> *In the following "P-ENV TIME 1-4" and "P-ENV LEVEL 1-4" screens, the TIME 1-4 and LEVEL 1-4 are indicated for one tone, rather than for Tones 1, 2, 3, and 4. For example, if before going to this screen the cursor is placed at TONE 2, then the TIME 1-4 for TONE 2 is indicated.*

P-ENV: TIME1–4

TIME1–4 (Pitch Envelope TIME 1–4)

Specifies the time until the next pitch level is reached. You can make settings for the four parameters TIME 1–4.

Higher settings will result in a longer time until the next pitch level is reached.

Range: 0–127
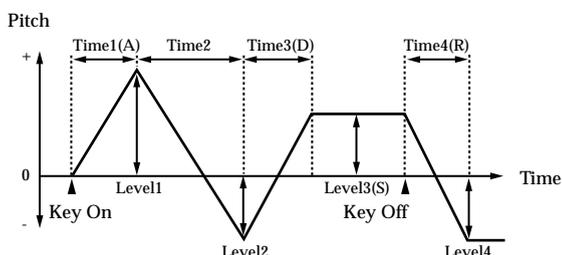
P-ENV: LEVEL1–4

Level1–4 (Pitch Envelope Level 1–4)

Specifies the pitch difference relative to the normal pitch (as specified by Coarse Tune and Fine Tune). You can make settings for the four parameters, Level 1–4.

Positive (+) settings will raise the pitch above the normal pitch. Negative (-) settings will make the pitch lower than the normal pitch.

Range: -63– +63

MEMO

For details on how TIME 1–4 and LEVEL1–4 of the envelope correspond with the assignable knob parameters A, D, S, R, refer to p. 104.

Changing the Brightness of Sounds (FILTER and ENVELOPE)

By using a filter, you can cause only a specific range of audio signals to be passed or attenuated, thus modifying the brightness. The FILTER lets you make settings that affect the brightness of the sound in this way. In the F-ENV (Filter Envelope) section, parameters concerning "changes in sound brightness relative to time" can be defined.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for patch editing appears.

4. Press the [CURSOR (up)] button, then press [F3 (FLTR)] button.

5. To edit parameters in the "FILTER:" section, press [F1 (FLTR)] button. To edit parameters in "F-ENV "(FILTER ENVELOPE), press [F2 (FENV)] button.
   One of the editing screens appears.

6. Press the[F3 (▲)]／[F4 (▼)]buttons to select the parameter to be edited.

7. Press the [CURSOR (right／left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

8. Specify a value using the [VALUE] dial or the [INC／DEC] buttons.

9. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- FILTER: TYPE, CUTOFF, CUTOFF KF, RESONANCE, RES VELO SENS
- F-ENV: ENV DEPTH, VELO CURVE, VELO SENS, VELO TIME1, 4, TIME KEY FOLLOW, TIME1–4, LEVEL1–4

 * See the following sections for descriptions of the setting ranges and contents of the respective parameters.

FILTER parameters

FILTER: TYPE

Select the type of filter.

Range:

- OFF:
  The filter will not be applied (all filter indicators are dark).
- LPF (Low Pass Filter):
  This type of filter is most commonly used and allows audio signals with frequencies lower than the cutoff frequency to pass through. It is used to make the sound more mellow.
- BPF (Band Pass Filter):
  This filter cuts off all audio signals except for those with frequencies around the cutoff frequency.
- HPF (High Pass Filter):
  This filter allows audio signals with frequencies exceeding the cutoff frequency to pass. It is effectively used to make sounds brighter and sharper.

- PKG (Peaking Filter):
  This filter enhances audio signals with frequencies around the cutoff frequency. It will emphasize the mid-range, and is useful for creating a distinctive sound.

  By selecting the Peaking Filter as the Filter Type and using the LFO to modulate the cutoff frequency, you can create a "wah" effect.

- > *"Adjusting the depth of cutoff frequency modulation (LFO 1 Filter Depth)" (P. 97)*

FILTER: CUTOFF

Specifies the frequency at which the filter will begin to affect the frequency components of the waveform (the Cutoff Frequency). By changing the cutoff frequency, you can control the brightness of the sound.

Range: 0–127

The effect will depend on the Filter Type.

- LPF (Low Pass Filter)
  Increasing the value will brighten the sound, making it more similar to the original waveform., approaching the original waveform. Lower settings will cut more of the high frequency overtones, making the sound darker.

  * *For some waveforms, you may not be able to hear any sound if you lower the value too far.*

CUTOFF=0   CUTOFF=64   CUTOFF=127
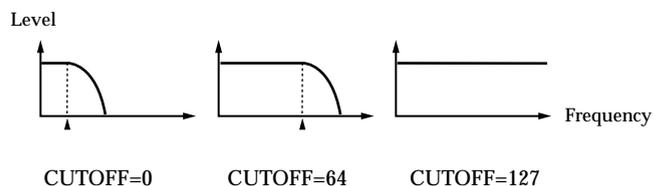
- BPF (Band Pass Filter)
  Higher settings will raise the frequency area that is heard. Lower settings will cause only a progressively lower frequency area to be heard.
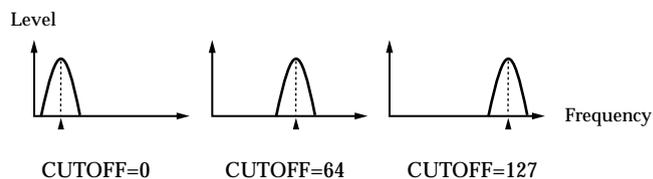
CUTOFF=0   CUTOFF=64   CUTOFF=127

- HPF (High Pass Filter)
  As this value is increased, the low frequency range will be cut more greatly, making the sound sharper. As this value is decreased, the original sound of the waveform will be heard.

  * *For some waveforms, you may hear no sound if this value is raised excessively.*

CUTOFF=0   CUTOFF=64   CUTOFF=127

- PKG (Peaking Filter)

   As this value is increased, the frequency area that is emphasized will rise. As this value is decreased, the frequency area that is emphasized will fall.

CUTOFF=0　　　CUTOFF=64　　　CUTOFF=127
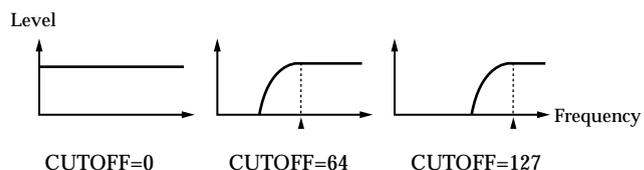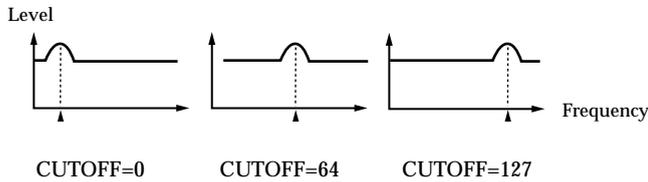
> **NOTE**
>
> *When operating FILTER, be careful not to set RESONANCE too high. Excessively high values may cause sounds to be distorted or the volume level to become unexpectedly high.*
> *Some settings may damage your hearing, or your speakers. Please use caution.*

FILTER: CUTOFF KF (CUTOFF FREQUENCY KEY FOLLOW)

This setting causes the cutoff frequency to be affected by the keyboard pad position.

With positive (+) settings, the cutoff frequency will also rise as you play higher notes. With negative (-) settings, the cutoff frequency will become lower as you play higher notes.
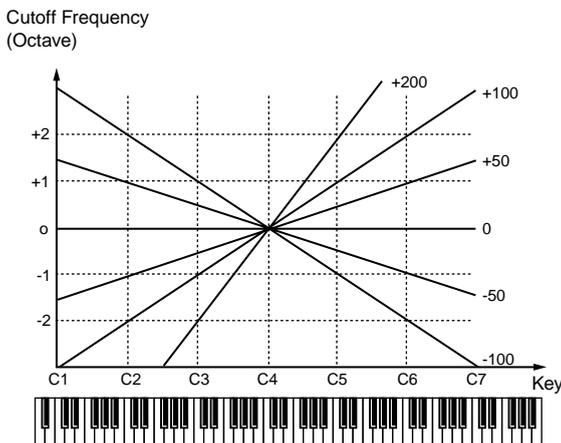
Range: -100– +200

-   +100: When you move 12 notes upward from C4 on the keyboard, the cutoff frequency will rise one octave.
-   +200: When you move 12 notes upward from C4 on the keyboard, the cutoff frequency will rise two octaves.
-   0: The cutoff frequency will be the same for all notes.
-   100: When you move 12 notes upward from C4 on the keyboard, the cutoff frequency will fall one octave.

If you set Cutoff Frequency to a value of approximately "64," the key follow effect will be easy to hear.

FILTER: RESONANCE

This setting emphasizes the overtones in the region of the cutoff frequency, adding character to the sound.

RESONANCE=0　　　RESONANCE=64　　　RESONANCE=127
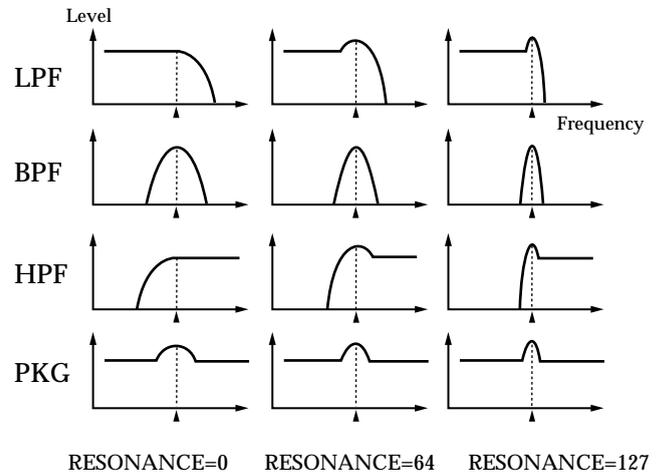
Range: 0–127

As this value is increased, the sound will have more character. As this value is decreased, the sound will be more natural.

In order to prevent the resonance from being increased excessively, factory settings have been made so that the value will not rise beyond "115" even if the [RESONANCE] knob is rotated all the way to the right. This is called the Resonance Limiter. You are free to adjust this upper limit.

-   > "Specifying the Variable Range of Resonance (Resonance Limiter)" (P. 115)

> **NOTE**
>
> *If you have increased the Resonance Limiter setting, be careful not to raise the resonance excessively. Excessively high values may cause sounds to be distorted or the volume level to become unexpectedly high.*
> *Some settings may damage your hearing, or your speakers. Please use caution.*

FILTER: RES VELO SENS (RESONANCE VELOCITY SENSE)

Specifies how resonance depth will be affected by your playing dynamics on the external MIDI keyboard.

With positive (+) settings, playing the keyboard more strongly will cause the change to be greater. With negative (-) settings, playing the keyboard more strongly will cause the change to be less.

Range: -100– +150

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F-ENV (FILTER ENVELOPE) parameters

F-ENV: ENV DEPTH (ENVELOPE DEPTH)

This setting adjusts the depth of the filter envelope.

As the value is increased in the positive (+) direction, the amount of tonal change will increase. With negative (-) settings, the shape of the envelope will be inverted, and the tone will change in the opposite direction.

When setting Envelope Depth to a positive (+) value, the effect of the filter envelope will be easier to hear if you set a lower cutoff frequency.

Range: -63– +63

F-ENV: VELO CURVE (VELOCITY CURVE)

Select the curve of change with which the force of your playing on the external MIDI keyboard will affect the amount of change produced by the filter envelope.

Range: 1–7

F-ENV: VELO SENS (VELOCITY SENSE)

Specifies how the force of your playing on the external MIDI keyboard will affect the filter envelope.

With positive (+) settings, the tone will change more as you play more strongly on the keyboard. With negative (-) settings, the tone will change less as you play more strongly on the keyboard.

With positive (+) settings of TIME, the sound will be brighter for strongly-played notes, and darker for softly-played notes.

Range: -100– +150

F-ENV: VELO TIME1, 4 (VELOCITY SENSE TIME1, 4)

The strength with which a keyboard key on an external MIDI keyboard pressed is used to control TIME 1, while the speed at which the key is released is used to control TIME 4.

- VELO TIME 1
  Range: -100– +100
  With positive (+) settings, TIME1 will become faster as you play the keyboard more strongly. With negative (-) settings, TIME1 will become slower as you play the keyboard more strongly.
- VELO TIME 4 (Amplifier Envelope Velocity TIME 4 Sensitivity)
  Range: -100– +100
  With positive (+) settings, releasing the keyboard more quickly will cause TIME4 to be faster. With negative (-) settings, releasing the keyboard more quickly will cause TIME4 to be slower.

F-ENV: TIME KEY FOLLOW

This setting causes the filter envelope times (TIME 2/3/4) to be affected by the location of the keyboard pad that you press.

Relative to the envelope at the C4 note, higher settings of this parameter will cause the times to change more greatly.

With positive (+) settings, times will become shorter as you play higher notes. With negative (-) settings, times will become longer as you play higher notes.

Range: -100– +100

NOTE

In the following "F-ENV TIME 1-4" and "F-ENV LEVEL 1-4" screens, the TIME 1-4 and LEVEL 1-4 are indicated for one tone, rather than for Tones 1, 2, 3, and 4. For example, if before going to this screen the cursor is placed at TONE 2, then the TIME 1-4 for TONE 2 is indicated.

F-ENV: TIME1–4

Specifies the time until the next cutoff frequency is reached. You can make settings for the four parameters TIME 1–4.

Higher settings will lengthen the time until the next cutoff frequency is reached.

Range: 0–127
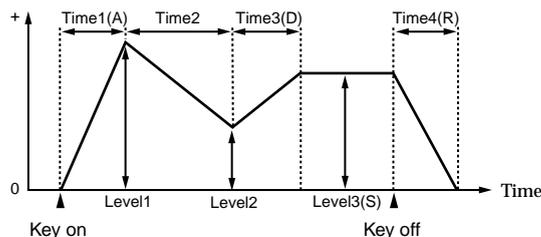
F-ENV: LEVEL1–4

Specifies the cutoff frequency at each level. You can make settings for the four parameters, Level 1–4.

Raising this setting will also raise the cutoff frequency.

Range: 0–127

MEMO

For details on how TIME 1–4 and LEVEL1–4 of the envelope correspond with the assignable knob parameters A, D, S, R, refer to p. 104.

Changing the Volume Level and Localization (AMP and ENVELOPE)

The AMP (amplifier) contains settings related to the volume and the position of the sound (PAN) on the stereo sound field. The parameters of the A-ENV let you specify this type of time-varying change in volume (the Amplifier Envelope).
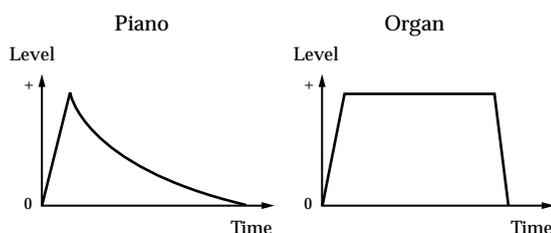
Piano   Organ

Level   Level

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for patch editing appears.

4. Press the [CURSOR (up)] button, then press [F4 (AMP)] button.

```
1 WAVE/FXM
2 PITCH/ENVELOPE
3 FILTER/ENVELOPE
4 AMP/ENVELOPE
WAVE  PICH  FLTR  AMP
```

5. To edit the parameters in the "AMP:", press [F1 (AMP)] button. To edit parameters in the "A-ENV:" (AMP ENVELOPE), press [F2 (AENV)] button.

   One of the editing screens appears.
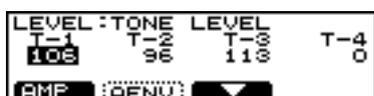
```
LEVEL:TONE LEVEL
T-1    T-2    T-3    T-4
108    96    113    0
AMP  :AENV:   ▼
```

6. Press the [F3 (▲)]/[F4 (▼)] buttons to select the parameter to be edited.

7. Press the [CURSOR (right/left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

8. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

9. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- AMP: TONE LEVEL, BIAS DIRECTION, BIAS POINT, BIAS POINT LEVEL, TONE PAN, PAN KEY FOLLOW, RANDOM PAN SW, ALT PAN DEPTH

- A-ENV: VELO CURVE, VELO SENS, VELO TIME 1, 4, TIME KEY FOLLOW, TIME 1–4, LEVEL 1–3

* *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

AMP parameters

AMP: TONE LEVEL

This setting adjusts the volume of each tone. This is used mainly to adjust the volume balance between tones.

Range: 0–127

- "Adjusting the Volume of Each Part (Part Level)" (P. 22)

AMP: BIAS DIRECTION

The Bias parameters specify how the keyboard position will affect the Tone Level. This can be used to simulate the way in which the volume of an acoustic instrument changes according to the location (pitch) of the note.

Select the keyboard area(s) that will be affected above and/or below the specified Bias Point.

Available Settings:

- LWR:The volume will be modified for the keyboard area below the note specified as the Bias Point.

- UPR:The volume will be modified for the keyboard area above the note specified as the Bias Point.

- L&U:The volume will be modified symmetrically toward the left and right of the note specified as the Bias Point.

- ALL:The volume will be modified linearly from the note specified as the Bias Point.

AMP: BIAS POINT

Specifies the key relative to which the volume will be modified.

Range: C-1–G9

AMP: BIAS POINT LEVEL

Adjusts the slope of the volume change that will occur in the direction specified by Bias Direction.

Range: -100– +100

With positive (+) settings, the slope of volume change will increase in the positive (+) direction. With negative (-) settings, the slope of volume change will increase in the negative (-) direction.

* *Even with positive (+) settings of this parameter, the volume*

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cannot exceed the maximum level.

LWR Bias Level

UPR Bias Level

L&U Bias Level

ALL Bias Level
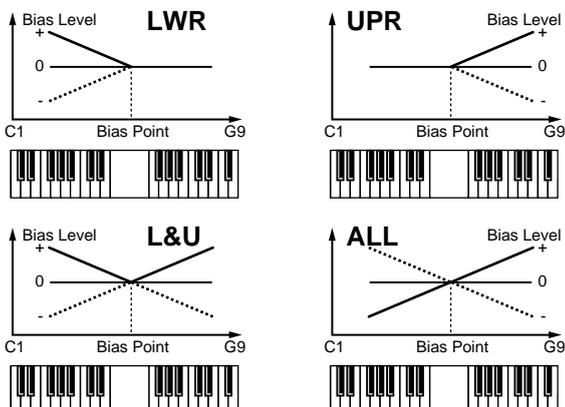
If you use two tones and set a Bias Direction of "UPR" for one and "LWR" for the other, the two tones will fade smoothly into each other as you play across the Bias Point. (This is known as "key crossfade.")

	T1	T2
Bias Dir	LWR	UPR
Bias Point	A4	E3
Bias Level	-50	-50
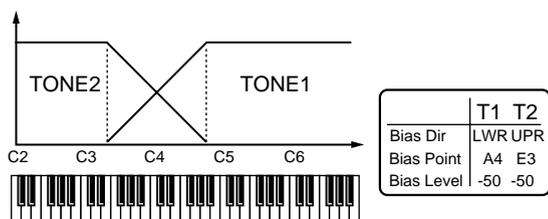
By setting Bias Direction to "L&U," you can create sounds that are heard only in a specific area of the keyboard.

	T1
Bias Dir	L&U
Bias Point	C4
Bias Level	-50
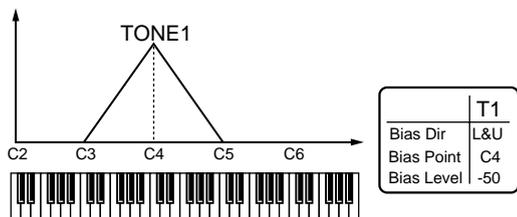
AMP: TONE PAN

This parameter sets the stereo location for each tone.

* *The pan of the overall patch can be modified and set for each pattern by the Setup parameter Part Pan. The Tone Pan value will be added to this setting.*

Range: L64–63R

- > "Adjusting the Pan of Each Part (Part Pan)" (P. 22)

AMP: PAN KEY FOLLOW

This parameter causes the stereo location to change according to the keyboard pad that is played.

With positive (+) settings, the sound will move toward the right as you play higher notes. With negative (-) settings, the sound will move toward the left as you play higher notes.

Range: -100– +100

AMP: RANDOM PAN SW

This setting causes the stereo location to change randomly each time a note is played.

All four indicators will be blinking, and the Random Pan Switch will be turned on.

* *The Tone Pan setting will be ignored by Tones for which the Random Pan Switch is turned on.*

Range: OFF, ON

AMP: ALT PAN DEPTH (ALTERNATE PAN DEPTH)

This parameter causes the stereo location of the sound to alternate between left and right each time a note is played.

When this parameter is set in the L direction, the sound will alternate in the order of left -> right-> left-> right. When set in the R direction, the sound will alternate in the order of right -> left-> right-> left.

Higher settings will cause greater change.

By using two tones and setting the Alternate Pan Depth of one to "L63" and of the other to "R63," you can make the two tones switch places alternately.

Range: L63–63R

A-ENV (AMP ENVELOPE) parameters

A-ENV: VELO CURVE (VELOCITY CURVE)

Select the curve at which the strength of your playing on the external MIDI keyboard will affect the depth of the amplifier envelope.

Range: 1–7

A-ENV: VELO SENS (VELOCITY SENSE)

Specifies how the depth of the amplifier envelope will be affected by the strength of your playing on the external MIDI keyboard.

If velocity sensitivity is set to a positive (+) value, the volume will be loud when you play strongly and soft when you play softly. As this value is increased, the volume difference between strongly played and softly played notes will gradually increase.

With positive (+) settings, the volume will increase as you play more strongly on the keyboard. With negative (-) settings, the volume will decrease as you play more strongly on the keyboard. If this is set to "0," the volume will not be affected by the strength of your playing on the keyboard.

Range: -100– +150

A-ENV: VELO TIME 1, 4 (VELOCITY SENSE TIME1, 4)

The strength with which a keyboard key on an external MIDI

keyboard pressed is used to control TIME 1, while the speed at which the key is released is used to control TIME 4.

- VELO TIME 1
  Range: -100– +100
  With positive (+) settings, TIME1 will become faster as you play the keyboard more strongly. With negative (-) settings, TIME1 will become slower as you play the keyboard more strongly.

- VELO TIME 4 (Amplifier Envelope Velocity TIME 4 Sensitivity)
  Range: -100– +100
  With positive (+) settings, releasing the keyboard more quickly will cause TIME4 to be faster. With negative (-) settings, releasing the keyboard more quickly will cause TIME4 to be slower.

A-ENV: TIME KEY FOLLOW

This parameter specifies how the amplifier envelope times (TIME2/3/4) will be affected by the keyboard pad location.

Relative to the envelope at the C4 note, higher settings of this parameter will cause the times to change more greatly.

With positive (+) settings, times will become shorter as you play higher notes. With negative (-) settings, times will become longer as you play higher notes.

Range: -100– +100

> **NOTE**
>
> *In the following "A-ENV TIME 1-4" and "A-ENV LEVEL 1-3" screens, the TIME 1-4 and LEVEL 1-3 are indicated for one tone, rather than for Tones 1, 2, 3, and 4. For example, if before going to this screen the cursor is placed at TONE 2, then the TIME 1-4 for TONE 2 is indicated.*

A-ENV: TIME 1–4

Specifies the time until the next level point is reached. You can make settings for the four parameters TIME 1–4.

Higher settings will lengthen the time until the next level point is reached.
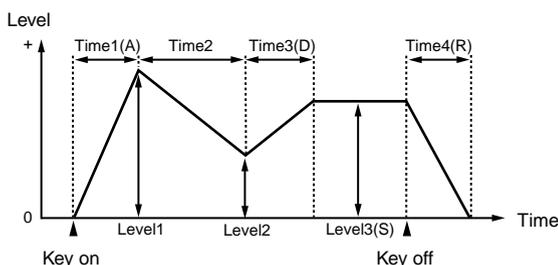
Range: 0–127

A-ENV: LEVEL 1–3

Specifies the volume at each point. You can set the three points Level1–3. Higher settings will also raise the volume.
Range: 0–127

> * *For details on how TIME 1–4 and LEVEL1–4 of the envelope correspond with the assignable knob parameters A, D, S, R, refer to p. 104.*

Applying Cyclic Changes to the Sound (LFO 1/2)

The LFO (Low Frequency Oscillator) provides cyclic oscillations to sounds. The MC-307 is equipped with two oscillators, LFO 1 and LFO 2, each of which can be used to make cyclic changes to the pitch, cutoff frequency and volume level for each tone, enabling effects like vibrato, wow and tremolo to be added. As both LFO 1 and LFO 2 have identical parameters, the descriptions in this apply to both.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for patch editing appears.

4. Press the [CURSOR (down)] button, then press [F1 (LFO)] button.

5. To edit parameters in the "LFO1:", press [F1 (LFO1)] button. To edit parameters in the "LFO2:", press [F2 (LFO2)] button.

   One of the editing screens appears.

6. Press the [F3 (▲)]/[F4 (▼)] buttons to select the parameter to be edited.

7. Press the [CURSOR (right/left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

8. Specify a value using the [VALUE] dial or the [INC/ DEC] buttons.

9. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

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Chapter 6 Making Original Patches

- LFO1/2: WAVEFORM, RATE, TEMPO SYNC, KEY SYNC, FADE MODE, DELAY TIME, FADE TIME, OFFSET, PITCH DEPTH, FILTER DEPTH, AMP DEPTH, PAN DEPTH

*   *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

LFO1/2: WAVEFORM

Select the output waveform for LFO 1/2. The sound will be modulated in the same shape as the selected waveform.

This setting is equivalent to waveform selection (P. 27) using LFO 1 on the panel.

Available Settings:

- TRI (triangle): The sound will be modulated continuously. This is a frequently-used waveform, and is suited for effects such as vibrato.
- SIN (sine wave): The sound will be modulated smoothly.
- SAW (sawtooth wave): When the sound reaches the upper value, it will return to the original position and begin rising again.
- SQR (square wave): The sound will be modulated as if it were being switched between two positions.
- TRP (trapezoid wave): The sound will be modulated as if it were being switched between two positions. The curve at the transitions differs from square wave.
- S&H (sample & hold): This setting causes the sound to change unpredictably, and is suitable for creating sound effects.
- RND (random): This setting causes the sound to change unpredictably, and is suitable for creating sound effects.
- CHS (chaos): This setting causes the sound to change unpredictably without regard to frequency, and is suitable for creating sound effects.

*   *When CHS (chaos) or RND (random) is selected, the LFO rate setting will be ignored.*

LFO1/2: RATE

Here's how to adjust the modulation speed of LFO 1.

As this value is increased, the sound will be modulated more rapidly. As this value is decreased, the sound will be modulated more slowly.

Range: 0–127

When LFO Tempo Sync (P. 98) is "ON," you can specify this parameter in terms of a note value.

Range: ♬ ♪ ♬ ♪ ♬ ♩. ♪ ♩₃ ♩. ♩ ♩₃
          ♩. ♩ ♩₃ ♩. ♩ ♁₃ ♩. ♁ ♁₃ ♁. ♁

*   *LFO Rate settings are common to PITCH (pitch), FILTER (brightness) and AMP (volume). The rate cannot be set*

independently for these three.

LFO1/2: TEMPO SYNC

This parameter synchronizes the LFO modulation frequency to the tempo of the pattern.

Range:

- ON:The modulation speed will be synchronized to the tempo (BPM), and the LFO Rate parameter can be set in terms of a note value.
- OFF:The modulation speed will be determined by the LFO Rate setting, regardless of the tempo (BPM).

LFO1/2: KEY SYNC

This parameter synchronizes the LFO cycle to the timing at which the keyboard pads are played.

Range:

- ON:The LFO cycle will begin when the keyboard is played.
- OFF:The same LFO waveform will be output regardless of the timing at which the keyboard is played.

*   *When Key Sync is on, the LFO waveform will begin for each note when it is played, producing a spacious sound with a sense of movement. When Key Sync is off, a single LFO waveform will be applied to all notes, producing a unified sound. When you wish to emphasize the effect (vibrato etc.), you may want to turn this parameter off. Also, when Tempo Sync is on, leaving Key Sync off will allow you to synchronize precisely to the tempo (BPM) of the pattern.*

LFO1/2: FADE MODE

Select the way in which the LFO effect will be applied.

Range:

- OnI (On-In): The effect will be applied gradually, after the keyboard pad is pressed.
- OnO (On-OUT): The effect will be applied immediately when the keyboard pad is pressed, and will gradually disappear.
- OfI (Off-In): The effect will be applied gradually, starting when the keyboard pad is released.
- OfO (Off-Out): The effect will be applied while the keyboard pad remains pressed, and will gradually disappear after it is released.

LFO1/2: DELAY TIME

Depending on the Fade Mode setting, specify the time over which the LFO will be applied or the time over which it will continue, etc.

Higher settings will produce longer times.

Range: 0–127

LFO1/2: FADE TIME

Specifies the time over which the LFO amplitude will reach the maximum (minimum) after the Delay TIME has elapsed. Higher settings will produce longer times.

Range: 0–127

LFO1/2: OFFSET

This parameter offsets the LFO waveform upward or downward from the central value (pitch or cutoff frequency, etc.).

As this value is increased in the positive (+) direction, the waveform will be moved upward from the central value. As this value is increased in the negative (-) direction, the waveform will be moved downward from the central value.

Range: -100– +100

LFO1/2: PITCH DEPTH

The pitch level wavers cyclically, creating a vibrato effect. The wavering increases the further from 0 the value becomes, and the effect is reversed by switching the - and + signs.

Range: -63– +63

> * *By giving two tones the same rate setting and setting their Pitch Depth to "+30" and "-30" respectively to apply opposite-phase LFO, you can create a vibrato effect in which the pitches change in opposite directions.*

LFO1/2: FILTER DEPTH

The cutoff level wavers cyclically, creating wah effect. The wavering increases the further from 0 the value becomes, and the effect is reversed by switching the - and + signs.

Range: -63– +63

LFO1/2: AMP DEPTH

The volume level wavers cyclically, creating a tremolo effect. The wavering increases the further from 0 the value becomes, and the effect is reversed by switching the - and + signs.

Range: -63– +63

LFO1/2: PAN DEPTH

Adjusts the effect that the LFO will have on pan (stereo location).

As this value is increased in the positive (+) direction, the LFO will have a greater effect on pan. Negative (-) settings will invert the LFO waveform, causing the pan to change in the opposite direction.

Range: -63– +63

Defining Parameters Affecting the Entire Patch (COMMON/SOLO, PORTA)

"COMMON:" is used to define parameters common to the entire patch.

"SOLO:" is used to set up the solo playback function. Synthesized reed and bass sounds are effectively set up by turning the SOLO switch on.

"PORTAMENTO:" is used to smoothen transition from the pitch of one key to another. Applied when the Solo switch is turned on, this function achieves an effect like a violin played using the slide technique.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order.

The menu screen for patch editing appears.

4. Press the [CURSOR (down)] button, then press [F2 (CMN)] button.

5. Press [F1 (CMN)] button to edit parameters in the "COMMON:". To edit parameters in the "SOLO:" or "PORTAMENT", press [F2 (SOLO)] button.

One of the editing screens appears.

6. Press the[F3 (▲)]/[F4 (▼)] buttons to select the parameter to be edited.

7. Press the [CURSOR (right/left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

8. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

9. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- COMMON:
  STRUCT 1/2, 3/4, BOOSTER GAIN 1/2, 3/4, STRETCH TUNE, VOICE PRIORITY, KEY RANGE LOWER, KEY RANGE UPPER, VELO RANGE SW, VELO RANGE

LOW, VELO RANGE UP, VELO CROSS FADE

- SOLO:
  SOLO SW, SOLO LEGATO

- PORTAMENTO:
  SW, MODE, TYPE, START, TIME

* *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

COMMOM parameters

COMMON: STRUCT (STRUCTURE) 1/2, 3/4

Specifies how tones 1 and 2 will be combined (Struct 1/2), and how tones 3 and 4 will be combined (Struct 3/4).

```
COMMON:STRUCT 1/2      8
W/P-AMP      TVF
W/P        R       TVF-AMP
CMN  :SOLO:    ▼
```

Abbreviations shown for each type have the following meanings.

- W/P: Wave/Pitch
- FILTER: Filter
- AMP: Amplifier
- B: Booster
- R: Ring Modulator

Range:

- TYPE 1:   This is the most basic type. Tones 1 and 2 (3 and 4) are independent. Select this when you wish to utilize the waveform of each tone without change, or when you wish to layer tones to create a richer sound.

- TYPE 2:   This type combines the two filters to strengthen their characteristics. The AMP of tone 1 (3) will control the volume balance of the two tones.

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

- TYPE 4:   This type applies a booster to distort the waveform, and then combines the two filters. The AMP of tone 1 (3) adjusts the depth of the booster.

- TYPE 5:   This type uses a ring modulator to create new overtones, and combines the two filters. The AMP of tone 1 (3) adjusts the depth of ring modulation.

- TYPE 6:   This type uses a ring modulator to create new overtones, and in addition mixes in the sound of tone 2 (4) and stacks the two filters. The AMP of tone 1 (3) adjusts the depth of ring modulation.

- TYPE 7:   This type applies a filter to tone 1 (3) and ring-modulates it with tone 2 (4) to create new overtones.

- TYPE 8:   This type applies a filter to tone 1 (3) and ring-

modulates it with tone 2 (4), and mixes the result with the filtered sound of tone 2 (4).

- TYPE 9:   This type passes the filtered sound of each tone through a ring modulator to create new overtones.

- TYPE 10: This type passes the filtered sound of each tone through a ring modulator to create new overtones, and also mixes in the sound of tone 2 (4).

* *With TYPE 2–10 selected, turning off one of the paired tones will cause the other tone to sound as TYPE 1.*

COMMON: BOOSTER GAIN 1/2, 3/4

When a Structure Type of "TYPE3" or "TYPE4" is selected, you can adjust the depth of the booster.

This can be set for the pair of tones 1 and 2 (Booster 1/2) and for the pair of tones 3 and 4 (Booster 3/ 4).

Range: 0, +6, +12, +18

Higher settings will produce greater distortion.

Booster

The Booster is a function that increases the input signal in order to distort it.
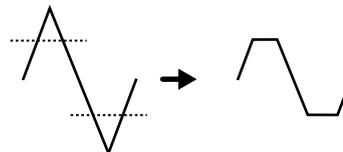
In addition to using this for distortion, you can use the waveform of one of the tones as an LFO to shift the other waveform up and down, producing an effect similar to PWM (Pulse Width Modulation). This is even more effective when used in conjunction with the Wave Gain of the WAVE/FXM.

-> "WAVE GAIN" (P. 89)

Ring Modulator

The ring modulator multiplies the waveforms of two tones to create many new overtones that were not present in either of the original waveforms (inharmonic overtones). This is suitable for creating unpitched metallic sounds such as bells.
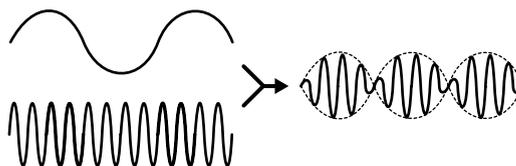
COMMON: STRETCH TUNE

Select the stretch tuning curve. The selected curve will affect the way that chords will sound.

Range: OFF, 1–3

When this is "OFF," equal temperament will be used. As the value is increased, the pitch difference between the high range and low range will increase.

Stretch Tuning

Stretch Tuning is a unique method of tuning specific to pianos. In general, pianos are tuned so that their high range is sharper and their low range is flatter than the equal tempered pitch. This makes chords sound better.

COMMON: VOICE PRIORITY

Specifies how notes will be prioritized when the maximum simultaneous polyphony (64 notes) is exceeded.

Range:

- LAST: The last-played notes will take priority. If more than 64 notes are played, the first-played notes will be turned off successively.
- LOUDEST: The loudest notes will take priority. If more than 64 notes are played, the notes with the lowest volume will be turned off successively.

COMMON: KEY RANGE LOWER

Specifies the lowest note that the tone will sound.

If a note below this setting is played, it will not sound.

Range: C-1–UPR

COMMON: KEY RANGE UPPER

Specifies the highest note that the tone will sound.

If a note above this setting is played, it will not sound. By using Key Range Lower and Key Range Upper, you can cause different tones to sound in different areas of the keyboard.

Range: LWR–G9
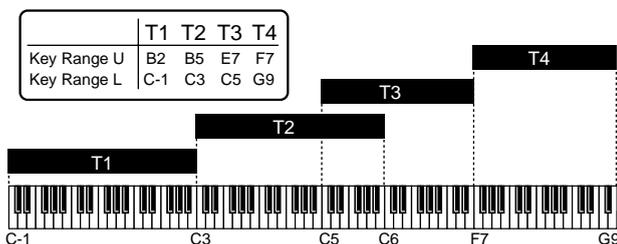
	T1	T2	T3	T4
Key Range U	B2	B5	E7	F7
Key Range L	C-1	C3	C5	G9

*   *It is not possible to set the Lower value above the Upper, nor the Upper value below the Lower.*

COMMON: VELO RANGE SWITCH (VELOCITY RANGE SWITCH)

Specifies whether or not the Velocity Range settings will be enabled. By using velocity range settings, you can cause different tones to sound in response to notes played at different strengths on the external MIDI keyboard.

Range: OFF, ON

When this setting is "ON," the Velocity Range settings will be used.

*   *It is not possible to control this by varying the force with which you press the keyboard pads.*

Velo Range L (Velocity Range Lower)

Specifies the lower velocity limit for which the tone will sound.

The tone will not be sounded by notes played with a velocity lower than this setting.

Range: 1–UPR

Velo Range U (Velocity Range Upper)

Specifies the upper velocity limit for which the tone will sound.

The tone will not be sounded by notes played with a velocity stronger than this setting.

Range: LWR–127
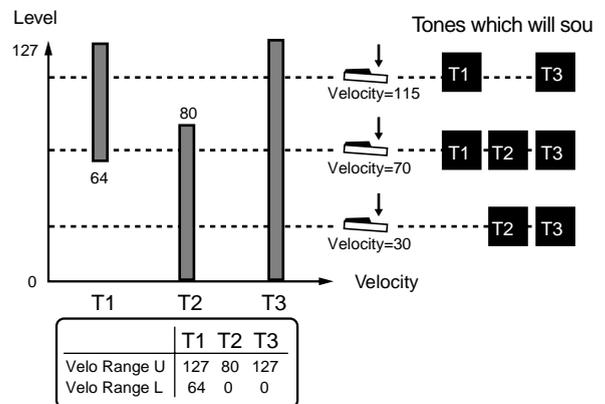
	T1	T2	T3
Velo Range U	127	80	127
Velo Range L	64	0	0

*   *It is not possible to set the Lower value above the Upper, nor the Upper value below the Lower.*

COMMON: VELO X-FADE (VELOCITY CROSS FADE)

Specifies the way in which the volume will change when a keyboard is played with a velocity that falls outside the velocity range setting. By using Velocity Crossfade, you can use playing dynamics on the keyboard to smoothly connect two tones.

Range: 0–127

Higher settings will cause the volume to decrease more gradually when the velocity falls outside of the velocity range.

Chapter6

SOLO/PORTAMENTO parameters

SOLO: SOLO SW

By turning on the Solo switch, you can play monophonically (one note at a time). It is effective to turn Solo on when playing synth lead or synth bass sounds.

Range: OFF, ON

SOLO: LEGATO

Solo Legato is a function that can be applied when the Solo Switch is on. When Solo Legato is on, playing a note while the previous note is still held will cause only the pitch to change, without generating a new attack. This creates a smooth transition between notes, which is effective when you wish to simulate the hammering-on and pulling-off techniques used by a guitarist.

Range: OFF, ON

PORTAMENTO:SW

Turn this on when you wish to use portamento.

Range: OFF, ON

PORTAMENTO:MODE

Select the performance technique by which portamento will be applied.

Range:

- NORMAL:Portamento will always be applied.
- LEGATO:Portamento will be applied for notes played legato (i.e., notes played before the previous note is released).

PORTAMENTO:TYPE

Select the type of the portamento effect.

Range:

- RATE: The time over which the pitch change occurs will depend on the distance between the two pitches.
- TIME: The pitch change will occur over a fixed time, regardless of the distance between pitches.

PORTAMENTO:START

When portamento is on, pressing another keyboard pad during the pitch change will cause a new pitch change to begin. This parameter specifies the pitch at which the change will begin.

Range:

- PITCH:　When another key is pressed while the pitch is changing, the new portamento movement will begin from the pitch at that moment.
- NOTE:　The new portamento movement will begin from the pitch toward which it had been moving.

PORTAMENTO:TIME

You can adjust the time over which the pitch will change when portamento is used.

Range: 0–127

As this values is increased, the pitch will take a longer time to reach the next note. As this value is decreased, the pitch of the next note will be reached more quickly.

Setting up Controllers (CONTROL MOD, BEND and AFT)

The following settings are used when wishing to control the MC-307 patch parameters using the controls on external MIDI equipment. There are three parameters for each controller.

"MOD:" refers to messages for applying vibrato. Such messages are sent when the modulation controller on an external MIDI keyboard is operated. (On the MC-307, the controller can also be used for effects other than vibrato.)

"BEND:" refers to messages for changing pitch. Such messages are sent when the pitch bend controller on an external MIDI keyboard is operated. (On the MC-307, the controller can also be used for effects other than pitch bend.)

"AFT:" is used to edit various parameters. On an external MIDI keyboard, pressing keys modifies parameters.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press one of the [1] to [7] part buttons to select the part to be edited.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for patch editing appears.

4. Press the [CURSOR (down)] button.

5. To edit parameters in the "BEND:" or "MOD:", press [F3 (CTL1)], then [F1 (MOD)] or [F2 (BEND)] button.

   To edit parameters in the "AFT:", press [F4 (CTRL2)] button.

   One of the editing screens appears.

6. Press the [F3 (▼)] and [F4 (▲)] button buttons to select the parameter to be edited.

7. Press the [CURSOR (right/left)] buttons to move the cursor below the tone number (T-1 to T-4) for which you want to define the parameter.

8. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

9. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- MOD:
  CONTROL1/2/3/4 DEST, CONTROL1/2/3/4 DEPTH
- BEND:
  RANGE UP, RANGE DOWN, CONTROL1/2/3/4 DEST, CONTROL1/2/3/4 DEPTH
- AFT:
  CONTROL1/2/3/4 DEST, CONTROL1/2/3/4 DEPTH

 * *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

Parameters common to CONTROL MOD/BEND and CONTROL AFT

CONTROL1/2/3/4 DEST

These are the parameters that can be set up for MOD, BEND and AFT, respectively.

Select the parameters that will be controlled when each controller of the external MIDI device is operated. For each controller, you can assign up to four parameters for each tone (CONTROL 1 through CONTROL 4).

Range:

- OFF: No control
- PCH: Pitch control.
- CUT: refer to FILTER: CUTOFF (p. 92).
- RES: refer to FILTER: RESONANCE (p. 93).
- LEV: refer to AMP: TONE LEVEL (p. 95).
- PAN: refer to AMP: TONE PAN (p. 96).
- L1P: refer to LFO1/2: PITCH DEPTH (p. 99).
- L2P: refer to LFO1/2: PITCH DEPTH (p. 99).
- L1F: refer to LFO1/2: FILTER DEPTH (p. 99).
- L2F: refer to LFO1/2: FILTER DEPTH (p. 99).
- L1A: refer to LFO1/2: AMP DEPTH (p. 99).
- L2A: refer to LFO1/2: AMP DEPTH (p. 99).
- PL1:   refer to LFO1/2: PAN DEPTH (p. 99).
- PL2:   refer to LFO1/2: PAN DEPTH (p. 99).
- L1R: refer to LFO1/2: RATE (p. 98).
- L2R: refer to LFO1/2: RATE (p. 98).

CONTROL1/2/3/4 DEPTH

These are the parameters that can be set up for MOD, BEND and AFT, respectively. Specifies the amount of change that will occur for each parameter selected as a control

destination.

Range: -63– +63

With positive (+) settings, higher values will allow greater control. With negative (-) settings, the direction of the change will be inverted.

 * *Parameters that are modified using controllers are modified only temporarily. The value of the parameter itself is not directly changed.*

CONTROL BEND parameters

BEND: RANGE

Bend Up/Down (Bend Range Up/Down)

Specifies the amount of pitch change (in semitone units) that will occur when the pitch bend lever of an external MIDI device is operated. You can make independent settings for movement to the right (raising the pitch) and left (lowering the pitch).

Range:

- Bend Range Up:0– +12
- Bend Range Down:0– -48

Higher settings will result in a greater pitch change when the pitch bend lever is moved to the left or right.

For example, if Bend Range Up is set to "+12," the pitch will rise one octave when the pitch bend lever is moved to the right-most position.

Setting example1

Using the modulation lever of an external MIDI keyboard to apply vibrato (Example of using LFO1 and CONTROL1)
1. For each tone, set LFO1 PITCH DEPTH to "0"
➜ "LFO1/2: PITCH DEPTH": p. 98
2. Set LFO1 RATE to approximately "90"
➜ "LFO1/2: RATE": p. 98
3. For each tone, set CONTROL1 DEST to "L1P"
➜ "CONTROL 1/2/3/4 DEST": p. 103
4. For each tone, set CONTROL1 DEPTH to approximately "10"
➜ "CONTROL 1/2/3/4 DEPTH": p. 103

Setting example 2

Using the pitch bend lever of an external MIDI keyboard to change the pan (Example of using CONTROL2)
1. For each tone, set Tone Pan to "0"
➜ "AMP: TONE PAN": p. 96
2. Set Bend Range Up/Down to "0"
➜ "BEND: RANGE": p. 103
3. For each tone, set CONTROL2 DEST to "PAN"
➜ "CONTROL 1/2/3/4 DEST": p. 103
4. For each tone, set CONTROL2 DEPTH to "63"
➜ "CONTROL 1/2/3/4 DEPTH": p. 103

Chapter6

Saving a Patch

All parameters explained in connection with patch editing can be saved.

* *If you turn off the power without saving the patch, the edited patch will be lost. Do not select another patch before saving the edited patch. The edited patch will be lost when you select another patch.*

Procedure

1. Select a patch and edit it. (P. 88 - P. 103)

2. Press the [SYSTEM] button.

3. Press the [F3 (WR)] button.

4. Press the [F1 (PACH)] button.
   The PATCH WRITE screen will appear.
   The save source patch will be displayed in the upper line of the screen, and the save destination patch in the lower line.

5. Use the [VALUE] dial or the [INC/DEC] buttons to select the copy destination patch.

   * *In this screen, you can press [F3 (CMPA)] to access a screen where you can audition the patch that currently occupies the save destination. When you press the keyboard pad, the save destination patch will sound. (Press [F3 (EXIT)] to return to the previous screen.)*

6. Press the [F4 (WR)] button.
   A screen will appear in which you can assign a name to the patch.

7. Use the [INC/DEC] buttons or the [VALUE] dial to specify characters.
   The following characters can be selected.
   space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | }

8. When you have finished specifying the characters, press the [F4 (OK)] button.
   The display will ask "ARE YOU SURE?" (do you really want to write the patch?).

9. Press the [F4 (EXEC)] button.
   The data will be saved.

   * *If you wish to copy a patch, use the above procedure to write the patch to another, unedited patch.*

   * *In step 7, you can use the [CURSOR(up/down)] buttons to switch the selected character between uppercase and lowercase.*

   * *In step 7, the F1–F3 buttons perform the following convenient functions to help you edit the name.*

[F1 (INS)]: Add a character at the cursor location.

[F2 (DEL)]: Delete the character at the cursor location.

How "ENV TIME 1–4 and LEVEL 1–3" of this chapter are related to the "A, D, S, R" of chapter 3

The explanation in chapter 3 of using the assignable knobs to control the envelope uses the four parameters ATTACK TIME (A), DECAY TIME (D), SUSTAIN LEVEL (S), and RELEASE TIME (R).
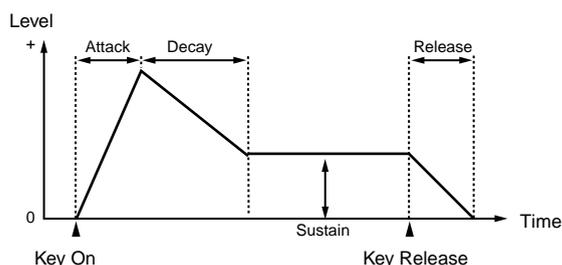
In "Patch Edit" in this chapter, the envelopes can be edited in greater detail, as shown below. The A, D, S, R envelope is related to the Patch Edit parameters as follows.
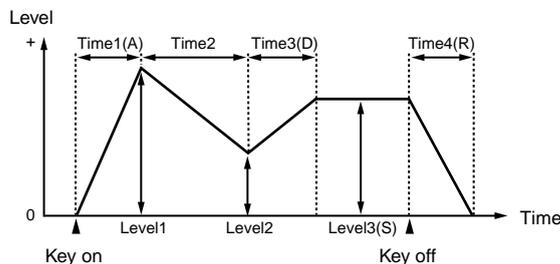
Editing Rhythm Sets

A rhythm set assigns a different tone to each keyboard pad.
The R part can be used to play multiple rhythm instrument
sounds by itself.
Here's how to edit each tone.

Selecting the Basic Tone of the rhythm (WAVE and KEY)

The WAVE and KEY are used to set up the waveform, that is,
the foundation of the rhythm tone sound, and to define basic
settings for the rhythm tone.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press [R] part buttons to
   select the part R.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order.
   The menu screen for rhythm set editing appears.

4. Press the [CURSOR (up)] button.

```
1 WAVE/KEY
2 PITCH/ENVELOPE
3 FILTER/ENVELOPE
4 AMP/ENVELOPE
WAVE PICH FLTR AMP
```

5. Press the [F1 (WAVE)] button.

6. To edit parameters in the WAVE:", press [F1 (WAVE)]
   button. To edit parameters in the "KEY:", press [F2
   (KEY)] button.
   One of the editing screens appears.

```
WAVE:  [ C 4]
A001 TB Dst Saw
WAVE KEY    ▼
```

7. Press the[F3 (▲)]/[F4 (▼)]buttons to select the
   parameter to be edited.

8. Press an appropriate keyboard pad to select the key for
   which you want to define the parameter.
   (You can listen to the sound to confirm which tone is
   selected.)

9. Specify a value using the [VALUE] dial or the [INC/
   DEC] buttons.

10. After the value is specified, press the [EXIT] button to
    return to the previous screen.

Parameters that can be set

- WAVE: WAVE, TONE SWITCH, WAVE GAIN
- KEY: ENV MODE, MUTE GROUP

*   *See the following sections for descriptions of the setting ranges*

and contents of the respective parameters.

WAVE parameters

WAVE:

You can make settings related to the waveform that is the
basis for a synthesizer's sound.

For each tone, select the waveform that will be the basis of
the sound.

The major part of a sound is determined by the waveform
that you select. It is recommended that a tone as close as
possible to the one you envision be selected.

Range: A001–A254, B001–B251, C001-C236

If you would like to know what waveforms are available...

- > "Waveform List" (P. 167)

WAVE: TONE SWITCH

Turn this "ON" if you want the tone to sound, or "OFF" if
you do not want the tone to sound.
Range: OFF, ON

WAVE: GAIN

This parameter boosts the waveform. Raising the value by 6
dB will double the gain.
Range: -6, 0, +6, +12

KEY parameters

KEY: ENV MODE (ENVELOPE MODE)

Specifies how the sound will play when a sustained-type
waveform such as a whistle (a looped waveform) is selected.

*   *If a waveform with a long decay (one-shot waveform) is
    selected, setting this parameter to SUSTAIN will have no
    effect.*

Range:
- NO-SUS: The sound will decay naturally even if you
   continue holding the keyboard pad.
- SUSTAIN:The sound will continue as long as the
   keyboard pad is pressed.

KEY: MUTE GROUP

The Mute Group function lets you prevent percussion
instruments in the same mute group from sounding
simultaneously.

If you are not using the mute group function, set this OFF.

For example, on an acoustic drum set, it is physically
impossible for the open hi-hat sound to be heard at the same

time as the closed hi-hat sound. To simulate this, you can specify the same mute group number for both hi-hat sounds.

Range: OFF, 1–31

Changing the Pitch (PITCH and ENVELOPE)

In "PITCH:" you can make settings that affect the pitch.

In "P-ENV:" you can make settings to specify how the pitch of the percussion instrument will change over time.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press [R] part buttons to select the part R.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order.

4. The menu screen for rhythm set editing appears.

5. Press the [CURSOR (up)] button.

```
1 WAVE/KEY
2 PITCH/ENVELOPE
3 FILTER/ENVELOPE
4 AMP/ENVELOPE          ▼
WAVE  PICH  FLTR  AMP
```

6. Press the [F2 (PICH)] button.

7. To edit parameters in the "PITCH:", press [F1 (PICH)] button. To edit parameters in the "P-ENV:", press [F2 (PENV)] button.
    One of the editing screens appears.

```
PITCH: [ C 4 ]
COARSE TUNE            +8
FINE TUNE              0
RANDOM PITCH          0
PICH  PENV
```

8. Press the [F3 (▲)]/[F4 (▼)]buttons to select the parameter to be edited.

9. Press an appropriate keyboard pad to select the key for which you want to define the parameter.
    (You can listen to the sound to confirm which tone is selected.)

10. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

11. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

-   PITCH: COARSE TUNE, FINE TUNE, RANDOM PITCH

-   P-ENV: ENV DEPTH, VELO SENS, VELO TIME SENS, TIME1–4, LEVEL1–4

    *   *See the following sections for descriptions of the setting ranges*

and contents of the respective parameters.

PITCH parameters

PITCH: COARSE TUNE

Adjust the pitch of each tone in semitone steps.

Higher settings will raise the pitch. Lower settings will lower the pitch.

Range: -60– +60 semitones

PITCH: FINE TUNE

You can adjust the pitch of each tone in 1-cent steps (1/100th of a semitone).

The greater value, the higher the pitch, and the smaller value, the lower the pitch.

Range: -50– +50

PITCH: RANDOM PITCH

This applies a degree of randomness to the pitch of each note.

As this value is increased, a greater degree of randomness will be applied. As this value is decreased, there will be less randomness.

With a value of "0" there will be no effect.

Range: 0–1200

P-ENV (PITCH ENVELOPE) parameters

P-ENV: ENV DEPTH (ENVELOPE DEPTH)

Here's how you can adjust the depth of the Pitch Envelope.

Increasingly positive (+) settings will produce a greater width of pitch change. Negative (-) settings will invert the shape of the envelope, causing the pitch to change in the opposite direction.

Range: -12– +12

P-ENV: VELO SENS (VELOCITY SENS)

This setting lets you control the Pitch Envelope depth by the velocity.

With positive (+) settings, the pitch will change more greatly as you play the keyboard more strongly. With negative (-) settings, the pitch will change less as you play the keyboard more strongly.

When TIME is set to a positive (+) value, softly-played notes will have little pitch change, and strongly-played notes will have greater pitch change; this lets you simulate "the pitch instability at the beginning of each note" that is characteristic of wind instruments.

Range: -100– +150

P-ENV: VELO TIME SENS (VELOCITY TIME SENSE)

This parameter lets your playing velocity the overall time of the entire Pitch Envelope.

With positive (+) settings, TIME1 will become faster as you play the keyboard more strongly. With negative (-) settings, time will become slower as you play the keyboard more strongly.

When Velocity TIME Sensitivity is set to a positive value, the pitch will change slowly for softly-played notes, and rapidly for strongly-played notes.

Range: -100– +100

P-ENV: TIME1–4 (ENVELOPE TIME1–4)

TIME1–4 (Pitch Envelope TIME 1–4)

Specifies the time until the next pitch level is reached. You can make settings for the four parameters TIME 1–4.

Higher settings will result in a longer time until the next pitch level is reached.

Range: 0–127
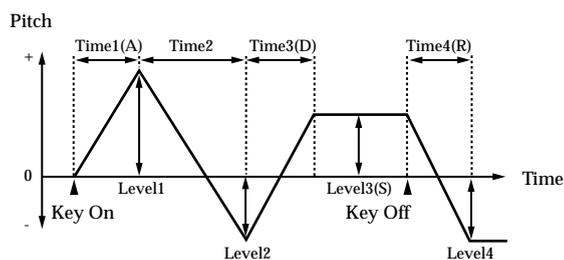
P-ENV: LEVEL1–4 (ENVELOPE LEVEL1–4)

Level1–4 (Pitch Envelope Level 1–4)

Specifies the pitch difference relative to the normal pitch (as specified by Coarse Tune and Fine Tune). You can make settings for the four parameters, Level 1–4.

Positive (+) settings will raise the pitch above the normal pitch. Negative (-) settings will lower the pitch below the normal pitch.

Range: -63– +63

Changing the Brightness of Sounds (FILTER and ENVELOPE)

FLTE" lets you make settings that affect the brightness of the percussion instrument sounds.

"F-ENV:" is used to define parameters concerning changes in the brightness of the sound relative to time.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press [R] part buttons to select the part R.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order.

4. The menu screen for rhythm set editing appears.

5. Press the [CURSOR (up)] button.

6. Press the [F3 (FLTR)] button.

7. To edit parameters in the "FILTER:", press [F1 (FLTR)] button. To edit parameters in the "F-ENV:", press [F2 (FENV)] button.
   One of the editing screens appears.
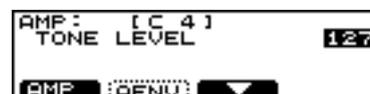
8. Press the [F3 (▲)]/[F4 (▼)] buttons to select the parameter to be edited.

9. Press an appropriate keyboard pad to select the key for which you want to define the parameter.(You can listen to the sound to confirm which tone is selected.)

10. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

11. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- FILTER:
  TYPE, CUTOFF, RESONANCE, RES VELO SENS

- F-ENV:
  ENV DEPTH, VELO SENS, VELO TIME SENS, TIME1–4, LEVEL1–4

  * *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

Chapter6

FILTER parameters

FILTER: TYPE

Select the type of filter.

Range:

- OFF:
  The filter will not be applied (all filter indicators are dark).
- LPF (Low Pass Filter):
  This is the most common type of filter, and allows audio signals with frequencies below the cutoff frequency to pass. It is used to make the sound more mellow.
- BPF (Band Pass Filter):
  This filter allows frequencies in the region of the cutoff frequency to pass, and cuts the rest.
- HPF (High Pass Filter):
  This filter allows frequencies above the cutoff frequency to pass. It is used to make the sound brighter and sharper.
- PKG (Peaking Filter):
  This filter boosts the overtones in the region of the cutoff frequency. It will emphasize the mid-range, and is useful for creating a distinctive sound.

FILTER: CUTOFF

Specifies the frequency at which the filter will begin to affect the frequency components of the waveform (the Cutoff Frequency). By changing the cutoff frequency, you can control the brightness of the sound.

Range: 0–127

The effect will depend on the Filter Type.

- LPF (Low Pass Filter)
  Higher values will cause the sound to become brighter, approaching the original waveform. Lower values will cut more of the high frequency overtones, making the sound darker.

  * *For some waveforms, you may not be able to hear any sound if you lower the value too far.*

Level

CUTOFF=0   CUTOFF=64   CUTOFF=127
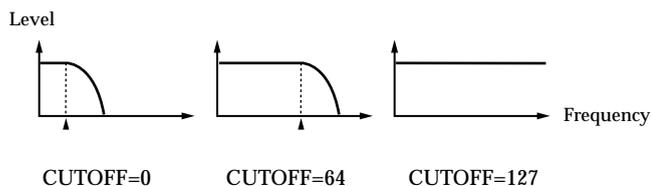
- BPF (Band Pass Filter)
  Higher values will raise the frequency area that is heard. Lower values will cause only a progressively lower

frequency area to be heard.

Level

CUTOFF=0   CUTOFF=64   CUTOFF=127

- HPF (High Pass Filter)
  As this value is increased, the low frequency range will be cut more greatly, making the sound sharper. As this value is decreased, the original sound of the waveform will be heard.

  * *For some waveforms, you may hear no sound if this value is raised excessively.*

Level

CUTOFF=0   CUTOFF=64   CUTOFF=127

- PKG (Peaking Filter)
  As this value is increased, the frequency area that is emphasized will rise. As this value is decreased, the frequency area that is emphasized will fall.

Level

CUTOFF=0   CUTOFF=64   CUTOFF=127
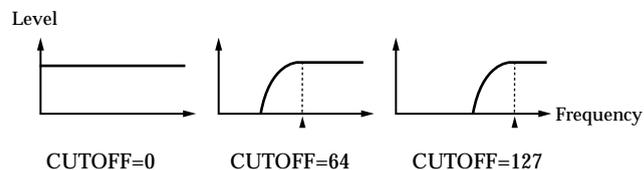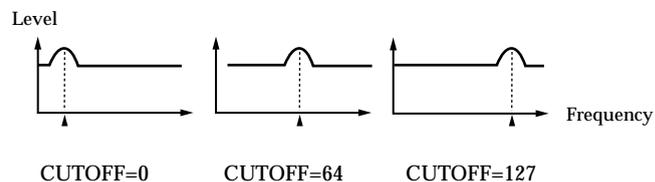
NOTE

In operating FILTER, be careful not to set RESONANCE too high. Excessively high values may cause sounds to be distorted or the volume level to become unexpectedly high. Some settings may damage your hearing, or your speakers. Please use caution.

FILTER: RESONANCE

Adding a Distinctive Character to the Sound (Resonance)

This setting emphasizes the overtones in the region of the cutoff frequency, adding character to the sound.

LPF
BPF
HPF
PKG

RESONANCE=0   RESONANCE=64   RESONANCE=127
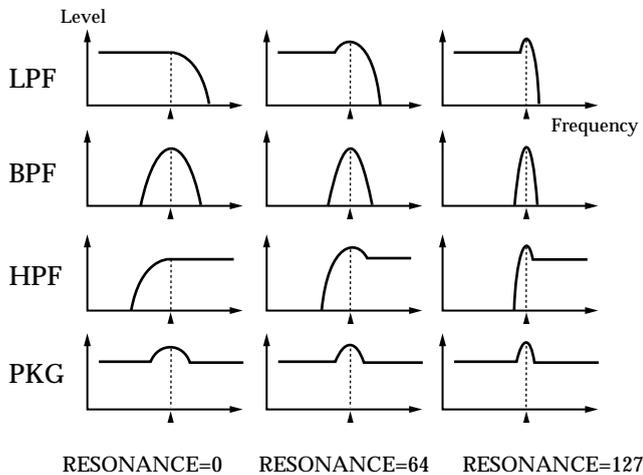
Range: 0–127

As the value is increased, the sound will take on more character. As the value is decreased, the sound will be more natural.

In order to prevent the resonance from being increased excessively, factory settings have been made so that the value will not rise beyond "110" even if the [RESONANCE] knob is rotated all the way to the right. This is called the Resonance Limiter. You are free to adjust this upper limit.

(refer to Defining the variable range for resonance (RESONANCE LIMITER) (p. 115).)

NOTE

If you have increased the Resonance Limiter setting, be careful not to raise the resonance excessively. Excessively high values may cause sounds to be distorted or the volume level to become unexpectedly high.
Some settings may damage your hearing, or your speakers. Please use caution.

FILTER: RES VELO SENS (RESONANCE VELOCITY SENSE)

Specifies how resonance depth will be affected by your playing velocity.

With positive (+) settings, playing the keyboard more strongly will cause the change to be greater. With negative (-) settings, playing the keyboard more strongly will cause the change to be less.

Range: -100– +150

F-ENV (FILTER ENVELOPE) parameters

F-ENV: ENV DEPTH (ENVELOPE DEPTH)

This setting adjusts the depth of the filter envelope.

As the value is increased in the positive (+) direction, the amount of tonal change will increase. With negative (-) settings, the shape of the envelope will be inverted, and the tone will change in the opposite direction.

When setting Envelope Depth to a positive (+) value, the effect of the filter envelope will be easier to hear if you set a lower cutoff frequency.

Range: -63– +63

F-ENV: VELO SENS (VELOCITY SENSE)

Specifies how the force of your playing velocity will affect the filter envelope.

With positive (+) settings, the tone will change more as you play more strongly on the keyboard. With negative (-) settings, the tone will change less as you play more strongly on the keyboard.

With positive (+) settings of TIME, the sound will be brighter for strongly-played notes, and darker for softly-played notes.

Range: -100– +150

F-ENV: VELO TIME SENS (VELOCITY TIME SENSE)

This parameter lets your playing dynamics on the external MIDI keyboard control the overall time of the entire envelope.

With positive (+) settings, envelope times will become faster as you play the keyboard more strongly. With negative (-) settings, envelope times will become slower as you play the keyboard more strongly.

Range: -100– +100

F-ENV: TIME1–4 (ENVELOPE TIME1–4)

Specifies the time until the next cutoff frequency is reached. You can make settings for the four parameters TIME 1–4.

Raising this setting will also raise the cutoff frequency.

Range: 0–127

Chapter6
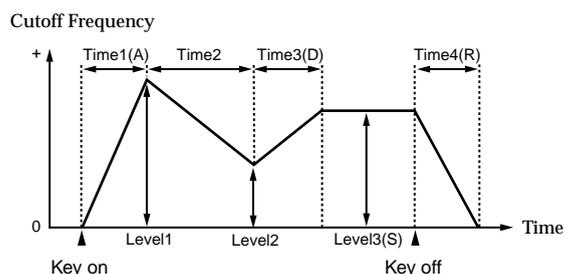
F-ENV: LEVEL1–4 (ENVELOPE LEVEL1–4)

Specifies the cutoff frequency at each level. You can make settings for the four parameters, Level 1–4.

Raising this setting will also raise the cutoff frequency.

Range: 0–127

Changing the Volume Level and Localization (AMP and ENVELOPE)

"AMP:" are used to define parameters concerning the volume level and localization.

"A-ENV:" let you specify this type of time-varying change in volume (the Amplifier Envelope).

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press [R] part buttons to select the part R.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for rhythm set editing appears.

4. Press the [CURSOR (up)] button.

   ```
   1 WAVE/KEY
   2 PITCH/ENVELOPE
   3 FILTER/ENVELOPE
   4 AMP/ENVELOPE
   WAVE PICH FLTR AMP
   ```

5. Press the [F4 (AMP)] button.

6. To edit parameters in the "AMP:," press [F1 (AMP). To edit parameters in the "A-ENV:", press [F2 (AENV)] button.

   ```
   AMP:      [C 4]
      TONE LEVEL        127
   AMP  AENV      ▼
   ```
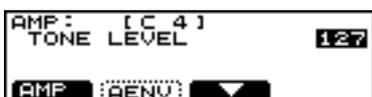
   One of the editing screens appears.

7. Press the[F3 (▲)]/[F4 (▼)] button buttons to select the parameter to be edited.

8. Press an appropriate keyboard pad to select the key for which you want to define the parameter.

   (You can listen to the sound to confirm which tone is selected.)

9. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

10. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- AMP:
  TONE LEVEL, TONE PAN, RANDOM PAN SW, ALT

  PAN DEPTH

- A-ENV:
  VELO SENS, VELO TIME SENS, TIME1–4, LEVEL1–3

* *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

AMP parameters

AMP: TONE LEVEL

This setting adjusts the volume of each tone. This is used mainly to adjust the volume balance between tones.

Range: 0–127

- > "Adjusting the Volume of Each Part (Part Level)" (P. 23)

AMP: TONE PAN

This parameter sets the stereo location for each tone.

* *The pan of the overall Rhythm set can be modified and set for each pattern by the Setup parameter Part Pan. The Tone Pan value will be added to this setting.*

Range: L64–63R

- > "Adjusting the Pan of Each Part (Part Pan)" (P. 23)

AMP: RANDOM PAN SW

This setting causes the stereo location to change randomly each time a note is played.

Range: OFF, ON

* *The TONE PAN and ALT PAN DEPTH setting will be ignored by Tones for which the Random Pan Switch is turned on.*

AMP: ALT PAN DEPTH (ALTANETE PAN DEPTH)

This parameter causes the stereo location of the sound to alternate between left and right each time a note is played.

When this parameter is set in the L direction, the sound will alternate in the order of left -> right-> left-> right. When set in the R direction, the sound will alternate in the order of right -> left-> right-> left.

Higher settings will cause greater change.

Range: L63–63R

A-ENV (AMP ENVELOPE) parameters

A-ENV: VELO SENS (VELOCITY SENSE)

Specifies how the depth of the amplifier envelope will be affected by the strength of your playing velocity.

If velocity sensitivity is set to a positive (+) value, the volume will be loud when you play strongly and soft when you play softly. As this value is increased, the volume difference

between strongly played and softly played notes will gradually increase.

With positive (+) settings, the volume will increase as you play more strongly on the keyboard. With negative (-) settings, the volume will decrease as you play more strongly on the keyboard. If this is set to "0," the volume will not be affected by the strength of your playing on the keyboard.

Range: -100– +150

A-ENV: VELO TIME SENS (VELOCITY TIME SENSE)

Specifies how the dynamics of your playing will affect TIME1–4.

Specifies the time until the next level is reached. You can make settings for the four parameters TIME 1–4.

Raising this setting will also raise the Level.

Range: -100– +100

With positive (+) settings, time will become faster as you play the keyboard more strongly. With negative (-) settings, time will become slower as you play the keyboard more strongly.

A-ENV: TIME1–4 (ENVELOPE TIME1–4)

Specifies the time until the next level point is reached. You can make settings for the four parameters TIME 1–4.

Higher settings will lengthen the time until the next level point is reached.
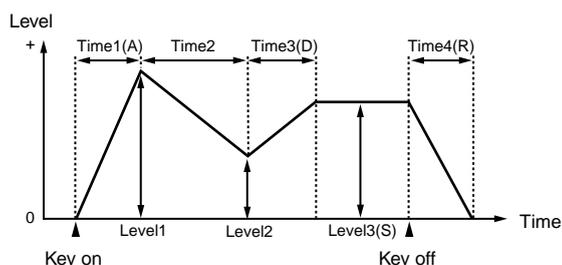
Range: 0–127

A-ENV: LEVEL1–3 (ENVELOPE LEVEL1–3)

These parameters specify the volume at each point. You can set the three points Level1–3.

Higher settings will also raise the volume.

Range: 0–127

Changing the Rate of the Pitch Change (BEND)

Specifies the amount of pitch change (in semitone units) that will occur when the pitch bend lever of an external MIDI device is operated.

Higher settings will result in a greater pitch change when the pitch bend lever is moved to the left or right.

For example, if Bend Range Up is set to "+12," the pitch will rise one octave when the pitch bend lever is moved to the right-most position.

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press [R] part buttons to select the part R.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order.

4. The menu screen for rhythm set editing appears.

5. Press the [CURSOR (down)] button.

6. Press the [F1 (BEND)] button.

7. Press the [F1 (BEND)] button again.
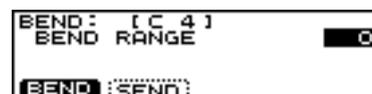
8. Press an appropriate keyboard pad to select the key for which you want to define the parameter.

   (You can listen to the sound to confirm which tone is selected.)

9. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

10. After the value is specified, press the [EXIT] button to return to the previous screen.

Range:

- Bend Range: 0–12

Chapter6

Adjusting the Effects for Each Rhythm Tone (SEND LEVEL)

In the RHY TONE (RHYTHM TONE), the levels of effects to be applied can be set up individually (on/off settings for M-FX).

Procedure

1. Press the [PTN] button.

2. Press [PART SELECT] then, Press [R] part buttons to select the part R.

3. Press [F1 (PACH)] and [F1 (EDIT)] button, in that order. The menu screen for rhythm set editing appears.

4. Press the [CURSOR (down)] button.

```
5 BEND/SEND LEVEL     ▲

BEND
```

5. Press the [F1 (BEND)] button.

6. Press the [F2 (SEND)] button.

```
SEND:   [ C 4]
REV SEND LEVEL        88
DLY SEND LEVEL         0
M-FX SW              OFF
BEND: SEND
```

7. Press [CURSOR (up/down)] buttons to select the parameter to be edited.

8. Press an appropriate keyboard pad to select the key for which you want to define the parameter.
   (You can listen to the sound to confirm which tone is selected.)

9. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

10. After the value is specified, press the [EXIT] button to return to the previous screen.

Parameters that can be set

- SEND: REV SEND LEVEL, DLY SEND LEVEL, M-FX SW

* *See the following sections for descriptions of the setting ranges and contents of the respective parameters.*

SEND: REV SEND LEVEL

Specifies the reverb volume for each rhythm tone. Higher settings will increase the reverb volume.

Range: 0–127

* *The Rhythm Tone Reverb Level setting is valid only if the Part M-FX SW setting of the rhythm part is set to "RHY." Also in this case, if the Reverb Level and the Part Reverb Level setting of the rhythm part are low, there will be no reverb even if the*

Rhythm Tone Reverb Level is raised.

- "Applying M-FX/Specifying the Output Destination for Each Part (Part M-FX SW)" (P. 23)

- "Adjusting the Overall Reverb Volume (Reverb Level) "(P. 43)

- "Adjusting the Reverb Volume for Each Part (Part Reverb Level)" (P. 23)

* *If you would like to know more about reverb settings..."Reverb" (P. 42)*

SEND: DLY SEND LEVEL

Specifies the amount of delay for each rhythm tone. Higher settings will increase the delay volume.

Range: 0–127

* *The Rhythm Tone Delay Level setting is valid only when the Part M-FX SW setting of the rhythm part is set to "RHY." Also in this case, if the Delay Level and the Part Delay Level setting of the rhythm part are low, there will be no delay even if the Rhythm Tone Delay Level is raised.*

- "Applying M-FX/Specifying the Output Destination for Each Part (Part M-FX SW)" (P. 23)

- "Adjusting the Overall Delay Volume (Delay Level)"(P. 45)

- "Adjusting the Delay Volume for Each Part (Part Delay Level)" (P. 44)

- If you would like to know more about delay settings... "Adding an Echo to the Sound (Delay)" (P. 44)

SEND: M-FX SW

This switch is used to specify M-FX on/off for each rhythm tone.

Settings

- OFF: Sounds are output from the OUTPUT jacks without any M-FX effect applied.

- ON: Sounds are output from the OUTPUT jacks with M-FX effects applied.

* *The RHYTHM TONE M-FX switch can only be activated when the PART M-FX switch for the rhythm part is set to "RHY." (P. 46)*

* *If the PART M-FX switch for the rhythm part is set to ON, M-FX effects are applied to all rhythm tones regardless of the setting of the RHYTHM TONE M-FX switch.*

* *If the M-FX Output Level setting is low, the rhythm tone with M-FX applied will not be heard (P. 44 - P. 61).*

To learn more about EFX settings.

- refer to Making Detailed Settings (p. 44).

Saving a Rhythm Set

This operation is used to save all parameters covered describing rhythm set editing.

* *To save the rhythm set with modified settings, follow the procedure below. On the other hand, if you have modified some parameters for a rhythm set but do not want to save the modifications, the rhythm set before modification can be used if this procedure is omitted.*

Procedure

1. Select and edit a rhythm set. (P. 105 - P. 112)

2. Press the [SYSTEM] button.

3. Press the [F3 (WR)] button.

4. Press the [F2 (RHY)] button.
   The screen appears where you can specify the copy source and destination rhythm sets. The display indicates that the rhythm set selected in step 1 is specified as the source.

5. Select the destination pattern to which the pattern is copied, using [CURSOR (down)] button.

   * *The rhythm set is saved under the Rhythm set number selected here. Be sure to select an appropriate rhythm set; the previously saved rhythm set is cleared.*

6. Press the [F4 (WR)] button.
   The rhythm set naming screen appears.

7. Specify characters using the [VALUE] dial or the [INC/DEC] buttons.

The following characters are available.

   space, A–Z, a–z, 0–9,! " # $ % & ' ( ) * +, - . / : ; < = > ? @ [\ ] ^ _ ` { | }

8. After characters have been specified, press [F4 (OK)] button.
   The "ARE YOU SURE?" message is displayed.

9. Press [F4 (EXEC)] button.
Saving is executed.

   * *In step 7 above, upper- or lower-case versions of the selected characters can be specified by pressing the [CURSOR (up/down)] buttons.*

   * *In step 7, the [F1] and [F2] buttons can be conveniently used for editing names.*

   - [F1 (INS)]: Adds a character at the cursor position.
   - [F2 (DEL)]: Deletes a character at the cursor position.

Copying and Initializing Settings

The parameters described in this chapter can be copied or initialized. Read the following pages for details.

Copying a Patch or Rhythm Set

A patch can be copied by performing WRITE on an unedited patch with the PATCH WRITE function (P. 104).

Copying a Patch Tone or a Rhythm Tone

Refer to "Copying a patch tone and a rhythm key (COPY)" (P. 128).

Initializing a Patch or a Rhythm Tone

Refer to "Initializing a patch, rhythm tone and pattern (INITIALIZE)" (P. 128).

Saving system settings

There are two types of system settings: those that are preserved when the power is turned off (backup parameters), and those that return to their default settings when the power is turned off.

MEMO

Backup parameters are saved when you press the [EXIT] button to close the setting screen. (At this time, the display will indicate "NOW WRITING...")

Configuration (System)

Here you can make settings that affect the operation of the entire MC-307, such as tuning and the synchronization method.

> * It is not possible to enter these set-up screens while a pattern or song is being played back.

Tuning and Sound Generator Related Settings

Setting effects on/off (EFFECT SW)

This switch is used to activate/deactivate the effects. The reverb, delay and Multi effects (M-FX) effects can be set on/off individually.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F1 (SND)] button. One of the "SYSTEM: SOUND" set-up screen appears.

4. Press [F1 (SND)] button. If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSDOR (up/down)] buttons to move the cursor to "REVERB," "DELAY" or "M-FX."

6. Set up a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

Parameter Type: Returns to "ON" each time you turn off the power
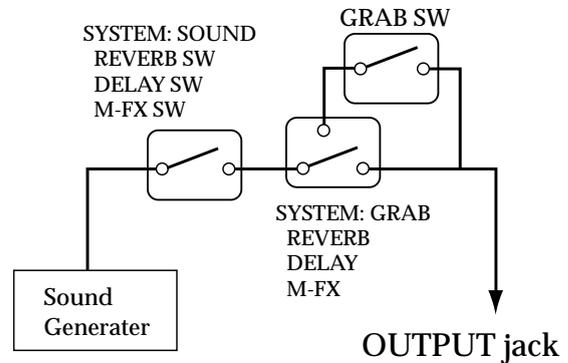
Specifying how patches will be switched (PATCH REMAIN)

This specifies whether the sound that was being heard at the moment you switched patches or rhythm sets will continue sounding, or whether it will stop.

If this is turned ON, the previous sound will continue. If this is OFF, the sound will stop.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F1 (SND)] button. One of the "SYSTEM: SOUND" set-up screen appears.

4. Press [F1 (SND)] button. If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "PATCH REMAIN."

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

Parameter Type: Backup parameters

Specifying the number of notes for each part (VOICE RESERVE)

Specifies the number of notes that will be reserved for each part when the total number of requested notes exceeds 64.Voice Reserve settings can be made up to a total of 64 notes for all parts.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F1 (SND)] button.
   One of the "SYSTEM: SOUND" set-up screen appears.

4. Press the [F1 (SND)] button.
   If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "VOISE RESERVE P - *."
   (* = Part Name)

   SYSTEM:SOUND
   PATCH REMAIN   OFF
   VOICE RESERVE P-R   7
   SND TUNE   ▼   ▲

Select the destination part.

6. Press the [PART SELECT] button.

7. Press the part button, [R], [1] to [7], for the part for which the parameter is to be set up.
   The number of the pressed part button is displayed after "P-."

8. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 0–64
Parameter Type: Backup parameters

Defining the variable range for resonance (RESONANCE LIMITER)

You can specify the range in which the [RESONANCE] knob can be adjusted.You can make separate settings for the rhythm part [RESONANCE LIMIT R] and for the other parts [RESONANCE LIMIT N].

As this setting is increased, the variable range of the [RESONANCE] knob will increase.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F1 (SND)] button.
   One of the "SYSTEM: SOUND" set-up screen appears.

4. Press the [F1 (SND)] button.
   If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "RESONANCE LIMIT R" or "RESONANCE LIMIT N.""R" is to set up the parameter for the rhythm part and "N" is for one of Parts 1 to 7.

   SYSTEM:SOUND
   RESONANCE LIMIT R 110
   RESONANCE LIMIT N 115
   SND TUNE   ▲
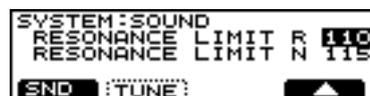
6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 50 – 127
Parameter Type: Backup parameters

Tuning the entire system (MASTER TUNE)

This adjusts the tuning of the MC-307's sound generator. The display shows the frequency of the A4 note.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F1 (SND)] button.
   One of the "SYSTEM: SOUND" set-up screen appears.

4. Press [F1 (SND)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "MASTER TUNE."

   SYSTEM:TUNE
   MASTER TUNE   440.0
   SCALE TUNE SW   ON
   SCALE TUNE [C]   0
   SND TUNE

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 427.4 – 440.0 – 452.6 (Hz)

Parameter Type: Backup parameters

Scale Tune switch (SCALE TUNE SW)

This switch activates/deactivates the Scale Tune function.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press [F1 (SND)] button.

4. One of the "SYSTEM: SOUND" set-up screen appears.

5. Press [F2 (TUNE)] button.
   The "SYSTEM: TUNE" screen appears.

6. Use the [CURSOR (up/down)] buttons to move the cursor to "SCALE TUNE SW."

```
SYSTEM:TUNE
 MASTER TUNE       440.0
 SCALE TUNE SW       ON
 SCALE TUNE [ C ]      0
:SND  TUNE
```

7. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON
Parameter Type: Backup parameters

Tuning each note (SCALE TUNE)

By modifying the tuning of each of the 12 notes from C to B, you can play using a variety of temperaments. The pitch is specified in 1-cent units relative to the equal tempered pitch.
Press the appropriate keyboard pad to select the note that you wish to adjust.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F1 (SND)] button.
   One of the "SYSTEM: SOUND" set-up screen appears.

4. Press [F2 (TUNE)] button.
   The "SYSTEM: TUNE" screen appears.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "SCALE TUNE [**]."
   (** indicates the key name.)

```
SYSTEM:TUNE
 MASTER TUNE       440.0
 SCALE TUNE SW       ON
 SCALE TUNE [ C ]      0
:SND  TUNE
```

6. Press the keyboard pad associated with the key subject to tuning.

The asterisks are replaced with the name of the key you pressed.

7. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: -64– +63 (1 cent equals 1/100 of a semitone.)
Parameter Type: Backup parameters

Setting example: Arabian-type scale
   The Scale Tune function allow you to use various tunings of ethnic music. Here is one of the Arabian scales.

- C   -6
- C#   +45
- D   -2
- Eb   -12
- E   -51
- F   -8
- F#   +43
- G   -4
- G#   +47
- A   0
- Bb   -10
- B   -49

Settings Concerning the Display and Controllers

*   *It is not possible to enter these set-up screens while a pattern or song is being played back.*

Adjusting the display contrast (LCD CONTRAST)

This adjusts the contrast (brightness) of the Display. Increasing this value will increase the contrast of the display.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up/down)] button to access the screen for items 1–4.

3. Press the [F2 (LCD)] button.

4. Press [F1 (LCD)] button.

```
SYSTEM:LCD
LCD CONTRAST        ■8
LCD  :CTRL :GRAB
```

The SYSTEM: LCD" screen appears.

5. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 1–16
Parameter Type: Backup parameters

Changing the velocity produced by playing the keyboard pads (PAD VELOCITY)

When you use the keyboard pads to play, all notes will be sounded with the same velocity (strength). This setting specifies the velocity that will be used. As this value is increased, notes played from the keyboard pad will be stronger.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up/down)] button to access the screen for items 1–4.

3. Press the [F2 (LCD)] button.

4. Press [F2 (CTRL)] button. The "SYSTEM: CONTROL" screen appears.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "PAD VELOCITY."

```
SYSTEM:CONTROL
PAD VELOCITY       127
PEDAL ASSIGN       HOLD
POLARITY       STANDARD
LCD  :CTRL :GRAB
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 1–127
Parameter Type: Backup parameters

Setting up the pedal (PEDAL ASSIGN)

This specifies the function of a pedal switch connected to the PEDAL jack.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F2 (LCD)] button.

4. Press [F2 (CTRL)] button. The "SYSTEM: CONTROL" screen appears.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "PEDAL ASSIGN."

```
SYSTEM:CONTROL
PAD VELOCITY       127
PEDAL ASSIGN       HOLD
POLARITY       STANDARD
LCD  :CTRL :GRAB
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Available Settings:

-   HOLD: The pedal will act as a Hold Pedal.
-   PTN-I: (Pattern Increment)
    With the Pattern Call function (P. 37) setting of ON, The patterns of the currently selected pattern set will be successively selected.
-   TAP: The pedal will act like the TAP button.
-   R-TPS: The pedal will act like the TRANSPOSE button.
-   PLAY: The pedal will act like the PLAY button / STOP button.
-   SOSTE: The pedal will act as a Sostenuto Pedal.

Parameter Type: Backup parameters

Setting up the polarity of the pedal (PEDAL POLARITY)

Select the polarity of the pedal.

If you are using a pedal with inverted polarity (so the pedal functions in a way opposite from what you expect), select "REVERSE."

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F2 (LCD)] button.

4. Press [F2 (CTRL)] button. The "SYSTEM: CONTROL" screen appears.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "POLARITY."

```
SYSTEM:CONTROL
PAD VELOCITY        127
PEDAL ASSIGN       HOLD
POLARITY       STANDARD
LCD   CTRL GRAB
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: STANDARD, REVERSE
Parameter Type: Backup parameters

Setting up the effect for which the GRAB switch is used (GRAB SW)

The GRAB switch is used to specify which of the REVERB, DELAY and Multi-Effect functions is to be turned on/off with the GRAB switch.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press [F2 (LCD)] button.

4. Press [F3 (GRAB)] button. The "SYSTEM: GRAB" screen appears.

5. Press the [CURSOR (up/down)] buttons to move the cursor to the desired effect.

```
SYSTEM:GRAB
REVERB              OFF
DELAY               OFF
M-FX                 ON
LCD   CTRL GRAB
```

6. Set the GRAB switch to ON to activate it, and to OFF to deactivate it.

7. Operating the [GRAB] switch turns the effect on/off.

Range: OFF, ON
Parameter Type: Backup parameters

* *If operating the GRAB switch does not turn the effect on or off, check the following:*
- Is the MASTER switch turned off for the effect? (P. 42, P. 44, P. 46)
- Is the SEND LEVEL for the part too low (P. 42, P. 44)or isn't the switch turned off? (P. 46)
- Is the switch function hard to recognize because the effect is already set up? (P. 42 - P. 61)

Sequencer-Related Settings

* *It is not possible to enter these set-up screens while a pattern or song is being played back.*

Setting up the volume level of the metronome (METRONOME LEVEL)

This sets the volume of the metronome. Increasing this setting will raise the volume.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button. One of the set-up screens for SYSTEM: SEQ is displayed.

4. Press the [F1 (PRM1)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "METRONOME LEVEL."

```
SYSTEM:SEQ
METRONOME LEVEL     127
AUTO CHECKSUM        ON
 PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 0–127
Parameter Type: Backup parameters

Calculating a checksum automatically (AUTO CHECKSUM)

This specifies whether or not the checksum will be calculated automatically when you use the Microscope page to input a system exclusive message. With the factory settings, this will be "ON." If you do not want the checksum to be calculated automatically, turn this "OFF."

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button. One of the SYSTEM: SEQ screens appears.

4. Press the [F1 (PRM1)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "AUTO CHECKSUM."
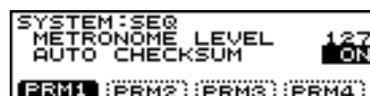
```
SYSTEM:SEQ
METRONOME LEVEL     127
AUTO CHECKSUM        ON
 PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON
Parameter Type: Backup parameters

Synchronization settings (SYNC MODE)

This specifies how the internal sequencer will operate and how MIDI Clock messages will be transmitted and received.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button. One of the selection screens for SYSTEM: SEQ appears.

4. Press the [F2 (PRM2)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "SYNC MODE."

```
SYSTEM:SEQ
SYNC MODE        REMOTE
SYNC OUT             ON
ARPEGGIO SYNC        ON
 PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Available Settings:

- INT:
  The internal sequencer will synchronize to the internal tempo clock. Any MIDI Clock messages received from an external device will be ignored.

- REMOTE:
  Operation will be essentially the same as "INT." However, Start/Stop messages from the external MIDI device will control playback/stop for the internal sequencer.

- 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.

* *When this is set to "SLAVE," the front panel SLAVE*

indicator will light.

Parameter Type: Backup parameters

Transmitting synchronization messages (SYNC OUT)

This specifies whether or not synchronization-related MIDI messages will be transmitted.

When this is on, the following messages will be transmitted from the MIDI OUT connector.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
   One of the "SYSTEM: SEQ" screens appears.

4. Press the [F2 (PRM2)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "SYNC OUT."

```
SYSTEM:SEQ
SYNC MODE          REMOTE
SYNC OUT               ON
ARPEGGIO  SYNC         ON
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

- Timing Clock:F8
- Start: FA
- Continue:FB
- Stop: FC
- Song Position Pointer:F2

Parameter Type: Backup parameters

Synchronizing arpeggios to the pattern (ARPEGGIO SYNC)

You can specify whether or not arpeggios will be synchronized to the pattern playback. If you do not want arpeggios to be synchronized to the pattern playback, turn Arpeggio Sync "OFF."

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
   One of the SYSTEM: SEQ set-up screens appears.

4. Press the [F2 (PRM2)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "ARPEGGIO SYNC."

```
SYSTEM:SEQ
SYNC MODE          REMOTE
SYNC OUT               ON
ARPEGGIO  SYNC         ON
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

Parameter Type: Backup parameters

Making songs play continuously (SONG LOOP MODE)

This specifies how songs will be played back.

You can cause the same song to be played back repeatedly, or all songs to be played back in sequence.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
   One of the SYSTEM: SEQ set-up screens appears.

4. Press the [F3 (PRM3)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "SONG LOOP MODE."

```
SYSTEM:SEQ
SONG LOOP MODE     LOOP1
SONG PLAY MODE     MODE1
RPS TRIGGER QTZ
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Available Settings:

- OFF:
  This is the normal condition. The currently selected song will be played back only once.
- LOOP 1:
  The currently selected song will be played back repeatedly.
- LOOP 2:
  All songs will be played back repeatedly in sequence.

* 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.

Parameter Type: Backup parameters

Setting up the mode of song playback (SONG PLAY MODE)

Specify whether or not the pattern setup parameters will be loaded when you move to the next step of the song.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
One of the SYSTEM: SEQ set-up screens appears.

4. Press the [F3 (PRM3)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "SONG PLAY MODE."

```
SYSTEM:SEQ
 SONG LOOP MODE    LOOP1
 SONG PLAY MODE    MODE1
 RPS TRIGGER QTZ
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range:
  - MODE 1:
    The setup parameters, mute, and realtime modify settings will be loaded each time you move to the next step.
  - 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.

Parameter Type: Backup parameters

Specifying the timing for RPS playback (RPS TRIGGER QTZ)

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 keyboard pad. On the MC-307 you can specify the playback timing of the phrase, so it will play back in precise synchronization with the pattern.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
One of the SYSTEM: SEQ set-up screens appears.

4. Press the [F3 (PRM3)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "RPS TRIGGER QTZ."

```
SYSTEM:SEQ
 SONG LOOP MODE    LOOP1
 SONG PLAY MODE    MODE1
 RPS TRIGGER QTZ
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: REAL, ♪ , ♩ , ♩ , MES
  - REAL:
    The phrase will play back immediately, at the timing at which you pressed keyboard pad.
  - ♪ , ♩ , ♩ :
    The pattern will be divided into selected note units, and when you press the keyboard pad, the phrase will begin playing at the beginning of the next note unit.
  - MES:
    The pattern will be divided into one-measure units, and when you press the keyboard pad, the phrase will begin playing at the beginning of the next measure.

* Except when this parameter is set to "REAL," pressing the keyboard pad 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.

Parameter Type: Backup parameters

Using the RHYTHM PART VIEW button as the MUTE CTRL part button (RHY VIEW)

There is a special "MUTE CTRL part" that is used to record data for operations such as "switching the MUTE buttons on/off," "tempo changes," and "system exclusive messages." If desired, you can make settings so that the RHYTHM PART VIEW button will function as the MUTE CTRL part button.

Procedure

1. Press the [SYSTEM] button and then the [F1 (SYS)] button.
   A screen will appear in which you can select system setting items.

2. Use the [CURSOR(up)] button to access items 1–4.

3. Press the [F3 (SEQ)] button.
   One of the "SYSTEM: SEQ" screens will appear.

4. Press the [F4 (PRM4)] button.

5. Use the [CURSOR(up/down)] buttons to move the cursor to "RHY VIEW."

```
SYSTEM:SEQ
RHY VIEW          NORMAL
TAP SW               ON
TAP RESOLUTION        ♩
PRM1  PRM2  PRM3  PRM4
```

6. Use the [VALUE] dial or the [INC/DEC] buttons to set the value.

Range:
- NORMAL:
  The button will function as the RHYTHM PART VIEW button.
- MUTE CTRL:
  The button will function as the MUTE CTRL button.

* *In the case of Microscope (P. 72) and Pattern Editing (P. 76), the button will always function as the MUTE CTRL button regardless of this setting.*

Parameter Type: Backup parameters

Turning off tap tempo (TAP SW)

Specify whether or not [TAP] button can be used to modify the tempo (BPM). With a setting of "OFF," it will not be possible to use [TAP] button to modify the tempo.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
   One of the SYSTEM: SEQ set-up screens appears.

4. Press the [F4 (PRM4)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "TAP SW."

```
SYSTEM:SEQ
RHY VIEW          NORMAL
TAP SW               ON
TAP RESOLUTION        ♩
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

Parameter Type: Backup parameters

Changing the resolution of the tap tempo (TAP RESOLUTION)

This specifies the basic note value that will be used when the TAP button is used to modify the tempo. When you press the TAP button, the tempo will be changed to intervals of the specified note value.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F3 (SEQ)] button.
   One of the SYSTEM: SEQ set-up screens appears.

4. Press the [F4 (PRM4)] button.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "TAP RESOLUTION."

```
SYSTEM:SEQ
RHY VIEW          NORMAL
TAP SW               ON
TAP RESOLUTION        ♩
PRM1  PRM2  PRM3  PRM4
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: ♪, ♩

Parameter Type: Backup parameters

MIDI-Related Settings

*   *It is not possible to access these setting pages while a pattern or song is playing back.*

Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD)

An external MIDI keyboard can be used instead of the MC-307's keyboard pads.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press [F1 (CMN)] button.
    If the following screen is not displayed, use [F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "REMOTE KEYBOARD."

    ```
    SYSTEM:MIDI
    REMOTE KEYBOARD      ON
    DEVICE ID            17
    THRU                 ON
    CMN :TXRX:    ▼
    ```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

> This parameter is set to "ON" with the factory settings, enabling patches in the part selected on the MC-307 to be played back regardless of the transmission channels of the external MIDI keyboard.
>
> Set it to "OFF" to control the MC-307 from an external sequencer, as a multi-timbre sound generator with eight parts. Patches can be played back by part, according to the channel used for sending MIDI data from the external sequencer.
>
> You should also turn this setting "OFF" if you want Note messages that are received on the specified Arpeggio Control Channel or the RPS Control Channel to control arpeggios or RPS from an external device.

-   "Specifying the Channel That Will Control Arpeggios, refer to Specifying the channel that will control arpeggios (ARPEGGIO CTRL CH) (p. 124).

-   "Specifying the Channel That Will Control RPS, refer to Specifying the channel that will control RPS (RPS CTRL CH) (p. 124).

Parameter Type: Backup parameters

Identifying devices of the same model (DEVICE ID)

This function is use to set up a device ID number of a system-exclusive message on the MC-307.

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-307 unit at the same time.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press [F1 (CMN)] button.
    If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "DEVICE ID."

    ```
    SYSTEM:MIDI
    REMOTE KEYBOARD      ON
    DEVICE ID            17
    THRU                 ON
    CMN :TXRX:    ▼
    ```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: 17–32

Parameter Type: Backup parameters

*   *The bulk dump message (one of the System Exclusive messages) is sent with the device ID number set up in the above procedure.*

Re-transmitting messages received at MIDI IN from MIDI OUT (THRU)

When this function is "ON," MIDI messages received at the MIDI IN connector will be re-transmitted from MIDI OUT without change.

(The MIDI OUT connector can be used as the MIDI THRU connector.)

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

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2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press [CMMN] button.
If the following screen is not displayed, use [F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] button to move the cursor to "THRU."

```
SYSTEM:MIDI
 REMOTE KEYBOARD       ON
 DEVICE ID             17
 THRU                  ON
 CMN  :TXRX:    ▼
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, ON

Parameter Type: Backup parameters

Specifying the channel that will control arpeggios (ARPEGGIO CTRL CH)

If the remote keyboard switch is set to "OFF" (that is, if the system is set to receive data from an external MIDI keyboard as they are on MIDI channels), this operation specifies which channel on the external MIDI equipment is used as the source of note information for controlling arpeggio.

When note messages on the specified channel are received from an external device, an arpeggio will be generated based on those notes, and played by the current part.

With the factory settings this is set at "16."

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F1 (CMN)] button.
If the following screen is not displayed, use [F3 (▼)] to make it appear.

5. Use the [CURSOR (up/down)] button to move the cursor to "ARPEGGIO CTRL CH."

```
SYSTEM:MIDI
 ARPEGGIO CTRL CH     16
 RPS CTRL CH          15
 EDIT TX/RX        MODE1
 CMN  :TXRX:    ▲
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, 1–16

Parameter Type: Backup parameters

- refer to Playing back arpeggio on the MC-307 using an external MIDI keyboard (p. 134).

* *If the Remote Keyboard Switch is "ON," you can play arpeggios on the current part simply by turning the arpeggiator on.*

Specifying the channel that will control RPS (RPS CTRL CH)

This specifies the channel that note messages arriving from an external MIDI device need to be using in order to control RPS when the Remote Keyboard Switch is "OFF." When note messages on the specified channel are received from an external device, RPS will play.

With the factory settings this is set at "15."

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F1 (CMN)] button.
If the following screen is not displayed, use [F3 (▼)] to make it appear.

5. Use the [CURSOR (up/down)] button to move the cursor to "RPS CONTROL CH."

```
SYSTEM:MIDI
 ARPEGGIO CTRL CH     16
 RPS CTRL CH          15
 EDIT TX/RX        MODE1
 CMN  :TXRX:    ▲
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Range: OFF, 1–16

Parameter Type: Backup parameters

- refer to Playing back RPS on the MC-307 using an external MIDI keyboard (p. 133).

* *If the Remote Keyboard Switch is "ON," this setting is ignored.*

Specifying how knob data is transmitted (EDIT TX/RX)

This specifies the type of MIDI message that will be used to communicate with external devices when the front panel knobs are moved. With the factory settings this is set to "MODE1."

When transmitting/receiving the MIDI messages of the knobs in MODE2, only control change data that can be received by the three devices MC-307, MC-505, and JX-305 will be transmitted.

When transmitting/receiving data between these devices, it is best to use MODE2.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F1 (CMN)] button.
   If the following screen is not displayed, use [F3 (▼)] to make it appear.

5. Use the [CURSOR (up/down)] button to move the cursor to "EDIT TX/RX."

```
SYSTEM:MIDI
ARPEGGIO CTRL CH    16
RPS CTRL CH         15
EDIT TX/RX       MODE1
CMN :TXRX:          ▲
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

   * *If you would like to know the control number assignments for each knob/slider in MODE1 and MODE2...*
     refer to RPS Pattern List (p. 176).

Range: MODE1, MODE2

- MODE1: Knob/slider data will be transmitted and received as control changes and as system exclusive data.
- MODE2: Knob/slider data will be transmitted and received as control changes.
  The amount of data will be smaller than for MODE1.

   * *The REVERB section, DELAY section and M-FX section will also be transmitted as system exclusive messages, regardless of the mode.*

   * *With MODE1, some control changes will be automatically converted to a system exclusive message for transmission. Also, when such a converted exclusive message is received, it*

will automatically be converted to a control change inside the MC-307.

   * *If you want the MC-307 to receive MIDI messages that were transmitted from the knobs/sliders to an external device (and then re-transmitted back to the MC-307), you must select the same EDIT TXRX with which the data was originally transmitted. If this setting is different, MIDI messages will not be received correctly.*

Parameter Type: Backup parameters

Setting up reception mode for each part (MIDI RX SW)

For each part R–7, you can specify whether or not MIDI messages from MIDI IN will be received.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F2 (TXRX)] button.
   If the following screen is not displayed, use [F4 (▲)] to make it appear.

Use [PART SELECT] button and the PART buttons to select the part whose settings you wish to modify.

5. Press [PART SELECT] button.

6. Press the part button, [R], [1] to [7], for the part for which the parameter is to be set up.

```
SYSTEM:MIDI
MIDI RX SW  P-2      ON
   R 1 2 3 4 5 6 7
[ + + + + + + + +]
CMN  TXRX       ▼
```

7. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.
   The listing at the bottom of the display shows the settings for the respective parts. Parts R and 1 to 7 are listed from left to right in sequence, and "+" indicates the receiving mode while "_" the non-receiving mode.

Range: OFF (_), ON (+)

If this is "OFF," the corresponding part cannot be played from an external MIDI device.

Parameter Type: Backup parameters

Disconnecting the keyboard pads from the internal sound generator (LOCAL TX SW)

You can specify how MIDI messages from the controller section (the keyboard pad, knobs, pedals etc.) will be sent to each part [R], [1] to [7]. Use [PART SELECT] button and the PART buttons to select the part whose settings you wish to modify.

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F2 (TXRX)] button.
   If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

   ```
   SYSTEM:MIDI
    MIDI LOCALTX P-R BOTH
      R 1 2 3 4 5 6 7
     [B B B B B B B B]
    CMN  TXRX    ▼     ▲
   ```

5. Press [PART SELECT] button.

6. Press the part button, [R], [1] to [7], for the part for which the parameter is to be set up.

7. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.
   The listing at the bottom of the display shows the settings for the respective parts. Parts R and 1 to 7 are listed from left to right in sequence, and "I" indicates transmission to the internal sound generator only while "E" indicates transmission to MIDI OUT only.

Available Settings:
- INT (I):   Messages from the controller section will be transmitted only to the internal sound generator.
- EXT (E):   Messages from the controller section will be transmitted only to MIDI OUT.
- BOTH (B):Messages from the controller section will be transmitted both to the internal sound generator and to MIDI OUT.

Parameter Type: Backup parameters

Reception settings for each type of MIDI message

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button.
   The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F2 (TXRX)] button.
   If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "RX. PROG CHANGE," "RX. BANK SELECT" or "RX. SYSEX."

   ```
   SYSTEM:MIDI
    RX.PROG CHANGE      ON
    RX.BANK SELECT      ON
    RX.SYS-EX           ON
    CMN  TXRX    ▼     ▲
   ```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Available Settings:
- **RX.PROG CHANGE** (Receive Program Change Switch)
  Specifies whether or not each part will receive program changes. When this is "OFF," program changes will not be received.
  Range: OFF, ON
- **RX.BANK SELECT** (Receive Bank Select Switch)
  Specifies whether or not each part will receive bank select messages. When this is "OFF," bank select messages will not be received.
  Range: OFF, ON
- **RX.SYSEX** (Receive System Exclusive Switch)
  Specifies whether or not each part will receive system exclusive messages. When this setting is "OFF," system exclusive messages will not be received.
  Range: OFF, ON

Parameter Type: Backup parameters

Transmission settings for each type of MIDI message

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F2 (TXRX)] button.
   If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

5. Use the [CURSOR (up/down)] buttons to move the cursor to "TX. PROG CHANGE," "TX. BANK SELECT" or "TX. ACTIVE SENSING."

```
SYSTEM:MIDI
  TX.PROG CHANGE        ON
  TX.BANK SELECT        ON
  TX.ACTIVE SENSING     ON
 CMN   TXRX      ▼       ▲
```

6. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Available Settings:

- **TX.PROG CHANGE** (Transmit Program Change Switch)
  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.
  Range: OFF, ON

- **TX.BANK SELECT** (Transmit Bank Select Switch)
  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.
  Range: OFF, ON

- **TX ACTIVE SENSING** (Transmit Active Sensing Switch)
  Specifies whether or not Active Sensing messages will be transmitted from MIDI OUT. When this setting is "OFF," these messages will not be transmitted.
  Range: OFF, ON

Parameter Type: Backup parameters

Transmission settings of Mute Control part

Transmission Setting of Mute Control part, to internal sound source (I), to MIDI OUT connector (E) or both (B)

Procedure

1. Press the [SYSTEM] button, then the [F1 (SYS)] button. The selection screen for system settings appears.

2. Press the [CURSOR (up)] button to access the screen for items 1–4.

3. Press the [F4 (MIDI)] button.

4. Press the [F2 (TXRX)] button.
   If the following screen is not displayed, use [F3 (▼)][F4 (▲)] to make it appear.

```
SYSTEM:MIDI
  MUTE CTRL OUTPUT    INT
 CMN   TXRX            ▲
```

5. Specify a value using the [VALUE] dial or the [INC/DEC] buttons.

Arpeggiator Settings

See P. 31 for detailed descriptions of the ARPEGGIATOR.

Settings for RPS Sets

See P. 38 for detailed descriptions of RPS sets.

Setting for Play Quantize

See P. 127 for detailed descriptions of Play Quantize.

Useful Functions (Utilities)

*   *It is not possible to enter these set-up screens while a pattern or song is being played back.*

Initializing Patches, Rhythm Tones and Patterns (INITIALIZE)

Initializing patches and patterns

Procedure

1. First, select the patch or pattern to be initialized (P. 17, P. 21).

2. Press the [SYSTEM] button.

3. Press the [F2 (UTIL)] button.

4. Press the [CURSOR (up)] button.
    The "1 INITIALIZE" screen appears.

5. Press the [F1 (INIT)] button.
    The screen for selecting what to initialize appears.

```
INITIALIZE
PATCH
RHYTHM  [C 4]
PATTERN
              EXEC
```
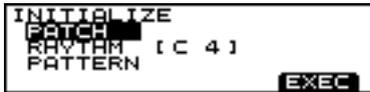
6. Use the [CURSOR (up/down)] buttons to select "PATCH" or "PATTERN," then press [F4 (SEL)] button.
    The "ARE YOU SURE?" message appears.

7. Press [F4 (EXEC)] button.

Initialization is performed.

Initializing rhythm tones.

Procedure

1. First, select the rhythm set containing the rhythm tone be initialized (P. 21).

2. Press the [SYSTEM] button.

3. Press the [F2 (UTIL)] button.

4. Press the [CURSOR (up)] button.
    The "1 INITIALIZE" screen appears.

5. Press the [F1 (INIT)] button.
    The screen for selecting what to initialize appears.

6. Use the [CURSOR (up/down)] buttons to select "RHYTHM."

7. Press the [OCT (-/+)] to set the key range, then Press one of the pads [1] to [16] to select the key to be initialized.

8. Press the [F4 (OK)] button.
    The "ARE YOU SURE?" message appears for confirmation.

9. Press [F4 (EXEC)] button.

Initialization is performed.

Copying Patch Tones and Rhythm Tone (COPY)

This function duplicates patch tones and rhythm keys.

Operating procedure

1. Select destination Patch or Rhythm set.
    (refer to Selecting Patch/Rhythm Set (p. 21).)

2. Press the [SYSTEM] button.

3. Press the [F2 (UTIL)] button.

4. Press the [CURSOR (up)] button.
    The "2 COPY" screen appears.

5. Press the [F2 (COPY)] button.
    The "PATCH TONE COPY" appears if any of parts [1] to [7] is selected, and the "RHYTHM TONE COPY" screen appears if part [R] is selected.

6. On the "PATCH TONE COPY" screen, select the patch/patch tones of the copy source (upper line) and the destination (lower line) patch.
    On the "RHYTHM TONE COPY" screen, select the rhythm set/tone numbers of the copy source (upper line) and the destination tone(lower line).

7. Press the [F4 (OK)] button.
    The "ARE YOU SURE?" message appears for confirmation.

8. Press [F4 (EXEC)] button.

Copying is performed.

Saving Data on an External Sequencer (BULK DUMP)

The MC-307 is capable of saving data of the currently selected pattern or patches in a part en masse on an external device. This is referred to as "Bulk Dump." By using this function, you can save MC-307 data on an external MIDI sequencer (such as the Roland MC-80) that has a floppy disk, or exchange data between two MC-307 units.

* *Entering the data reception screen for the BULK DUMP function clears the contents of the pattern being edited. If there is any pattern that has not been saved, be sure to save it before performing BULK DUMP.*

* *The MC-307 is capable of receiving bulk dumps data from the MC-505. On the other hand, the MC-505 may fail to receive the bulk dumps from the MC-307 due to differences in the number of patches.*

Recording Pattern data on an external sequencer

First, connect the MIDI OUT connector of the MC-307 to the MIDI IN connector of the external (such as the Roland MC-80) MIDI sequencer via an MIDI cable.

Procedure

Select the pattern to be saved.

1. Press the [PTN] button.

2. Select the pattern using the [VALUE] dial or the [INC/DEC] button.

3. Press the [SYSTEM] button, then Press the [F2 (UTIL)] button.

4. Press the [CURSOR (up)] button.
   The screen containing the "3 BULK DUMP" screen appears.

5. Press the [F3 (BULK)] button.

6. Press [F1 (TX)] button.
   The "BULK DUMP" screen appears.

7. Use the [CURSOR (up/down)] buttons to select the data type to be transmitted.

Available Settings:

- SETUP: Setup parameters for all parts of the currently selected pattern will be transmitted.

- SETUP&PATCH: In addition to the contents transmitted by SETUP, data for the patches (rhythm set) of all parts of the currently selected pattern will be transmitted.

- PATCH & PATTERN: In addition to the contents transmitted by SETUP&PATCH, the musical data of the currently selected pattern will be transmitted.

8. Start real-time recording on the external sequencer.

9. Press the [F4 (SEL)] button.
   ARE YOU SURE?" message is displayed. The system enters the BULK DUMP standby mode."

10. Press [F4 (EXEC)] button on the MC-307.
    The bulk data will be transmitted from MIDI OUT.

    After data transmission is completed, the display returns to the pattern play screen.

11. Stop recording on the external MIDI sequencer.

* *The bulk data are transmitted with the device ID number set up in the procedure for setting the device ID number (P. 123).*

Restoring Pattern data from a MIDI sequencer to the MC-307

Follow the steps below to return the saved bulk data to the MC-307.

First, connect the MIDI IN connector of the MC-307 to the MIDI OUT connector of the external MIDI sequencer via an MIDI cable.

* *Even when bulk data is received in this procedure, the data has not yet been saved on the MC-307. If you wish to keep the data (including the patches and rhythm sets used by the pattern), you must save it.*

* *When you wish to receive data, press the [PATTERN] button to enter Pattern mode before executing the operation.*

Procedure

1. Press the [PTN] button.

2. Select the pattern using the [VALUE] dial or the [INC/DEC] button.
   Data is returned to the pattern selected in this step.

3. Press the [SYSTEM] button, then the [F2 (UTIL)] button.

4. Press the [CURSOR (up)] button.
   The screen containing the "3 BULK DUMP" screen appears.

5. Press the [F3 (BULK)] button.

6. Press the [F2 (RX)] button.
   The "BULK DUMP" screen appears. The MC-307 enters the bulk data reception mode.

7. Transmit bulk data from the external device.
   Data is received.

8. When transmission from the external device is completed, Pattern Play screen appears.

* *If you want to about the reception, press [F4 (EXIT)].*

* *After SETUP data has been received, use the Pattern Write operation to save the setup to user pattern memory.*

* *After SETUP&PATCH or ALL data has been received, first use the Patch Write operation to save the patches of all parts to vacant user patches. Then use the Pattern Write operation to save the setup and musical data as a user pattern.*

Recording the data of all MC-307 data on an external sequencer

Before you begin, use a MIDI cable to connect the MIDI OUT of the MC-307 to the MIDI IN of the external sequencer.

NOTE

Approximately 1.1 MB (megabytes) of storage space is required to save this data. You will need to use a sequencer that is able to handle this amount of data. Roland models that meet this requirement include the MC-80 (as of January, 2000).

Procedure

1. Press the [SYSTEM] button, and then the [F2 (UTIL)] button.

2. Press the [CURSOR(up)] button.
   The "3 BULK DUMP" screen will appear.

3. Press the [F3 (BULK)] button.

4. Press the [F3 (TXAL)] button.
   The "BULK TX USER ALL" screen will appear.

5. Start realtime recording on your external MIDI sequencer.

6. On the MC-307, press [F4 (EXEC)].
   Bulk data will be transmitted from MIDI OUT.

   Data transmission will end in approximately nine minutes, and you will return to the pattern playback screen.

7. Stop recording on your external MIDI sequencer.

* *The bulk data will be transmitted with the device ID number specified by the Device ID setting (P. 123).*

Restoring data for all MC-307 data from a MIDI sequencer back to the MC-307

To restore previously saved bulk data back to the MC-307, use the following procedure.

Before you begin, use a MIDI cable to connect the MIDI IN of the MC-307 to the MIDI OUT of your external sequencer.

Procedure

1. Press the [SYSTEM] button and then the [F2 (UTIL)] button.

2. Press the [CURSOR(up)] button.
   The "3 BULK DUMP" screen will appear.

3. Press the [F3 (BULK)] button.

4. Press the [F4 (RX AL)] button
   The "ARE YOU SURE?" message is displayed.

5. Press [F4 (EXEC)].
   The "BULK RX USER ALL" screen will appear. The MC-307 will be ready to receive bulk data.

6. Transmit bulk data from the external device.

7. When the external device has finished transmitting the data (It takes about nine minutes), You will return to pattern play screen.

Checking the amount of unused internal memory (MEMORY INFORMATION)

You can check the remaining amount of internal memory.

Procedure

1. Press the [SYSTEM] button.

2. Press the [F2 (UTIL)] button.

3. Press the [CURSOR (up)] button.
   The screen containing the "4 MEMORY INFORMATION" screen appears.

4. Press the [F4 (INFO) button.
   The "MEMORY INFORMATION" screen appears.

```
MEMORY INFORMATION
AVAIL              70%
[████████████      ]
              [ OK ]
```
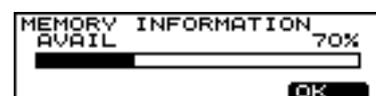
Press [F4 (OK)] or [EXIT] to return to previous screen.

Restoring the Factory Settings (FACTORY RESET)

This operation can restore all settings of the MC-307 to those factory default settings.

Caution: If any valuable data reside in the MC-307 main memory, save the data into an external MIDI sequencer or other external devices by performing bulk dumps (P. 130) before executing factory reset.

Operating procedure

1. Press the [SYSTEM] button.
    The menu screen for system set-up appears.

2. Press the [F2 (UTIL)] button.

3. Press the [CURSOR (down)] button.
    The screen containing the "5 FACTORY RESET" screen appears.

4. Press [F1 (FACT)] button.
    The "FACTORY RESET" screen appears and the "ARE YOU SURE?" message is displayed.

```
FACTORY RESET

       ARE YOU SURE?
              EXIT   OK
```

5. Press [F4 (EXEC)] button to execute factory reset.

It takes about 6 minutes to complete and the "COPMPLETED!" message appears.

After a while, pattern play screen appears.

Writing Patches and Patterns in the Memory (WRITE)

This operation writes editing and recording results in the main memory. This enables patches and patterns to be stored in the system even after power off.

*   *It is not possible to enter this setting display while a pattern or song is playing back. Refer to the following pages for saving procedures used for the respective items.*

- **Patch**
    refer to Saving a Patch (p. 104).
- **Rhythm set**
    refer to Saving a Rhythm Set (p. 113).
- **Pattern**
    refer to Saving the Pattern (p. 83).

- **Song**
    refer to Saving the Song (p. 87).
- **Arpeggiator**
    refer to Saving Arpeggio Settings (Arpeggio Write) (p. 34).
- **Pattern Set**
    refer to Saving a Pattern Set (p. 38).
- **RPS Set**
    refer to Saving the Settings of an RPS Set (p. 41).

Canceling Execution of Editing and Recording (Undo/Redo)

It is possible to cancel the results of an editing (pattern/song edit and microscope edit) or recording operation for a song or pattern. This is called "Undo."

It is also possible to cancel the results of the Undo. This is called "Redo."

*   *It is not possible to access this setting page while a pattern or song is playing back.*

Procedure

1. Press the [SYSTEM] button.

2. Press the [F4 (UNDO)] button.
    The item subject to UNDO is displayed. For example, "UNDO MICROSCOPE" appears for undoing microscopic editing.

3. Press [F4 (EXEC)] button to execute this function, or press [EXIT] button to cancel.
    Upon completion, the "COMPLETED!" message appears on the display and the screen returns to the selection screen for system settings.

*   *UNDO can be executed for Pattern/Song editing, recording and microscopic editing.*

Advanced Operation Using MIDI

About MIDI

The MC-307 records and plays back MIDI musical data, and when MIDI musical data is received its sound generator will produce sound.

MIDI (Musical Instrument Digital Interface) is a standard specification that allows musical data to be exchanged between electronic musical instruments and computers. Devices that have a MIDI connector can be connected using a MIDI cable, allowing them to transmit and receive data. Today, MIDI is found on virtually all electronic musical instruments. Without MIDI, it would not be possible to use an external keyboard to play the MC-307, or to use the MC-307 to record and play back a performance played on an external keyboard. Although you can use the MC-307 without knowing much at all about MIDI, you might also want to take full advantage of the possibilities offered by electronic musical instruments. This chapter will provide a simple explanation of the MC-307's MIDI-related functionality.

About MIDI connectors

The MC307 has two kinds of MIDI connectors.

- MIDI OUT Connectors
  These connectors transmit MIDI messages to external MIDI devices. These can also be used as connectors from which data received from the MIDI IN connector are directly transmitted. (refer to Re-transmitting messages received at MIDI IN from MIDI OUT (THRU) (p. 123).).
- MIDI IN Connectors
  Performance messages from an external MIDI device are received here. The MC-307 can receive these messages to play notes or select sounds, etc.

MIDI Channels

MIDI is able to transmit 16 parts of independent musical data over a single MIDI cable. This is made possible by the concept of "MIDI channels." MIDI channels allow messages intended for a given instrument to be distinguished from messages intended for another instrument. There are sixteen MIDI channels (1–16), and normally the transmitting device must be set to the same MIDI channel as the receiving device in order for messages to be received.

With the factory settings, the MC-307's Remote Keyboard setting is ON. In this condition, an external MIDI keyboard will be able to play the patch of the current part, regardless of its transmit channel setting.

- > "Using an External MIDI Keyboard in Place of the Keyboard Pads (refer to Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD) (p. 123).)
- * *The transmit/receive channel settings of each part are as follows. It is not possible to change the channel settings of each part.*
- Rhythm part: Ch. 10
- Part 1: Ch. 1
- Part 2: Ch. 2
- Part 3: Ch. 3
- Part 4: Ch. 4
- Part 5: Ch. 5
- Part 6: Ch. 6
- Part 7: Ch. 7

The flow of MIDI signals inside the MC-307 is as follows.
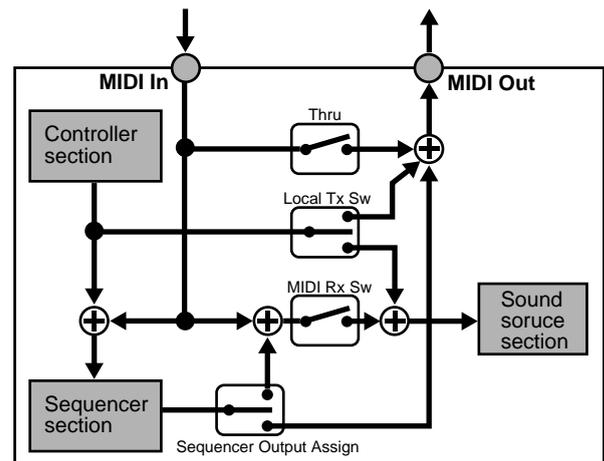
If you would like to know more about each parameter...

- refer to Re-transmitting messages received at MIDI IN from MIDI OUT (THRU) (p. 123).
- refer to Specifying the channel that will control arpeggios (ARPEGGIO CTRL CH) (p. 124).
- refer to Disconnecting the keyboard pads from the internal sound generator (LOCAL TX SW) (p. 126).

When MIDI messages are being received from the MIDI IN connector, the MIDI indicator will light.

Using with an External MIDI Device

Recording performance on an external MIDI keyboard in the MC-307

This is the set-up operation for recording performance on an external MIDI keyboard in the MC-307.

Set the remote keyboard switch to "ON." (With the factory settings, this will be "ON.")

For the set-up procedure, refer to Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD) (p. 123).

MIDI OUT   MIDI Ch = 1–16

MIDI IN
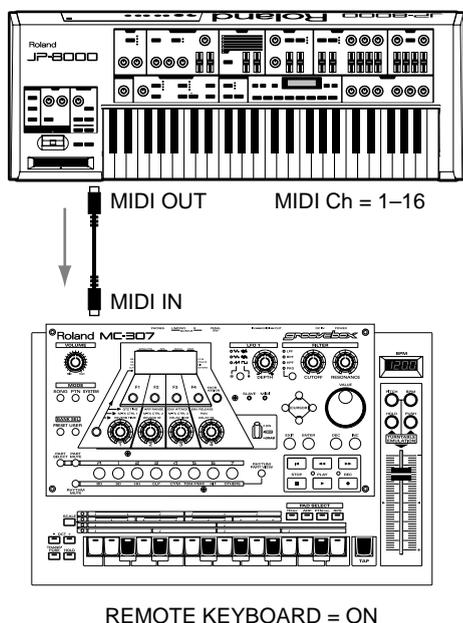
REMOTE KEYBOARD = ON

This setting enables the part selected on the MC-307 to be used as the recording part (regardless of the transmission channel of the external MIDI keyboard).

Playing the MC-307 as the sound generator for an external MIDI sequencer

Set the remote keyboard switch to "OFF." This setting enables the MC-307 to receive and simultaneously play back data from multiple MIDI channels.

Set the transmit channel of the external MIDI keyboard to match the receive channel of the MC-307 that you wish to play. For example, if you wish to play part 2, set the transmit channel of the external MIDI keyboard to "2" since the receive channel of part 2 is "2."

- refer to Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD) (p. 123).

Selecting patches from an external MIDI device

By transmitting control change Bank Select messages (CC#0, CC#32) and Program Change messages (PC) from an external MIDI device to the MC-307, you can change the patch (rhythm set) of each part. At this time, the Receive Program Change Switch and the Receive Bank Select Switch must be turned ON (refer to Reception settings for each type of MIDI message (p. 126).). For details on how bank select and program change messages are transmitted from your external MIDI device, refer to the owner's manual for your device.

If you would like to know how the incoming bank select and program change messages correspond to each patch (rhythm set), refer to:

- "Preset Patch List" (P. 155)
- "Preset Rhythm Set List" (P. 159)
- "MIDI Implementation" (P. 194)

Playing back RPS on the MC-307 using an external MIDI keyboard

This setting enables the MC-307 to play back RPS upon reception of note messages from a particular MIDI channel.

Channels can be efficiently used by specifying a channel other than channels for parts transmission and reception.

Procedure

1. Set the MC-307's remote keyboard switch to "OFF" (refer to Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD) (p. 123).).

2. Match the MC-307's RPS control channel to the transmission channel of the external MIDI keyboard (P. 124).

3. Press [RPS] button to turn on the indicator.

4. Pressing keys on the external MIDI keyboard plays back RPS.

   The notes B1–D3 will play the RPS for keyboard pads [1]–[16] respectively.

Playing back arpeggio on the MC-307 using an external MIDI keyboard

This setting enables the MC-307 to play back arpeggio upon reception of note messages from a particular MIDI channel.

(If the Remote Keyboard Switch is "ON," you can simply turn the arpeggiator on and play the external MIDI keyboard to produce arpeggios.)

Procedure

If the MC-307's Remote Keyboard Switch is set "OFF,"

1. Set the MC-307's Arpeggio Control Channel to match the transmit channel of the external MIDI keyboard (P. 124).

   * *It is a good idea to set the Arpeggio Control Channel so it does not conflict with the transmit/receive channels of each of the MC-307's parts.*

2. Press [ARP] button to turn the arpeggiator on.

3. When you play the external MIDI keyboard, arpeggios will sound on the selected part.

Using the MC-307 as a sound generator/controller, in conjunction with a computer

By using MIDI sequence software for a personal computer, you can use the MC-307 as a sound generator as well as a controller. Establish connection as follows.

MC-307

MIDI Interface
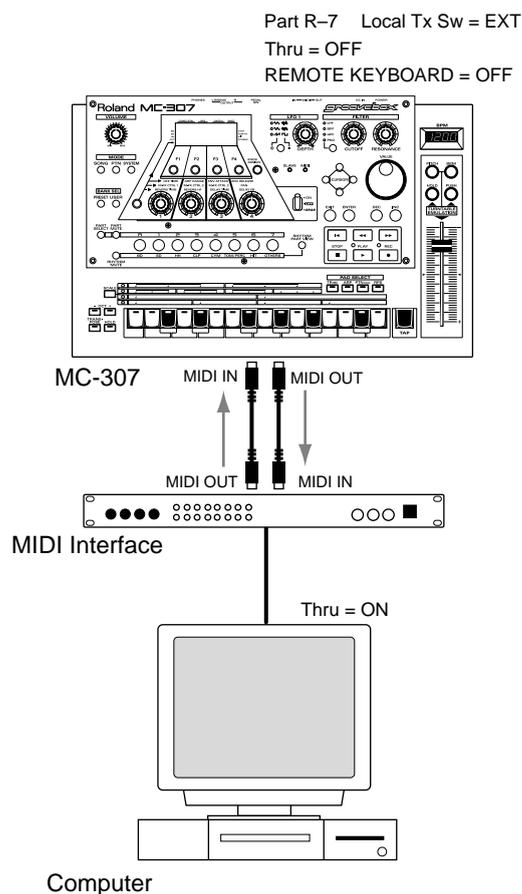
Computer

* *If you wish to connect a computer and play the MC-307 from a MIDI sequencer program etc., you will need to use a MIDI interface appropriate for your computer.*

Procedure

1. Turn on the Thru function of your MIDI sequencer software.

2. Make the following settings on the MC-307.
   - Local Tx Switch for all parts: EXT
     (refer to Disconnecting the keyboard pads from the internal sound generator (LOCAL TX SW) (p. 126).)
   - Remote Keyboard Switch: OFF
     (refer to Using an external MIDI keyboard in place of the keyboard pads (REMOTE KEYBOARD) (p. 123).)
   - Thru function: OFF
     (refer to Re-transmitting messages received at MIDI IN from MIDI OUT (THRU) (p. 123).)

3. Set the transmit channel(s) of your MIDI sequencer software to match the receive channel of the part(s) you wish to play.

   This setting enables such information to be recorded by operating the MC-307's keyboard pads, knobs and Arpeggiator.

Tempo synchronization when using the MC-307 as a sound module

By setting Sync Mode to "SLAVE" and then setting parameters such as LFO Rate, Delay Time and M-FX Rate to be synchronized to the tempo, you can synchronize these parameters to the tempo of an external sequencer. However in this case, the MC-307 will respond to synchronization messages from the external sequencer and play back patterns. If you simply want to synchronize the sounds to the tempo, you should select an empty pattern that contains no musical data.

- refer to LFO1/2: RATE (p. 98).
- refer to Adjusting the delay interval (TIME) (p. 45).
- refer to Multi-Effects (M-FX) (p. 46).
- refer to Synchronization settings (SYNC MODE) (p. 119).

Playing an external MIDI device using the MC-307

The MC-307 can transmit operations on the keyboard pads and the controller from its MIDI OUT connector. Recordings in the respective parts of the MC-307 can also be transmitted to an external device. In such transmission, MIDI channels 10 and 1 to 7 are assigned to data in parts R and 1 to 7, in this order.

Setting the external MIDI sound generator channel, the receiving channel, to one of channels 10 and 1 to 7 enables playback on the external MIDI device.

MIDI OUT   MIDI IN

Part1 Local Tx Sw = Ext   MIDI Ch =1
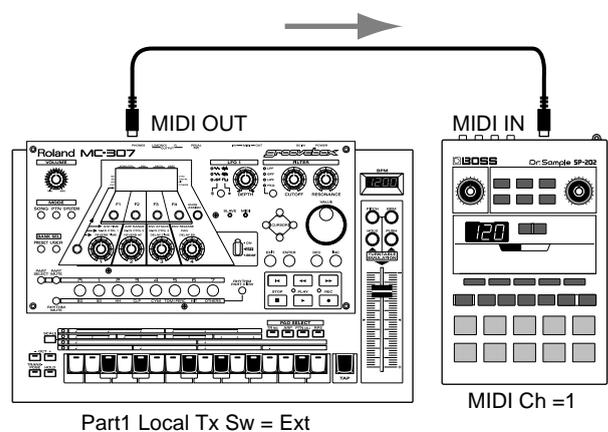
Procedure

1. Set the MIDI channel of the external sound generator to one of channels 10 and 1 to 7.

   Setting it to MIDI channel 10 enables the rhythm set selected with part R of the MC-307 to be played back.

   Setting it to MIDI channels 1 to 7 enables patches selected with part 1 to 7.

2. Set the local TX switch for each part of the MC-307 to "EXT" (P. 126).

   These settings enables playback information to be transmitted from the MIDI OUT connector.

3. Play back data on the MC-307 or using the keyboard pad /controller.

Synchronization with an External MIDI Device

Timing of the MC-307's sequencer can be synchronized with that of another sequencer for playback. This feature enables large-scale performance playing back a number of parts at the same time.

Making an external MIDI sequencer synchronized with playback on the MC-307

Now, let's make MC-307's patterns synchronized with an external MIDI sequencer. (In this example, the external MIDI sound generator is played back using the MIDI data from the external MIDI sequencer.)

MC-307 (Master)

MIDI OUT

MIDI Clock

MIDI IN

External Sequencer (Slave)
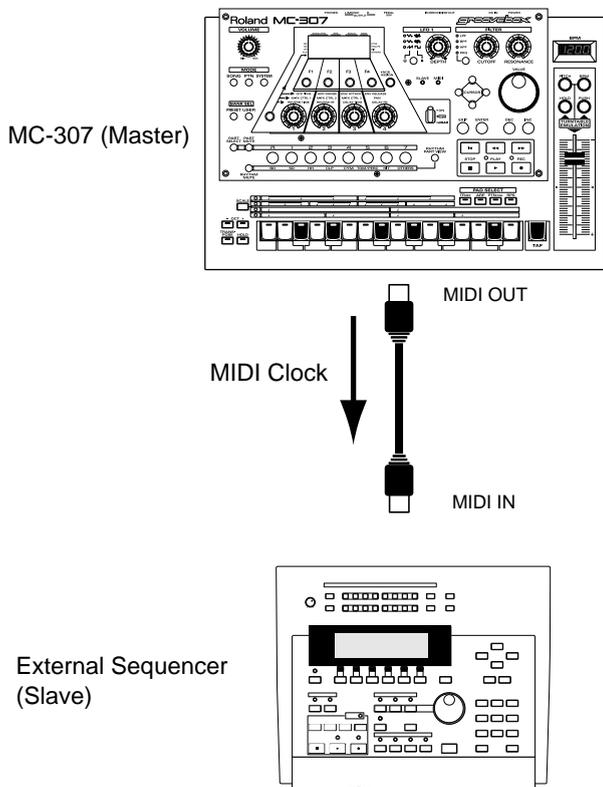
Set up the MC-307

1. Set SYNC OUT to "ON" (P. 120).

   This setting enables synchronizing signals to be transmitted from the MC-307's MIDI OUT.

2. Set the sequence output assignment for all parts (including MUTE CTRL) of the pattern to be used to "INT" (P. 23). This setting enables the MC-307 to output only MIDI clocks and start/stop information from the MIDI OUT connector.

Set up the external sequencer

3. Set the external MIDI sequencer so it will synchronize to the MIDI Clock messages that it receives. For details on the setting, refer to the owner's manual for your MIDI sequencer.
   Start synchronized playback.

4. Press the [PLAY] button of the MC-307, and synchronized playback will begin.

5. To stop synchronized playback, press [STOP] button on the MC-307.

Making the MC-307 synchronized with performance on an external sequencer.

The playback of the MC-307's sequencer can be synchronized to the MIDI Clock messages transmitted from an external MIDI sequencer or from a hard disk recorder (optional). In the following example, we will synchronize the MC-307 pattern playback to an external source of timing.

External Sequenser (Master)

MIDI OUT

MIDI Clock

MIDI IN

MC-307 (Slave)
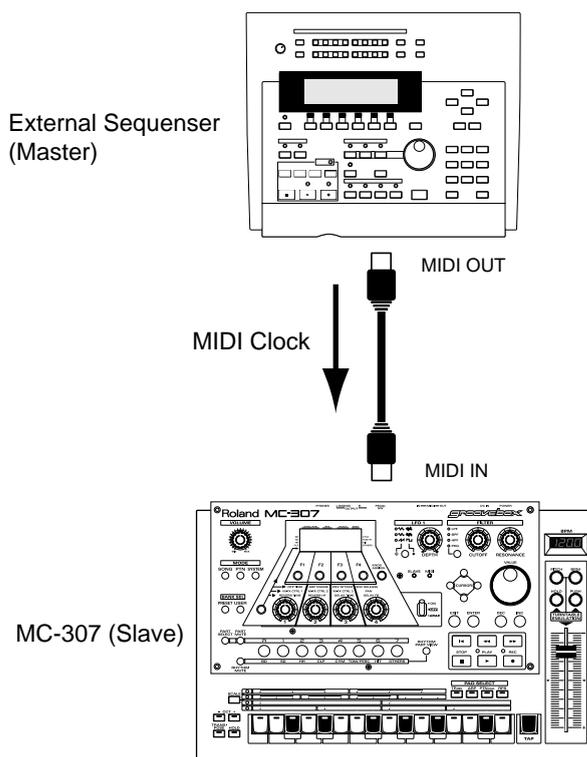
Set up the MC-307.

1. Set SYNC MODE to "SLAVE" (P. 119).

2. Press the [◄] button on the MC-307.
   Returns to the beginning of pattern.

Set up the external sequencer.

3. Set up so that MIDI clocks are transmitted from the external MIDI sequencer.
   For details on the setting, refer to the owner's manual for your external MIDI sequencer.

Start synchronized playback.

4. Press the [PLAY] button of the external MIDI sequencer, and synchronized playback will begin.

5. To stop synchronized playback, press [STOP] button on the external sequencer.

   * *As required, set up to block transmission of playback information from the external device to the MC-307. (Or, set MIDI channels 1 to 7 and 10, corresponding to those used on the MC-307, not to be used for data transmission.) Otherwise, the MC-307 performs playback with playback information from the external device.*
   For details, see the operation manual of the external MIDI device.

   * *It is also possible to control playback/stop operations only without synchronization with MIDI clocks transmitted from the external MIDI sequencer. In this case, set Sync mode of the MC-307 to "REMOTE."*

Making playback on two units of the MC-307 to be synchronized

Two MC-307 units can be connected to each other, and used to play different patterns in synchronization. The playback unit is referred to as "Master" and the unit to be synchronized "Slave."

Set up the Master unit.

1. On the master unit (the MC-307 that will control the timing), set the Local Tx Switch of all parts to "INT" (P. 126), and turn Sync Out "ON" (P. 120).

2. For all parts (including MUTE CTRL) of the pattern used by the master device, set the Sequencer Output Assign setting to "INT" (P. 23).
   With these settings, the only messages transmitted from MIDI OUT will be synchronization signals. This setting block transmission of playback information and operations of the knobs, the Arpeggiator and RPS to the Slave side.

Set up the Slave unit.

3. On the slave unit (the MC-307 whose timing will be controlled), set the Sync Mode to "SLAVE" (P. 119).

Perform synchronized playback.

4. Press [PLAY] button on the master unit, and the two MC-307s will begin playback together.

5. To stop synchronized playback, press [STOP] button on the master unit.

   * *If the two patterns being synchronized have a different time signature or a different number of measures, the performance will move apart even if synchronization is maintained. When synchronizing in this way, it is recommended that you use patterns that have the same time signature and number of measures.*

Appendices

Troubleshooting

If there is no sound, or if the instrument does not function as you expect, first check the following points. If this does not resolve the problem, contact your dealer or the nearest Roland Service Center.

*   *Roland shall bear no responsibility whatsoever with regard to any loss of memory contents, or any consequent damages, whether direct or indirect.*

No Sound

The power of the MC-307 or connected devices is not turned on.

-   Turn on the power.
-   Confirm that the AC adaptor is connected correctly.

The volume of the MC-307 or connected device is turned down.

-   Raise the volume (P. 10).

MIDI cables and/or audio cables are not connected correctly.

-   Make the correct connections (Quick Start; p. 2).

The Part Level of the corresponding part is lowered.

-   Raise the Part Level (P. 22).

All tones of the patch are turned off.

-   Turn each tone on (P. 88).

The patch parameter settings are not appropriate.

-   Raise the Sustain Level (Level3) of AENV (P. 97).
-   Raise the Cutoff Frequency of FILTER (P. 92).
-   Raise the Tone Level of AMP-LEVEL (P. 95).
-   Raise the Rate of LFO 1/2 (P. 98).

The pitch of the patch has exceeded the range in which it can be sounded normally.

-   Use Octave Shift to lower (raise) the range being played (P. 24).

The Local Tx Switch of the corresponding part is set to "EXT."

-   Set it to "INT" or "BOTH" (P. 126).

The MIDI Rx Switch of the corresponding part is set to "OFF."

-   Turn it "ON" (P. 125).

The receive channel setting of the corresponding part does not match the MIDI channel of the messages that are being transmitted from the external MIDI device.

-   Set the MIDI channel of the messages being transmitted to match the receive channel of each part.

The Sequencer Output Assign setting of the corresponding part is set to "EXT."

-   Set it to "INT" or "BOTH" (P. 23).

The Pad Velocity setting is too low.

-   Raise the Pad Velocity setting (P. 117).

The Bank Select and Program Change messages transmitted from an external device have the wrong values.

-   Transmit the correct Bank Select and Program Change messages (P. 72).

Notes Drop Out

You are attempting to play too many notes at once.
(The maximum number of simultaneous notes is 64.)

-   Reduce the number of notes that are played simultaneously.
-   Reduce the number of notes in the pattern being played.
-   Increase the Voice Reserve setting for parts that must not drop out (P. 115).

The sound continues even after you release your fingers from keyboard pads

The [HOLD] button indicator is lit.

-   Press the [HOLD] button to make the indicator go dark.

Some sounds continue for unnaturally long durations

A Hold Off message was deleted by pattern editing etc.

-   Use the Microscope page to insert a Hold Off (CC#64 Value=0) message (P. 72).

The DELAY TIME, DELAY FB, or ENV TIME4 (Release) parameters are set excessively high.

- Decrease the values of these parameters.

Pattern (Song) Does Not Play

(Pattern Playback, RPS Playback, etc.)

The Sync Mode is set to "SLAVE."

-   Set the Sync Mode to "INT" (P. 119).

If nothing happens if you press [STOP] button when the [PLAY] button indicator is lit, turn the power off and on again, and set Sync Mode to "INT."

Reverb/Delay/M-FX Do Not Apply

If the GRAB switch is turned "OFF":

- To maintain the ON mode, put the GRAB switch at "ON."

Reverb/Delay/M-FX are turned off.

- Turn each switch "ON" (P. 42, P. 44, P. 46).

The Reverb Level setting and the Part Reverb Level settings of each part are set to "0."

- Increase the settings (P. 43, P. 42).

The Delay Level setting and the Part Delay Level settings of each part are set to "0."

- Increase the settings (P. 45, P. 44).

The M-FX Output Level is "0." The Part M-FX SW Assign settings of each part are not set to "ON."

- Increase the M-FX Output Level. Set the Part M-FX SW settings to "ON" (P. 48 - P. 61, P. 22).

The Rhythm Tone Reverb Level or Rhythm Tone Delay Level of each note of the rhythm set you are using is set to "0." The Rhythm Tone M-FX/Output Assign setting for each note is not set to "ON."

- Increase the Rhythm Tone Reverb Level and the Rhythm Tone Delay Level of each note. Set the Rhythm Tone M-FX SW settings to "ON" (P. 112).

Pitch Is Incorrect

The tuning of the MC-307 or of the external MIDI sound generator is incorrect.

- Check the tuning setting (Refer to **Tuning the entire system (MASTER TUNE)** (p. 115).).

The pitch is being changed as a result of the TURNTABLE EMULATION slider.

- Either set the slider in the center position, or press the BPM button, getting the light to go out (P. 25).

Play Quantize Does Not Apply

Either the Strength setting is at 0%, or the Shuffle Rate setting is at 50%.

- Set an appropriate value for the TIMING (P. 34).

**No Part is specified for Play Quantize.
 Specify the parts (P. 34).**

- The Play Quantize "TYPE" setting is turned OFF. Select either GRID, SHUFFLE, or GROOVE (P. 34).

Notes Are Delayed or Unsteady During Playback

If you create a pattern that contains an extremely large amount of data, or if you input an excessive amount of knob data, notes may be delayed or unsteady during playback. This problem can also occur if the tempo is speeded up excessively.

- Delete unneeded note data or knob data. Use Data Thin to thin out knob data (P. 82).

- Use Move Event to move notes that were input at the same location as chords, so that they are staggered by 1 clock (P. 75).

- Use Shift Clock to move data of parts other than the rhythm part backward by 1 clock (P. 81).

The display is difficult to read

The LCD CONTRAST setting could be inappropriate.

- Set the contrast to an appropriate value.

Error Message List

If an incorrect operation has been performed or if processing could not be carried out as specified, an error message will appear. Refer to this list and take the appropriate action.

NOW PLAYING

Since playback is in progress, operation cannot be performed.
- Press the [STOP] button to stop playback, and then perform the operation.

MIDI OFFLINE

There is a problem with the MIDI cable connections.
- Make sure that MIDI cables have not been pulled out or broken (Quick Start; p. 2).

MIDI BUFFER FULL

More MIDI messages were received at once than the MC-307 was able to process.
- Reduce the amount of MIDI messages that are being transmitted to the MC-307.

REC OVERFLOW

More recording data was received at once than the MC-307 was able to process.
- Reduce the amount of recording data that is being transmitted to the MC-307.

CHECKSUM ERROR

The checksum value of the received system exclusive message is incorrect.
- Correct the checksum value.

PTN REC FULL

Since the maximum number of notes that can be recorded in a single pattern has been reached, further pattern recording is not possible.
- Erase unneeded data from the pattern that you are recording (P. 77).

SONG REC FULL

Since the maximum number of patterns that can be registered in a single song has been reached, further song recording is not possible.
- A maximum of 50 patterns can be registered in a single song. No further patterns can be registered.

USER MEMORY FULL

Since there is insufficient user memory, the pattern cannot be saved.
- Either initialize an unneeded pattern, or save the data to a External Sequencer.

BEAT DIFFERS

Since a different time signature is set for the copy source and copy destination patterns, the pattern copy is not possible.
- The pattern copy operation can only be used for patterns with the same time signature.

CANNOT ASSIGN

Since there are two or more un-muted parts, the phrase cannot be assigned to an RPS set.
- Decide on one part in the phrase that you wish to register, and mute all the other parts (P. 39).

NO QTZ SELECTED

Quantize is not selected.
- In the Play Quantize setting, select the quantization that you wish to use (P. 34).

EMPTY SONG

Since the song contains no musical data, it cannot be played back.

EMPTY PATTERN

Since the pattern contains no musical data, it cannot be played back.

CANNOT UNDO

Cannot undo.

MEMORY DAMAGED

It is possible that the contents of internal memory have been damaged.
- Try executing the Factory Reset operation (P. 131). If this does not resolve the problem, contact a nearby Roland service center.

RHYTHM PART

The operation cannot be executed because the Rhythm part is selected.
- Select a Patch part before you execute.

PATCH PART

The operation cannot be executed because the Patch part is selected.
- Select a Rhythm part before you execute.

SONG PART

The operation cannot be executed because you are in Song mode.
- Move to Pattern mode before you execute.

PATTERN PART

The operation cannot be executed because you are in Pattern mode.
- Move to Song mode before you execute.

Parameter List

Patch Parameter

WAVE: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (WAVE)]+[F1 (WAVE)] (P. 88)

Parameter	Parameter Name	Setting Value
*WAVE: Wave Select	Wave Select	A001 - 254, B001 - B251, C001 - C236
*WAVE: Tone SW	Tone Switch	OFF, ON
*WAVE: Wave Gain	Wave Gain	-6, 0, +6, +12

FXM: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (WAVE)]+[F2 (FXM)] (P. 89)

Parameter	Parameter Name	Setting Value
*FXM SWITCH	FXM Switch	OFF, ON
*FXM COLOR	FXM Color	1 - 4
*FXM DEPTH	FXM Depth	1 - 16

PITCH: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F2 (PICH)]+[F1 (PICH)] (P. 89)

Parameter	Parameter Name	Setting Value
COARCE TUNE	Coarse Tune	-48 - +48
FINE TUNE	Fine Tune	-50 - +50
RANDOM PITCH	Random Pitch Depth	1*
KEY FOLLOW	Pitch Key Follow	2*

1*: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200
2*: -100, -70, -50, -30, -10, 0, +10, +20, +30, +40, +50, +70, +100, +120, +150, +200

P-ENV: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F2 (PICH)]+[F2 (PENV)] (P. 90)

Parameter	Parameter Name	Setting Value	
ENV DEPTH	Envelope Depth	-12 - +12	
VELO SENS	Velocity Sence	-100 - +150	
VELO TIME1	Velocity Time1 Sence	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
VELO TIME4	Velocity Time4 Sence	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
TIME KEY FOLLOW	Time Key Follow	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
TONE n TIME1[A]	Time1 (Attack Time)	0 - 127	(n = 1 - 4)
TONE n TIME2[D]	Time2	0 - 127	(n = 1 - 4)
TONE n TIME3	Time3 (Decay Time)	0 - 127	(n = 1 - 4)
TONE n TIME4[R]	Time4 (Release Time)	0 - 127	(n = 1 - 4)
TONE n Level1	Level1	-63 - +63	(n = 1 - 4)
TONE n Level2	Level2	-63 - +63	(n = 1 - 4)
TONE n Level3 [S]	Level3 (Sustain Level)	-63 - +63	(n = 1 - 4)
TONE n Level4	Level4	-63 - +63	(n = 1 - 4)

FILTER: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F3 (FLTR)]+[F1 (FLTR)] (P. 91)

Parameter	Parameter Name	Setting Value
TYPE	Filter Type	OFF, LPF, BPF, HPF, PKG
CUTOFF	Cutoff Frequency	0 - 127
CUTOFF KF	Cutoff Key Follow	-100, -70, -50, -30, -10, 0, +10, +20, +30, +40, +50, +70, +100, +120, +150, +200
RESONANCE	Resonance	0 - 127
RES VELO SENS	Resonance Velocity Sence	-100 - +150

F-ENV [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F3 (FLTR)]+[F2 (FENV)] (P. 94)

Parameter	Parameter Name	Setting Value	
ENV DEPTH	Envelope Depth	-63 - +63	
VELO CURVE	Velocity Curve	1 - 7	
VELO SENS	Velocity Sence	-100 - +150	
VELO TIME1	Velocity Time1 Sence	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
VELO TIME4	Velocity Time4 Sence	1-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
TIME KEY FOLLOW	Time Keyfollow	1-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
TONE n TIME1[A]	Time1 (Attack Time)	0 - 127	(n = 1 - 4)

Parameter List

TONE n TIME2[D]	Time1 (Decay Time)	0 - 127	(n = 1 - 4)
TONE n TIME3	Time3	0 - 127	(n = 1 - 4)
TONE n TIME4[R]	Time4 (Release Time)	0 - 127	(n = 1 - 4)
TONE n Level1	Level1	-63 - +63	(n = 1 - 4)
TONE n Level2	Level2	-63 - +63	(n = 1 - 4)
TONE n Level3 [S]	Level3 (Sustain Level)	-63 - +63	(n = 1 - 4)
TONE n Level4Level4-63 - +63 (n = 1 - 4)			

AMP: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F4 (AMP)]+[F1 (AMP)] (P. 95)

Parameter	Parameter Name	Setting Value
TONE LEVEL	Tone Level	0 - 127
BIAS DIRECTION	Bias Direction	LWR, UPR, L&U, ALL
BIAS POINT	Bias Point	C-1 - G9
BIAS POINT LEVELl	Bias Point Level	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100
TONE PAN	Tone Pan	L64 - 63R
PAN KEY FOLLOW	Pan Keyfollow	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100
RANDOM PAN SW	Random Pan Switch	OFF, ON
ALT PAN DEPTH	Alternate Pan Depth	L63 - 63R

A-ENV: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F4 (AMP)]+[F2 (AENV)] (P. 96)

Parameter	Parameter Name	Setting Value	
VELO CURVE	Velocity Curve	1 - 7	
VELO SENS	Velocity Sence	-100 - +150	
VELO TIME1	Velocity Time1 Sence	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
VELO TIME4	Velocity Time4 Sence	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
TIME KEY FOLLOW	Time Keyfollow	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100	
TONE n TIME1[A]	Time1 (Attack Time)	0 - 127	(n = 1 - 4)
TONE n TIME2[D]	Time1 (Decay Time)	0 - 127	(n = 1 - 4)
TONE n TIME3	Time3	0 - 127	(n = 1 - 4)
TONE n TIME4[R]	Time4 (Release Time)	0 - 127	(n = 1 - 4)
TONE n Level1	Level1	-63 - +63	(n = 1 - 4)
TONE n Level2	Level2	-63 - +63	(n = 1 - 4)
TONE n Level3 [S]	Level3 (Sustain Level)	-63 - +63	(n = 1 - 4)
TONE n Level4	Level4	-63 - +63	(n = 1 - 4)

LFO1: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (LFO)]+[F1 (LFO1)]
LFO2: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (LFO)]+[F2 (LFO2)] (P. 98)

Parameter	Parameter Name	Setting Value
WAVEFORM	Waveform	TRI, SIN, SAW, SQR, TRP, S&H, RND, CHS
RATE	Rate	0 - 127, ♪♩ ♫ ♩♫ ...
TEMPO SYNC	Tempo Sync	OFF, ON
KEY SYNC	Key Sync	OFF, ON
FADE MODE	Fade mode	ON-I, ON-O, OF-I, OF-O
DELAY TIME	Delay Time	0 - 127
FADE TIME	Fade Time	0 - 127
OFFSET	Level Offset	-100, -50, 0, +50, +100
PITCH DEPTH	Pitch Depth	-63 - +63
FILTER DEPTH	Filter Depth	-63 - +63
AMP DEPTH	Amplifier Depth	-63 - +63
PAN DEPTH	Pan Depth	-63 - +63

1*: Note

COMMON: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F2 (CMN)]+[F1 (CMN)] (P. 100)

Parameter	Parameter Name	Setting Value
STRUCT 1, 2 *	Structure 1&2	1 - 10
STRUCT 3, 4 *	Structure 3&4	1 - 10
BOOSTER GAIN 1, 2 *	Booster Gain 1&2	0, +6, +12, +18
BOOSTER GAIN 3, 4 *	Booster Gain 3&4	0, +6, +12, +18
STRETCH TUNE *	Stretch Tune Depth	OFF, 1 - 3

VOICE PRIORITY*	Voice Priority	LAST, LOUDEST
KEY RANGE LOWER *	Key range Lower	C-1 - UPR
KEY RANGE UPPER *	Key range Upper	LWR - G9
VELO RANGE SW*	Velocity Range Switch	OFF, ON
VELO RANGE LOW	Velocity Range Lower	1 - UPR
VELO RANGE UP	Velocity Range Upper	LWR - 127
VELO CROSS FADE	Velocity Cross Fade	0 - 127

*: Common settings for each tone

SOLO: , PORTAMENT: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F2 (CMN)]+[F2 (SOLO)] (P. 102)

Parameter	Parameter Name	Setting Value	
SOLO SW	Solo Switch	OFF, ON	
SOLO LEGATO	Solo Lagato		OFF, ON
SW	Portamento Switch	OFF, ON	
MODE	Portamento Mode	NORMAL, LEGATO	
TYPE	Portamento Type	RATE, TIME	
START	Portamento Start	PITCH, NOTE	
TIME	Portamento Time	0 - 127	

MOD: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F3 (CTL1)]+[F1 (MOD)] (P. 103)

Parameter	Parameter Name	Setting Value
CONTROL1 DEST	Control1 Destination	1*
CONTROL1 DEPTH	Control1 Depth	-63 - +63
CONTROL2 DEST	Control2 Destination	1*
CONTROL2 DEPTH	Control2 Depth	-63 - +63
CONTROL3 DEST	Control3 Destination	1*
CONTROL3 DEPTH	Control3 Depth	-63 - +63
CONTROL4 DEST	Control4 Destination	1*
CONTROL4 DEPTH	Control4 Depth	-63 - +63

1*: OFF, PCH, CUT, RES, LEV, PAN, L1P, L2P, L1F, L2F, L1A, L2A, PL1, PL2, L1R, L2R

BEND: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F3 (CTL1)]+[F2 (BEND)] (P. 103)

Parameter	Parameter Name	Setting Value
BEND RANGE UP *	Bend Range Up	0 - +12
BEND RANGE DOWN *	Bend Range Down	0 - -48
CONTROL1 DEST	Control1 Destination	1*
CONTROL1 DEPTH	Control1 Depth	-63 - +63
CONTROL2 DEST	Control2 Destination	1*
CONTROL2 DEPTH	Control2 Depth	-63 - +63
CONTROL3 DEST	Control3 Destination	1*
CONTROL3 DEPTH	Control3 Depth	-63 - +63
CONTROL4 DEST	Control4 Destination	1*
CONTROL4 DEPTH	Control4 Depth	-63 - +63

*: Common settings for each tone
1*: OFF, PCH, CUT, RES, LEV, PAN, L1P, L2P, L1F, L2F, L1A, L2A, PL1, PL2, L1R, L2R

AFT: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F4 (CTL2)] (P. 103)

Parameter	Parameter Name	Setting Value
CONTROL1 DEST	Control1 Destination	1*
CONTROL1 DEPTH	Control1 Depth	-63 - +63
CONTROL2 DEST	Control2 Destination	1*
CONTROL2 DEPTH	Control2 Depth	-63 - +63
CONTROL3 DEST	Control3 Destination	1*
CONTROL3 DEPTH	Control3 Depth	-63 - +63
CONTROL4 DEST	Control4 Destination	1*
CONTROL4 DEPTH	Control4 Depth	-63 - +63

1*: OFF, PCH, CUT, RES, LEV, PAN, L1P, L2P, L1F, L2F, L1A, L2A, PL1, PL2, L1R, L2R

Parameter List

■ Rhythm Set Parameter

WAVE:, KEY: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (WAVE)]+[F1 (WAVE)] (P. 105)

Parameter	Parameter Name	Setting Value
WAVE:	Wave Select	A001 - 254, B001 - B251, C001 - 236
TONE SWITCH	Rhythm Tone Switch	OFF, ON
WAVE GAIN	Wave Gain	-6, 0, +6, +12
ENV MODE	Envelope MOde	SUSTAIN, NO-SUS
MUTE GROUP	Mute Group	OFF, 1 - 31

PITCH: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F2 (PICH)]+[F1 (PICH)] (P. 106)

Parameter	Parameter Name	Setting Value
COARSE TUNE	Coarse Tune	-48 - +48
FINE TUNE	Fine Tune	-50 - +50
RANDOM PITCH	Random Pitch Depth	1*

1*: 0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200

P-ENV: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F2 (PICH)]+[F2 (PENV)] (P. 106)

Parameter	Parameter Name	Setting Value
ENV DEPTH	Envelope Depth	-12 - +12
VELO SENS	Velocity Sence	-100 - +150
VELO TIME SENS	Velocity Time Sence	-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100
TM1	Time1 (Attack Time)	0 - 127
TM2	Time2	0 - 127
TM3	Time3 (Decay Time)	0 - 127
TM4	Time4 (Release Time)	0 - 127
LV1	Level1	-63 - +63
LV2	Level2	-63 - +63
LV3	Level3 (Sustain Level)	-63 - +63
LV4	Level4	-63 - +63

FILTER: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F3 (FLTR)]+[F1 (FLTR)] (P. 108)

Parameter	Parameter Name	Setting Value
TYPE	Filter Type	OFF, LPF, BPF, HPF, PKG
CUTOFFf	Cutoff Frequency	0 - 127
RESONANCE	Resonance	0 - 127
RESO VELO SENS	Resonance Velocity Sence	-100 - +150

F-ENV: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F3 (FLTR)]+[F2 (FENV)] (P. 109)

Parameter	Parameter Name	Setting Value
ENV DEPTH	Envelope Depth	-63 - +63
VELO SENS	Velocity Sence	-100 - +150
VELO TIME SENS	Velocity Time Sence	1*
TM1	Time1 (Attack Time)	0 - 127
TM2	Time2	0 - 127
TM3	Time3 (Decay Time)	0 - 127
TM4	Time4 (Release Time)	0 - 127
LV1	Level1	0 - 127
LV2	Level2	0 - 127
LV3	Level3 (Sustain Level)	0 - 127
LV4	Level4	0 - 127

1*: -100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100

AMP: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F4 (AMP)]+[F1 (AMP)] (P. 110)

Parameter	Parameter Name	Setting Value
TONE LEVEL	Rhythm Tone Level	0 - 127
TONE PAN	Rhythm Tone Pan	L64 - 63R
RANDOM PAN SW	Random Pan Switch	OFF, ON
ALT PAN DEPTH	Alternate Pan Depth	L63 - 63R

A-ENV: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F4 (AMP)]+[F2 (AENV)] (P. 110)

Parameter	Parameter Name	Setting Value
VELO SENS	Velocity Sence	-100 - +150
VELO TIME SENS	Velocity Time Sence	1*
TM1	Time1 (Attack Time)	0 - 127
TM2	Time2	0 - 127
TM3	Time3 (Decay Time)	0 - 127
TM4	Time4 (Release Time)	0 - 127
LV1	Level1	0 - 127
LV2	Level2	0 - 127
LV3	Level3 (Sustain Level)	0 - 127

1*: -100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100

BEND: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (BEND)]+[F1 (BEND)] (P. 112)

Parameter	Parameter Name	Setting Value
BEND RANGE	Bend Range	0 - +12

SEND: [PTN]+[F1 (PACH)]+[F1 (EDIT)]+[F1 (BEND)]+[F2 (SEND)] (P. 112)

Parameter	Parameter Name	Setting Value
REV SEND LEVEL	Rhythm Tone Reverb Send Level	0 - 127
DLY SEND LEVEL	Rhythm Tone Delay Send Level	0 - 127
M-FX SW	Rhythm Tone M-FX Switch	OFF, ON

■ Setup Parameter

*: Parameters that are set independently for each part.

PART MIXER: [PTN]+[F2 (STUP)]+[F1 (PART)] (P. 22)

Parameter	Parameter Name	Setting Value
LEVEL *	Part Level	0 - 127
PAN *	Part Pan	L64 - 63R
KEY SHIFT *	Part Keyshift	-48 - +48
REV LEVEL *	Part Reverb Level	0 - 127
DLY LEVEL *	Part Delay Level	0 - 127
M-FX OUT *	Part M-FX Switch	OFF, ON, RHY (RHY: Part R Only)
SEQ OUT *	Sequencer Output Assign	INT, EXT, BOTH

REVERB: [PTN]+[F2 (STUP)]+[F2 (REV)] (P. 42)

Parameter	Parameter Name	Setting Value
TYPE	Reverb Type	ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2
TIME	Reverb Time	0 - 127
HF DAMP	HF Damp	1*
REVERB LEVELI	Reverb Level	0 - 127
M-FX TO REV LEVEL	M-FX to Reverb Level	0 - 127

1*: 200, 250, 315, 400, 500 ,630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS

DELAY: [PTN]+[F2 (STUP)]+[F3 (DLY)] (P. 44)

Parameter	Parameter Name	Setting Value
TYPE	Delay Type	SHORT, LONG
TIME	Delay Time	S:0.1 - 275, L:200 - 1000, 1*
FEEDBACK	Feedback Level	0 - +98
HF DAMP	HF Damp	2*
OUTPUT	Delay Output Assign	LINE, REV, LINE + REV
M-FX TO DLY LEVEL	M-FX to Delay Level	0 - 127
DELAYLEVEL	Delay Level	0 - 127

1*: ♪ ♪₃ ♪. ♩ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ₃ ♩. ○

2*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS

M-FX TYPE: [PTN]+[F2 (STUP)]+[F4 (M-FX)] (P. 48)

Parameter	Parameter Name	Setting Value
M-FX TYPE:	M-FX Type	1 4-BAND EQ, 2 SPECTRUM, 3 ENHANCER, 4 ENHANCER, 5 OVERDRIVE, 6 DISTORTION, 7 LO-FI, 8 NOISE, 9 RADIO TUNING, 10 COMPRESSOR,

Parameter List

11 LIMITER, 12 SLICER, 13 TREMOLO, 14 PHASER, 15 CHORUS, 16 SPACE-D, 17 TETRA CHORUS, 18 FLANGER, 19 STEP FLANGER, 20 SHORT DELAY, 21 AUTO PAN, 22 FB PITCH SHIFTER, 23 REVERB, 24 GATE REVERB, 25 ISOLATOR

M-FX   **[PTN]+[F2 (STUP)]+[F4 (M-FX)]+[F4 (PRM)] (P. 48)**

M-FX: 1 4-BAND-EQ

Parameter	Parameter Name	Setting Value
LOW FREQ	Low Frequency	200, 400
LOW GAIN	Low Gain	-15 - +15
HIGH FREQ	High Frequency	4000, 8000
HIGH GAIN	High Gain	-15 - +15
PEAK1 FREQ	Peaking1 Frequency	1*
PEAK1 Q	Peaking1 Q	0.5, 1.0, 2.0, 4.0, 8.0
PEAK1 GAIN	Peaking1 Gain	-15 - +15
PEAK2 FREQ	Peaking2 Frequency	1*
PEAK2 Q	Peaking2 Q	0.5, 1.0, 2.0, 4.0, 8.0
PEAK2 Gain	Peaking2 Gain	-15 - +15
OUTPUT LEVEL	Output Level	0 - 127

1*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000

M-FX: 2 SPECTRUM

Parameter	Parameter Name	Setting Value
LOW-HIGH GAIN	Low-High Gain	-15 - +15
MIDDLE GAIN	Middle Gain	-15 - +15
BAND WIDTH	Band Width	1 - 5
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 3 ENHANCER

Parameter	Parameter Name	Setting Value
SENS	Sence	0 - 127
MIX	Mix Level	0 - 127
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 4 OVERDRIVE

Parameter	Parameter Name	Setting Value
INPUT LEVEL	Input Level	0 - 127
DRIVE	Drive	0 - 127
AMP TYPE	Amplifier Type	SMALL, BUILTIN, 2STACK, 3STACK
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 5 DISTORTION

Parameter	Parameter Name	Setting Value
INPUT LEVEL	Input Level	0 - 127
DRIVE	Drive	0 - 127
AMP TYPE	Amplifier Type	SMALL, BUILTIN, 2STACK, 3STACK
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 6 Lo-Fi

Parameter	Parameter Name	Setting Value
BIT DOWN	Bit Down	0 - 7
SAMPLE RATE DOWN	Sample Rate Down	32, 16, 8, 4
POST GAIN	Post Gain	0, +6, +12, +18
LOW GAIN	Lo Gain	-15 - +15

HIGH GAIN	High Gain	-15 - +15
OUTPUT	Output	MONO, STEREO
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 7 NOISE

Parameter	Parameter Name	Setting Value
NOISE TYPE	Noise Type	1 - 18
NOISE LEVEL	Noise Level	0 - 127
NOISE FILTER	Noise Filter	1*
LO-FI LEVEL	LO-FI Level	0 - 127
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

1*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS

M-FX: 8 RADIO TUNING

Parameter	Parameter Name	Setting Value
RADIO DETUNE	Radio Detune	0 - 127
NOISE LEVEL	Noise Level	0 - 127
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
OUTPUT	Output	MONO, STEREO
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 9 PHONOGRAPH

Parameter	Parameter Name	Setting Value
DISC TYPE	Disk Type	LP, EP, SP
DISC NOISE LEVEL	Disc Noise Level	0 - 127
DEPTH	Depth	0 - +20
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 10 COMPRESSOR

Parameter	Parameter Name	Setting Value
ATTACK	Attack	0 - 127
SUSTAIN	Sustain	0 - 127
POST GAIN	Post Gain	0, +6, +12, +18
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 11 LIMITER

Parameter	Parameter Name	Setting Value
THRESHOLD	Threshold Level	0 - 127
RATIO	Compression Ratio	1.5:1, 2:1, 4:1,100:1
RELEASE	Release	0 - 127
POST GAIN	Post Gain	0, +6, +12, +18
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 12 SLICER

Parameter	Parameter Name	Setting Value
TIMING PATTERN	Timeing Pattern	1 - 34
ACCENT PATTERN	Accent Pattern	1 - 16
ACCENT LEVEL	Accent Level	0 - 127
ATTACK	Attack	1 - 10
OUTPUT LEVEL	Output Level	0 - 127
RATE	Rate	♩ ♩ 𝅗𝅥

Parameter List

M-FX: 13 TREMOLO

Parameter	Parameter Name	Setting Value
LFO TYPE	LFO Type	TRI, TRP, SIN, SAW1, SAW2, SQR
DEPTH	Depth	0 - 127
LOW GAIN	Low Gain	-15 - +15
RATE	Rate	0.1 - 10.0, 1*
HIGH GAIN	High Gain	-15 - +15
OUTPUT LEVEL	Output Level	0 - 127

1*: ♪ ♫₃ ♪. ♫ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ∞₃ ♩. ∞ , 2MES, 3MES, 4MES, 8MES, 16MES

M-FX: 14 PHASER

Parameter	Parameter Name	Setting Value
MANUAL	Manual	100 - 8000
DEPTH	Depth	0 - 127
RESONANCE	Resonance	0 - 127
RATE	Rate	0.1 - 10.0, 1*
MIX	Mix Level	0 - 127
OUTPUT PAN	Output Pan	L64 - 63R
OUTPUT LEVEL	Output Level	0 - 127

1*: ♪ ♫₃ ♪. ♫ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ∞₃ ♩. ∞ , 2MES, 3MES, 4MES, 8MES, 16MES

M-FX: 15 CHORUS

Parameter	Parameter Name	Setting Value
PRE DELAY	Pre Delay Time	0.0 - 100
DEPTH	Depth	0 - 127
PHASE	Phase	0 - 180
RATE	Rate	0.1 - 10.0, 1*
FILTER TYPE	Filter Type	OFF, LPF, HPF
CUTOFF	Cutoff Frequency	2*
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

1*: ♪ ♫₃ ♪. ♫ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ∞₃ ♩. ∞ , 2MES, 3MES, 4MES, 8MES, 16MES
2*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000

M-FX: 16 SPACE-D

Parameter	Parameter Name	Setting Value
PRE DELAY	Pre Delay Time	0.0 - 100
DEPTH	Depth	0 - 127
PHASE	Phase	0 - 180
RATE	Rate	0.1 - 10.0, 1*
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

1*: ♪ ♫₃ ♪. ♫ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ∞₃ ♩. ∞ , 2MES, 3MES, 4MES, 8MES, 16MES

M-FX: 17 TETRA CHORUS

Parameter	Parameter Name	Setting Value
PRE DELAY	Pre Delay Time	0.0 - 100
DEPTH	Depth	0 - 127
PRE DELAY DEVI	Pre Delay Deviation	0 - 20
RATE	Rate	0.1 - 10.0, 1*
DEPTH DEVI	Depth Deviation	-20 - +20
PAN DEVI	Pan Deviation	0 - 20
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

1*: ♪ ♫₃ ♪. ♫ ♩₃ ♩. ♩ ♩₃ ♩. ♩ ∞₃ ♩. ∞ , 2MES, 3MES, 4MES, 8MES, 16MES

M-FX: 18 FLANGER

Parameter	Parameter Name	Setting Value
PRE DELAY	Pre Delay Time	0.0 - 100
DEPTH	Depth	0 - 127
FEEDBACK	Feedback Level	0 - +98
RATE	Rate	0.1 - 10.0, 1*
PHASE	Phase	0 - 180
FILTER TYPE	Filter Type	OFF, LPF, HPF
CUTOFF	Cutoff Frequency	2*
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

1*: ♩♪♩.♪♩♪.♩♪♩.♩♪♩.♩⊙♩♩.⊙ , 2MES, 3MES, 4MES, 8MES, 16MES
2*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000

M-FX: 19 STEP FLANGER

Parameter	Parameter Name	Setting Value
PRE DELAY	Pre Delay Time	0.0 - 100
DEPTH	Depth	0 - 127
FEEDBACK	Feedback Level	0 - +98
RATE	Rate	0.1 - 10.0, 1*
PHASE	Phase	0 - 180
STEP RATE	Step Rate	0.05 - 10.0, 2*
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

1*: ♩♪♩.♪♩♪.♩♪♩.♩♪♩.♩⊙♩♩.⊙ , 2MES, 3MES, 4MES, 8MES, 16MES
2*: ♩♪♩.♪♩♪.♩♪♩.♩♪♩.♩

M-FX: 20 SHORT DELAY

Parameter	Parameter Name	Setting Value
TIME L	Delay Time Left	0.1 - 190
TIME R	Delay Time Right	0.1 - 190
HF DAMP	HF Damp	1*
FEEDBACK	Feedback Level	0 - +98
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
BALANCE	Effect Balance	D100:0W - D0:100W
AUTO PAN	Auto Pan	OFF, 2*
OUTPUT LEVEL	Output Level	0 - 127

1*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS
2*: ♩♪♩.♪♩♪.♩♪♩.♩♪♩.♩⊙♩♩.⊙ , 2MES, 3MES, 4MES, 8MES, 16MES

M-FX: 21 AUTO PAN

Parameter	Parameter Name	Setting Value
LFO TYPE	LFO Type	TRI, TRP, SIN, SAW1, SAW2, SQR
BASS SENS	Bass Sence	OFF, MODE1, MODE2
DEPTH	Depth	0 - 127
RATE	Rate	0.1 - 10.0, 1*
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
OUTPUT LEVEL	Output Level	0 - 127

1*: ♩♪♩.♪♩♪.♩♪♩.♩♪♩.♩⊙♩♩.⊙ , 2MES, 3MES, 4MES, 16MES

M-FX: 22 FB PITCH SHIFTER

Parameter	Parameter Name	Setting Value
COARSE	Course Pitch	-24 - +12
FINE	Fine Pitch	-100 - +100

OUTPUT PAN	Output Pan	L64 - 63R
PRE DELAY	Pre Delay Time	0.0 - 100
MODE	Pitch Shifter Mode	1 - 5
FEEDBACK	Feedback Level	0 - +98
LOW GAIN	Low Gain	-15 - +15
HIGH GAIN	High Gain	-15 - +15
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 23 REVERB

Parameter	Parameter Name	Setting Value
TYPE	Reverb Time	ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2
TIME	Reverb Type	0 - 127
HF DAMP	HF Damp	1*
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

1*: 200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS

M-FX: 24 GATE REVERB

Parameter	Parameter Name	Setting Value
TYPE	Gate Reverb Type	NORMAL, REVERSE, SWEEP1, SWEEP2
TIME	Gate Reverb Time	5 - 330
BALANCE	Effect Balance	D100:0W - D0:100W
OUTPUT LEVEL	Output Level	0 - 127

M-FX: 25 ISOLATOR

Parameter	Parameter Name	Setting Value
LOW GAIN	Low Gain	0 - 127
MID GAIN	Middle Gain	0 - 127
HIGH GAIN	High Gain	0 - 127
PAN	Pan	0 - 127
OUTPUT LEVEL	Output Level	0 - 127

■ Arpeggiator Parameter

SYSTEM: ARPEGGIATOR[SYSTEM]+[F1 (SYS)]+[F1 (ARP)] (P. 127)

Parameter	Parameter Name	Setting Value
STYLE	Arpeggio Style	1*
MOTIF	Motif	2*
BEAT PTN	Beat Pattern	3*
SHUFFLE RATE	Shuffle Rate	50 - 90 %
ACCENT RATE	Accent Rate	0 - 127
OCTAVE RANGE	Octave Range	-3 - +3

1*: 1/4, 1/6, 1/8, 1/12, 1/16, 1/32, PORTAMENTO A - B, GRISSANDO, SEQUENCE A - D, ECHO, SYNTH BASS, HEAVY SLAP, LIGHT SLAP, WALK BASS, RHYTHM GTR 1 - 5, 3 FINGER, STRUMMING GTR, PIANO BACKING, CLAVI CHORD, WALTZ, SWING WALTZ, REGGAE, PERCUSSION, HARP, SHAMISEN, BOUND BALL, RANDOM, BOSSA NOVA, SALSA, MAMBO, LATIN PERCUSSION, SAMBA, TANGO, HOUSE, LIMITLESS, USER TYPE 1 - 20
2*: SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, DUAL UP, DUAL DOWN, DUAL UP&DOWN, DUAL RANDOM, TRIPLE UP, TRIPLE DOWN, TRIPLE UP&DOWN, TRIPLE RANDOM, NOTE ORDER, GLISSANDO, CHORD, BASS+CHORD 1 - 5, BASS+UP 1 - 8, BASS+RND 1 - 3, TOP+UP 1 - 6, BASS+UP+TOP
3*: 1/4, 1/6, 1/8, 1/12, 1/16 1 - 3, 1/32 1 - 3, PORTA-A 1 - 11, PORTA-B 1 - 15, SEQ-A 1 - 7, SEQ-B 1 - 5, SEQ-C 1 - 2, SEQ-D 1 - 8, ECHO 1 - 3, MUTE 1 - 16, STRUM 1 - 8, REGGAE 1 - 2, REF 1 - 2, PERC 1 - 4, WALKBS, HARP, BOUND, RANDOM, BOSSA NOVA, SALSA 1 - 4, MAMBO 1 - 2, CLAVE, REV CLA, GUILO , AGOGO, SAMBA, TANGO 1 - 4, HOUSE 1 - 2

■ Play Quantize Parameter

SYSTEM: PLAY QTZ   [SYSTEM]+[F1 (SYS)]+[F4 (QTZ)] (P. 127)

GRID

Parameter	Parameter Name	Setting Value
TEMPLATE	Grid Template	1/4, 1/6, 1/8, 1/12, 1/16, 1/24, 1/32
TIMING	Timing Strength	0 - 100%

GROOVE

Parameter	Parameter Name	Setting Value
TEMPLATE	Groove Template	01 - 71
TIMING	Timing Strength	0 - 100 %
VELOCITY	Velocity Strength	0 - 100 %

SHUFFLE

Parameter	Parameter Name	Setting Value
TEMPLATE	Shuffle Template	1/12,1/24
TIMING	Timing Strength	0 - 100 %

■ System Parameter

SYSTEM: SOUND   [SYSTEM]+[F1 (SYS)]+[F1 (SND)]+[F1 (SND)] (P. 114)

Parameter	Parameter Name	Setting Value	
REVERB SW	Reverb Master Switch		OFF, ON
DELAY SW	Delay Master Switch	OFF, ON	
M-FX SW	Multi-Effect Master Switch	OFF, ON	
PATCH REMAIN	Patch Remain	OFF, ON	
VOICE RESERVE	Voice Reserve	0 - 64	
RESONANCE LIMIT R	Resonance Limiter R	50 - 127	
RESONANCE LIMIT N	Resonance Limiter N	50 - 127	

SYSTEM: TUNE   [SYSTEM]+[F1 (SYS)]+[F1 (SND)]+[F2 (TUNE)] (P. 115)

Parameter	Parameter Name	Setting Value
MASTER TUNE	Master Tune	427.4 - 452.6
SCALE TUNE SW	Scale Tune Switch	OFF, ON
SCALE TUNE C - B	Scale Tune C - B	-64 - +63

SYSTEM: LCD   [SYSTEM]+[F1 (SYS)]+[F2 (LCD)]+[F1 (LCD)] (P. 117)

Parameter	Parameter Name	Setting Value
LCD CONTRAST	LCD Contrast	1 - 16

SYSTEM: CONTROL   [SYSTEM]+[F1 (SYS)]+[F2 (LCD)]+[F2 (CTRL)] (P. 117)

Parameter	Parameter Name	Setting Value
PAD VELOCITY	Pad Velocity	1 - 127
PEDAL ASSIGN	Pedal Assign	HOLD, PTN-I, TAP, R-TPS, PLAY, SOSTE
PORALITY	Pedal Porarity	STANDARD, REVERSE

SYSTEM: GRAB   [SYSTEM]+[F1 (SYS)]+[F2 (LCD)]+[F3 (GRAB)] (P. 118)

Parameter	Parameter Name	Setting Value
REVERB	Reverb Switch	OFF, ON
DELAY	Delay Switch	OFF, ON
M-FX	Multi-Effect Switch	OFF, ON

SYSTEM: SEQ   [SYSTEM]+[F1 (SYS)]+[F3 (SEQ)]+[F1 (PRM1)] (P. 119)

Parameter	Parameter Name	Setting Value
METRONOME LEVEL	Metronome Level	0 - 127
AUTO CHECKSUM	Auto Checksum	OFF, ON

SYSTEM: SEQ   [SYSTEM]+[F1 (SYS)]+[F3 (SEQ)]+[F2 (PRM2)] (P. 119)

Parameter	Parameter Name	Setting Value
SYNC MODE	Sync Mode	INT, REMOTE, SLAVE
SYNC OUT	Sync Out	OFF, ON
ARPEGGIO SYNC	Arpeggio Sync	OFF, ON

SYSTEM: SEQ   [SYSTEM]+[F1 (SYS)]+[F3 (SEQ)]+[F3 (PRM3)] (P. 120)

Parameter	Parameter Name	Setting Value
SONG LOOP MODE	Loop Mode	OFF, LOOP1, LOOP2
SONG PLAY MODE	Song Play Mode	MODE1, MODE2
RPS TRIGGER QTZ	RPS Trigger Quantize	REAL, 16, 8, 4, MES

Parameter List

SYSTEM: SEQ   **[SYSTEM]+[F1 (SYS)]+[F3 (SEQ)]+[F4 (PRM4)] (P. 122)**

Parameter	Parameter Name	Setting Value
RHY VIEW	Rhythm View Button	NORMAL, MUTE CTRL
TAP SW	Tap Switch	OFF, ON
TAP RESOLUTION	Tap Resolution	♩ , ♪

SYSTEM: MIDI   **[SYSTEM]+[F1 (SYS)]+[F4 (MIDI)]+[F1 (CMN)] (P. 123)**

Parameter	Parameter Name	Setting Value
REMOTE KEYBOARD	Remote Keyboard Switch	OFF, ON
DEVICE ID	Device ID number	17 - 32
THRU	Thru	OFF, ON
ARPEGGIO CTRL CH	Arpeggio Control Channel	OFF, 1 - 16
RPS CTRL CH	RPS Control Channel	OFF, 1 - 16
EDIT TX/RX	Edit TX/RX	MODE1, MODE2

SYSTEM: MIDI   **[SYSTEM]+[F1 (SYS)]+[F4 (MIDI)]+[F2 (TXRX)] (P. 125)**

Parameter	Parameter Name	Setting Value
MIDI RX SW P-*	MIDI Receive Switch	OFF, ON
MIDI LOCAL TX P-*	MIDI Local Transmit	INT, EXT, BOTH
RX.PROG CHANGE	Receive Program Change	OFF, ON
RX.BANK SELECT	Receive Bank Select	OFF, ON
RX.SYS-EX	Receive System Exclusive	OFF, ON
TX.PROG CHANGE	Transmit Program Change	OFF, ON
TX.BANK SELECT	Transmit Bank Select	OFF, ON
TX.ACTIVE SENSING	Transmit Active Senceing	OFF, ON
MUTE CTRL OUTPUT	Mute Control Output assign	INT, EXT, BOTH

Preset Patch List

Preset A (CC#0 = 81, CC#32 = 0)

No.	Name	No.	Name
001	Lead TB 1	065	Dist Lead 3
002	Dist TB 1	066	Mosquito
003	Dist Sqr TB	067	Phazyn Vox
004	Dist TB 2	068	Voc Saw
005	Dist TB 3	069	VT Vox
006	TB + Voco	070	Pure Voice
007	Dist TB 4	071	Robo Vox
008	Lead TB 2	072	Hallucinate
009	Devil TB	073	Seq.Synth
010	Dual TB	074	Analog Seq
011	HiLo303ModSw	075	Ana Punch
012	Arpness TB	076	Atom Brain
013	Acid Line	077	Fooled MC
014	Dist TB 5	078	101 Bass 1
015	Lead TB 3	079	House Bass
016	Lead TB 4	080	101 Bass 2
017	TB Tra Bass	081	202 Bass
018	Acid TB	082	Psycho Funk
019	Psyche-TB	083	Talking Line
020	TB + Sine	084	Inside Bass
021	Hi-Pass TB	085	Bubble Bass
022	Moog Saw	086	Bass Bleep
023	OB Saw	087	Wiggle Bass
024	MG Lead	088	Twist Bass
025	Poly Key	089	Octa Bass
026	Synth Pulse	090	BT's Sticky
027	Dual Profs	091	MG Bass
028	Axe of 80	092	FM Super Bs
029	MG Square	093	Solid Bass
030	Square Lead1	094	T Nite Bass
031	Square Lead2	095	Front 505
032	Square Lead3	096	Def Bass 1
033	Lucky	097	Def Bass 2
034	Synth Lead 1	098	Sine Bass 1
035	Moon Lead	099	Sine Bass 2
036	Rezo SynLead	100	RollModRezBs
037	Wspy Synth	101	Gate Me Buzz
038	Enorjizor	102	System Bass
039	JP8 Sprang	103	Spike Bass
040	PortaSynLead	104	Solid Goa
041	Wah Lead	105	Rezo Bass
042	Beep Mod	106	Blip Bass
043	Dist Lead 1	107	Pizz Bass
044	Freaky Fry	108	Voco Bass
045	JU2 SubOsc 1	109	VoCoRoBo
046	JU2 SubOsc 2	110	Dust Bass
047	Froggy	111	ArtCore Bass
048	Synth Lead 2	112	NU-NRG Bass
049	Singin' MINI	113	TalkBox Bass
050	Plastic Tone	114	Incontinence
051	SinusoidRave	115	Bari Voice
052	Sine Me Up	116	Ac.Bass
053	Spooky Sine	117	E.Ac.Bass
054	Sine Tone	118	Acid Jazz Bs
055	D50 Saw Lead	119	Soup's Bass
056	Dst Syn Lead	120	Fingered Bs
057	Big Up Massv	121	FingBsVeloSw
058	Warm SawLead	122	PickedBass 1
059	Hartnoll Era	123	PickedBass 2
060	Skegness 97	124	Fretless Bs
061	Simply June	125	Phot Bass
062	The Brothers	126	Slap Bass
063	Dist Lead 2	127	R&B B-Slides
064	Dark SawLead	128	Syn Stack 1

Preset B (CC#0 = 81, CC#32 = 1)

No.	Name	No.	Name
001	Strong Brass	065	NU-NRG Str
002	You Can Fly	066	Violin
003	Syn stack 2	067	Contrabass
004	Dawn Of Man	068	Tremolo Str
005	Saw Stack 1	069	Pizzicato 1
006	Saw Stack 2	070	Pizzicato 2
007	DLM Stack	071	Pizz It
008	DOC Stack	072	Guardians
009	LN2 Stack	073	Gat Passion
010	Bend Stack	074	Syn Harp
011	Freedom	075	Voice Oohs
012	Good Bean	076	Solo Vox
013	JP8000 5th	077	Syn Vox
014	Mega 5th	078	Choir Aahs
015	5th Saw	079	Space Voice
016	4th Saw	080	Star Voice
017	Soundtrack	081	Brightness
018	Rise Pad	082	Vox Lead
019	Warm Pad	083	Auhbient
020	JP + OB Pad	084	Auh Luv Rave
021	Planet	085	PCM Life
022	Additive	086	Noisevox
023	Noise Pad	087	Trance Voice
024	Sweep Pad 1	088	Effect Acer
025	Sweep Pad 2	089	Alternative
026	Alles Padde	090	Hard Pure
027	Sky Light	091	Metal EF
028	Stargate MC	092	Dly Tone
029	Middle Grow	093	Osci Frog
030	AiRye Bread-	094	Cal + After
031	NU-NRG Org	095	8b Pad
032	Halo Pad	096	SpaceHighway
033	Str/Brs Pad	097	Trek Storm
034	Syn Brs Pad	098	Abduction
035	Simple Pad	099	1st Contact
036	OB Rezo Pad	100	Ice Cave
037	Sweet Vocode	101	Rev Cord
038	Thin Pad	102	Blue Random
039	Attack Pad	103	Sync Tone
040	Metal Pad	104	Seq Up
041	Atmosphere	105	SawLFOSaw
042	Fantasia	106	Calculating
043	Feedbackwave	107	Touch EF
044	Pacifica	108	Welding
045	Atmosphere 2	109	Press Machin
046	Sub Atmosphe	110	EF Tribe
047	Machine Pad	111	Scratch Alt
048	Detuned Pad	112	Analog FX
049	Scoop Pad	113	Non TB
050	Psycho Trevo	114	Nasty Filt
051	Floating Pad	115	Psy-Ence
052	Fancy Pad	116	Music Hi
053	Strings 1	117	Uber Zone
054	Strings 2	118	Down Gown
055	Old StringSW	119	For Giving
056	Swim Strings	120	Sound Alarm
057	Eclip-Str	121	Acid Drone
058	Slow Strings	122	X-Mod
059	OB Slow Str	123	X-FM/Org
060	Syn.Strings1	124	X-FM Bass
061	Syn.Strings2	125	Hard BD?
062	OB Strings	126	S&H Voc
063	Rhap Strings	127	X-TlkBxBass
064	Banded Jupe	128	X-Kick/TB

Preset Patch List

Preset C (CC#0 = 81, CC#32 = 2)

No.	Name	No.	Name
001	X-Org/Nz	065	Timpani
002	X-Pizz/Rng	066	Steel Drum
003	White Noise	067	Digi Bell
004	Pink Noise	068	Acid Perc
005	P5 Noise	069	MetaL-SD
006	Toy Noise	070	Classy Pulse
007	Rezo Noise	071	Glockenspiel
008	Vinyl Noise	072	Fanta Bell
009	Tornado Jet	073	Crystal
010	Smooth Jet	074	Tubular-Bell
011	Sweep Noise	075	Shank Bells
012	ModWhtSweep	076	MKS-30 Melts
013	Perk Breath	077	Trip Lead
014	Pink Bomb	078	Steel-Str.Gt
015	64voicePiano	079	Clean Gtr
016	Ac.Piano 1	080	Jazz Gtr 1
017	Ac.Piano 2	081	Jazz Gtr 2
018	Epic House	082	Muted Gtr
019	Hush Piano	083	Lo-Fi Gtr
020	Happy Piano	084	Terror Dome
021	BPF Piano	085	Psycho-G
022	Honky-tonk	086	Dist Gtr Chd
023	NY Piano+Str	087	Going Bald
024	Voice Piano	088	Gt.Harmonic1
025	Old E.Piano	089	Gt.Harmonic2
026	E.Piano 1	090	Shafted Gtr
027	E.Piano 2	091	WahGT 2 Menu
028	Cool Rhodes	092	Gtr Up
029	Psycho EP	093	Gtr Down
030	Trip E.Piano	094	Gtr Sweep
031	Rotary Rhode	095	Orch Gtr
032	EP-Organ	096	Brass
033	Harpsichord	097	Bright Brass
034	Clavi	098	Hush Brass
035	Digi Clavi	099	Synth Brass1
036	FM Clavi	100	Synth Brass2
037	AnalogClavi1	101	Synth Brass3
038	AnalogClavi2	102	Syn Brs Lead
039	Funky Clavi	103	Obilator
040	RotaryOrg Sl	104	OpenUp Brass
041	RotaryOrg Fs	105	Brass Fall
042	Gospel Spin	106	Trumpet
043	L Org F	107	MutedTrumpet
044	Organ 1	108	Soprano Sax
045	Lp-Hp Organ	109	Alto Sax
046	Organ 2	110	Baritone Sax
047	Percsv Organ	111	SlideBiteSax
048	Ballad B	112	Sax & Tp
049	FM Club Org	113	Tuba
050	Pop Organ	114	Syn F.Horn
051	Cheese Organ	115	Oboe
052	Reed Organ	116	Whistle
053	Telstar	117	Ocarina
054	Church Org	118	Recorder
055	Organ Bass	119	Jazz SynLead
056	Strict Organ	120	Solo Flute
057	SmkyChrd Org	121	Pan Flute
058	Sweep Organ	122	Bottle Blow
059	Accordion	123	Funky Pipe
060	Vibraphone	124	Breath Noise
061	FM Marimba	125	Shakuhachi
062	Marimba	126	Sitar 1
063	Xylophone	127	Sitar 2
064	Balaphone	128	Santur

Preset D (CC#0 = 81, CC#32 = 3)

No.	Name	No.	Name
001	Kalimba	065	MutePandeiro
002	Bagpipes	066	Open Surdo
003	PnoBendM7-m7	067	Brazil Perc
004	Org Chd m7	068	Tablabaya
005	BalapChd 9th	069	Mute Cuica
006	Wah Gtr Hit	070	Long Whistle
007	Orch Hit 1	071	Agogo
008	Orch Hit 2	072	Short Tamb
009	Rave-X-Tasy	073	808 Cowbell
010	Philly Hit 1	074	CR78 Cowbell
011	Philly Hit 2	075	CR78 Beat
012	Attack Hit	076	Wind-Chime
013	Funky Hit	077	Rim Shot
014	Tekno ChdHit	078	TR909 Rim
015	Dist Hit	079	Hyoshigi
016	Glasgow Hit	080	TR626 Shaker
017	Happy Hit	081	727 Quijada
018	Scene Hit 1	082	Real CH
019	Scene Hit 2	083	TR909 OH
020	Drill Hit	084	Syn OH
021	Gaia Message	085	TR909 Crash
022	Rezo Perc	086	Reverse Cym.
023	Syn Perc	087	Asian Gong
024	MG Blip	088	TR808 Clap
025	Rev Blip	089	Down Clap
026	Air Blip	090	Clap Tail
027	Radical Perc	091	Rap&Real Clp
028	Machine	092	Maddening
029	Metal Hit	093	TR909 Snare
030	Tanz Devil	094	TR808 Snare
031	Headz Direkt	095	House Snare
032	ShoppingCart	096	Jungle Snr 1
033	Noisy Drill	097	Jungle Snr 2
034	Thump Bounce	098	TR808 Kick
035	Tape Rewind	099	Plastic BD
036	Stop	100	Gate Kick
037	Ao!	101	Jungle Kick
038	Ha!	102	Scrtch/Vo Mn
039	Seashore	103	Flexi Vox Mn
040	Bird	104	Hit Menu
041	Telephone	105	Indust Menu
042	Helicopter	106	Tom Menu
043	Applause	107	Percus1 Menu
044	Gun Shot	108	Percus2 Menu
045	Machine Gun	109	Cowbell Menu
046	Laser Gun	110	Shaker+ Menu
047	Sci-Fi Laser	111	Rim Menu
048	Breath	112	Cymbal Menu
049	Rain	113	CHH 1 Menu
050	Siren	114	CHH 2 Menu
051	TR909 Tom	115	PHH Menu
052	TR808 Tom	116	OHH 1 Menu
053	Syn Tom 1	117	OHH 2 Menu
054	Syn Tom 2	118	Clap 1 Menu
055	Old Syn Tom	119	Clap 2 Menu
056	Taiko	120	Snare 1 Menu
057	Slow Down	121	Snare 2 Menu
058	Boom Drop	122	Snare 3 Menu
059	B-Tom-D	123	Snare 4 Menu
060	Mr.Bong Bass	124	Snare 5 Menu
061	Friends of 0	125	Snare 6 Menu
062	Latin Perc	126	Kick 1 Menu
063	Bongo Fury	127	Kick 2 Menu
064	High Timbale	128	Kick 3 Menu

Preset E (CC#0 = 83, CC#32 = 0)

No.	Name	No.	Name
1	Dist TB 6	65	P-Up Synth
2	Acid Lead	66	NRG Sweep
3	Acid TB 2	67	Tech Lead
4	Hi-Pass TB 2	68	Rezo Booster
5	Acid NRG 1	69	NRG Synthe 1
6	Acid NRG 2	70	NRG Synthe 2
7	Synth Saw	71	NRG Synthe 3
8	W-Side Saw	72	Dust Rave
9	SawSoloSlide	73	Psyche Stack
10	OSC Rezo Saw	74	DOC Stack 2
11	Cry Wave	75	NRG Stack
12	BignNasty Ld	76	Rave Stack
13	Elect Shock	77	HC Stack
14	Robo Vox 2	78	Rezo Stack
15	Detroit Wave	79	Pad State
16	Detune Saw	80	MG Big Pad
17	OD Sync	81	Dream Pad
18	HC Solo Lead	82	Warm Pad 2
19	Night Lead	83	7th Romance
20	Pluk Out	84	Psycho Power
21	Dragonfly	85	Ocean Pad
22	Rezo Voice	86	Aurora
23	Higher Self	87	Planet CH
24	Digital Lead	88	Strings Atk
25	DigitalLead2	89	Rave Tremolo
26	PureSineSolo	90	DrkTrem Orch
27	Too Pure	91	DrkChoirOrch
28	2000 Micro	92	Radio 30's
29	Palm Pad	93	DelayStrings
30	Organ Seq	94	Moon Synth
31	HiRezo Seq	95	Sweep Str
32	Seq.Synth 2	96	CelluloidStr
33	Mondigi Seq	97	P5 Sync Str
34	Synazetic	98	Electric Str
35	Shaky Saw	99	F.O.U
36	Now Bass	100	Choir Aahs 2
37	Blip Bass 2	101	Floor Choir
38	Warp Bass	102	Darkness
39	Bassage	103	HevnsFactory
40	Alter Bass	104	Space Voice2
41	Goldon Bass	105	V-Zox
42	Bell Bass	106	Voco+Choir
43	FM Super Bs2	107	Trancer
44	SI Bass	108	Slice Choir
45	MG Bass 2	109	Matt Chord
46	Cellu Bass	110	Fuwa Rings
47	Det Bass	111	3rdChoir U&D
48	PWM Bass	112	2Matt Colors
49	Electro Rubb	113	Detz
50	Tracore Bass	114	High Reeveer
51	PreasureBass	115	Home Sweep
52	Bau Bass	116	Ucyu-Bue
53	Weird Bass	117	Machine A
54	NRG HardBass	118	MG Sweep
55	Noise Bass	119	2Ranger
56	Ven Bass	120	Warping
57	Low Bit Bass	121	Galactic Swp
58	Dub Bass	122	Lift UP
59	Drum'n'Bass	123	Trance UFO
60	DnB Fall	124	Dentalic
61	Heavy Bass	125	Energy
62	LoFiAtk Bass	126	Fatt One
63	OldtmeAcBass	127	Strange
64	P-Down Synth	128	Space Creaps

Preset F (CC#0 = 83, CC#32 = 1)

No.	Name	No.	Name
1	Bottle Keep	65	Happy Hit 2
2	Def Filter	66	Rave Hit
3	Analyzer	67	MonsterAtack
4	Funny Man	68	Smear Hit 1
5	SpEcE&HoLd	69	Dark Hit
6	TranceMachin	70	Bottom Hit
7	Spaceage	71	TeknoChdHit2
8	Cosmic Rays	72	JP Lead Hit
9	Dada XYZ	73	Classic Hit
10	What?	74	RevHouse Hit
11	Take Effect	75	Smear Hit 2
12	Deep Wave	76	Samba Hit
13	Elktron	77	Stopper
14	Transport	78	Metal Bang
15	Fury Atk	79	MetallicShot
16	Horror Film1	80	Metal Zapper
17	Horror Film2	81	P-Zing
18	NoFXrequired	82	Boing
19	Tom Noise	83	Zap YoYo FXm
20	16beat rpm	84	Zap 1
21	Classique	85	Zap 2
22	Smooth Piano	86	Zap 3
23	Geek Piano	87	Zap 4
24	Feed Piano	88	Zap 5
25	Bird Piano	89	Game Bleep
26	EppEEppE	90	Seq MG
27	Gentle Wurly	91	Bull Scream
28	Wurly Pad	92	Hoo!
29	Str8Up Wurly	93	Hey! 2
30	78RPM Wurly	94	iYooh
31	OrganOrgan	95	Dolphin
32	Percs Organ2	96	Voice Riff
33	RotaryOrgFs2	97	Thunderbolt
34	Digi Organ	98	Construct
35	Vib+MuteTp	99	Jack Hammer
36	Vib+Guitar	100	Turbine
37	SteelTimpani	101	Sawing
38	Wind Bell	102	Steaming
39	Bell 2 Bell	103	SteamWhistle
40	TreasureBell	104	Aircraft
41	Noise Bell	105	Missile 3D
42	Overdrive Gt	106	Siren 2
43	OD octave	107	Siren 3
44	DistMute Gtr	108	FireBomb
45	RockinMuteGt	109	Boost Tom
46	Funk Gtr	110	WaDaiko
47	FunkyMuteGtr	111	Tsuzumi Velo
48	FunkMtWah Gt	112	LoFi Perc
49	Ghost Gtr	113	Air Perc
50	Acoutic Gtr	114	Retro Bell
51	30's Tpt	115	Timpani 2
52	ThunderBrass	116	Spring Cowb
53	Solo Trumpet	117	Rim Shot 2
54	Sax+MuteTp	118	Dark Crash
55	Real Sax	119	DR110 Cymbal
56	Slow BlowSax	120	Syn Ride
57	Brass Fall 2	121	Asian Gong 2
58	Retro Flute	122	Asian Gong 3
59	TronM Flute	123	Asian Gong 4
60	Real Sitar	124	TR909 Sn&Clp
61	FarOutSGliss	125	Afro Clap
62	Maharagna	126	Dynamic Snr
63	Didge Pad	127	Perc Snare
64	Bagpipes 2	128	PicSnHrd&Rol

Preset G (CC#0 = 83, CC#32 = 2)

No.	Name						
1	PurePhat Snr	9	Beats Kick	18	Voice Menu	27	Cymbal2 Menu
2	LoFi Snare	10	R&B Kick	19	Tom 2 Menu	28	AsiaGng Menu
3	Spray SD	11	BD reso Ride	20	Percus3 Menu	29	Clap 3 Menu
4	Plastic BD 2	12	Future Kick	21	Percus4 Menu	30	Snare 7 Menu
5	TR808 Kick 2	13	Filtic BD	22	TablaBy Menu	31	Kick 4 Menu
6	NRG Kick	14	Didge Menu	23	Udu Pot Menu	32	Kick 5 Menu
7	Drive Kick	15	BerimbauMenu	24	Japan Menu		
8	Atack Kick	16	MG Zap Menu	25	Rim 2 Menu		
		17	Sweep Menu	26	C&OHH 3 Menu		

User A: 001 - 128 (CC#0 = 85, CC#32 = 0)ÅAUser B: 001 - 128 (CC#0 = 85, CC#32 = 1)

STYLE/MOTIF/BEAT PATTERN
Correspondence Chart

Style	Motif	Beat Pattern
1/4	all	1/ 4
1/6	all	1/ 6
1/8	all	1/ 8
1/12	all	1/12
1/16	all	1/16 1 - 3
1/32	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN,SINGLE RANDOM, DUAL UP, DUAL DOWN DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER, GLISSANDO, BASS+UP 1 - 8, BASS+RND 1 - 3, TOP+UP 1 - 6	1/32 1 - 3
PORTAMENTO A	all	PORTA-A 01 - 11
PORTAMENTO B	all	PORTA-B 01 - 15
GLISSANDO	GLISSANDO	1/16 1 - 3, 1/32 1 - 3
SEQUENCE A	all	SEQ-A 1 - 7
SEQUENCE B	all	SEQ-B 1 - 5
SEQUENCE C	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN,SINGLE RANDOM, DUAL UP, DUAL DOWN DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER, GLISSANDO, BASS+UP 1 - 8, BASS+RND 1 - 3, TOP+UP 1 - 6	SEQ-C 1 - 2
SEQUENCE D	all	SEQ-D 1 - 8
ECHO	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, DUAL UP, DUAL DOWN, DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER	ECHO 1 - 3
SYNTH BASS	BASS+UP 2	SEQ-A 1, SEQ-C 1
HEAVY SLAP	BASS+UP 5, TOP+UP 5	MUTE 02, 03
LIGHT SLAP	BASS+UP 5, TOP+UP 5	MUTE 02, 03
WALK BASS	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, NOTE ORDER, GLISSANDO	WALKBS
RHYTHM GTR 1	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, DUAL UP, DUAL DOWN DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER, BASS+UP 1 - 8,BASS+RND 1 - 3 TOP+UP 1 - 6	MUTE 01,04
RHYTHM GTR 2	CHORD	MUTE 07, 13, 14
RHYTHM GTR 3	CHORD	MUTE 08, 12, 15
RHYTHM GTR 4	CHORD	MUTE 09, 10, 11, 16
RHYTHM GTR 5	SINGLE UP, SINGLE DOWN	STRUM 1 - 6
3 FINGER	BASS+UP+TOP	SEQ-A 7
STRUMMING GTR	SINGLE UP, SINGLE DOWN	STRUM 7, 8
PIANO BACKING	CHORD	MUTE 12, REF 2
CLAVI CHORD	BASS+CHORD 4, BASS+CHORD 5	MUTE 05, 06
WALTZ	BASS+CHORD 2, BASS+UP 2, BASS+RND 2, TOP+UP 2	1/ 6, 1/12
SWING WALTZ	BASS+CHORD 2, BASS+UP 2, BASS+RND 2, TOP+UP 2	1/16 1 - 3
REGGAE	CHORD, BASS+CHORD 1	REGGAE1 - 2
PERCUSSION	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, DUAL UP, DUAL DOWN, DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER BASS+UP 1 - 8, BASS+RND 1 - 3, TOP+UP 1 - 6	PERC1 - 4
HARP	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, GLISSANDO	HARP
SHAMISEN	TOP+UP 4 - 6	SEQ-A 2
BOUND BALL	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, DUAL UP, DUAL DOWN DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER, GLISSANDO	BOUND
RANDOM	SINGLE RANDOM, DUAL RANDOM, BASS+RND 1 - 3	1/4,1/6,1/8,1/12,1/16 1-3, 1/32 1-3, RANDOM
BOSSA NOVA	all	BOSSA NOVA
SALSA	all	SALSA 1 - 4
MAMBO	all	MAMBO 1 - 2
LATIN PERCUSSION	SINGLE UP, SINGLE DOWN, SINGLE UP&DOWN, SINGLE RANDOM, DUAL UP, DUAL DOWN DUAL UP&DOWN, DUAL RANDOM, NOTE ORDER, GLISSANDO	CLAVE, REV CLA, GUIRO, AGOGO
SAMBA	all	SAMBA
TANGO	all	TANGO 1 - 4
HOUSE	all	HOUSE 1 - 2
LIMITLESS	all	all

Preset Rhythm Set List

* The Rhythm Group column shows the button that can be pressed to mute that rhythm tone.

P: A 01-26 (CC#0 = 81, CC#32 = 0), P: B 01-26 (CC#0 = 83, CC#32 = 0), User: 01-20 (CC#0 = 85, CC#32 = 0)

Note No.	Rhythm Group	P: A01 TR-909	P: A02 TR-808	P: A03 TR-606	P: A04 CR78&Cheaps	P: A05 Techno 1
35	BD	Plastic BD 4	TR808 Kick 5	TR808 Kick 3	Toy Kick	Plastic BD 3
C2 36	BD	Plastic BD 3	TR808 Kick 3	Analog Kick	Plastic BD 4	Plastic BD 2
37	TOM/PERC	TR808 Rim	TR808 RimLng	TR808 Rim	TR808 Rim	TR707 Rim
38	SD	TR909 Snr 1	TR808 Snr 8	TR606 Snr 3	TR808 Snr 5	TR909 Snr 6
39	CLP	TR909 Clap 2	TR909 Clap 1	Cheap Clap	TR909 Clap 1	TR909 Clap 1
40	SD	TR909 Snr 3	TR808 Snr 9	TR808 Snr 5	Deep Snare	TR909 Snr 7
41	TOM/PERC	TR707 Tom	TR606 Tom	TR606 CmpTom	MG Blip	TR909 DstTom
42	HH	TR909 CHH 2	TR808 CHH 2	TR606 CHH 2	TR808 CHH 1	TR909 CHH 2
43	TOM/PERC	TR707 Tom	TR606 Tom	TR606 CmpTom	MG Blip	TR909 DstTom
44	HH	TR909 PHH 2	TR808 PHH 2	Hip PHH	TR606 PHH 2	TR909 PHH 1
45	TOM/PERC	TR707 Tom	TR606 Tom	TR606 CmpTom	MG Blip	TR909 DstTom
46	HH	TR909 OHH 1	TR808 OHH 2	TR606 DstOHH	TR606 OHH	TR909 OHH 2
47	BD	TR909 Kick 4	TR808 Kick 1	TR606 Dst BD	TR606 Kick	TR909 Kick 5
C3 48	BD	TR909 Kick 2	TR808 Kick 4	TR606 Kick	Analog Kick	TR909 Kick 4
49	TOM/PERC	TR909 Rim	TR808 Rim	Analog Rim	Analog Rim	TR909 Rim
50	SD	TR909 Snr 2	TR808 Snr 6	TR606 Snr 2	TR808 Snr 1	TR909 Snr 4
51	CLP	TR909 Clap 1	TR808 Clap	TR808 Clap	TR808 Clap	Group Clap
52	SD	TR909 Snr 3	TR808 Snr 2	TR606 Snr 1	CR78 Snare	TR909 Snr 5
53	TOM/PERC	TR909 Tom	TR808 Tom	TR606 Tom	TR606 Tom	TR909 Tom
54	HH	TR909 CHH 1	TR808 CHH 1	TR606 CHH 1	DR55 CHH 1	TR909 CHH 1
55	TOM/PERC	TR909 Tom	TR808 Tom	TR606 Tom	TR606 Tom	TR909 Tom
56	HH	TR909 OHH 2	TR808 CHH 2	TR606 PHH 1	CR78 CHH	TR909 PHH 2
57	TOM/PERC	TR909 Tom	TR808 Tom	TR606 Tom	TR606 Tom	TR909 Tom
58	HH	TR909 OHH 2	TR808 OHH 1	TR606 OHH	CR78 OHH	TR909 OHH 3
59	TOM/PERC	TR909 Tom	TR808 Tom	TR606 Tom	TR606 Tom	TR909 Tom
C4 60	TOM/PERC	TR909 Tom	TR808 Tom	TR606 Tom	TR606 Tom	TR909 Tom
61	CYM	TR909 Crash	TR606 Cym 1	TR606 Cym 2	TR606 Cym 1	TR909 Crash
62	TOM/PERC	TR909 Tom	TR808 Tom	TR606 Tom	TR606 Tom	TR909 Tom
63	CYM	TR909 Ride	TR606 Cym 1	TR909 Ride	TR606 Cym 1	TR707 Ride
64	CYM	TR909 Crash	TR909 Crash	TR606 Cym 1	Cup Cym	TR909 Crash
65	CYM	TR909 Ride	TR909 Ride	TR707 Ride	TR909 Ride	Asian Gong
66	TOM/PERC	Tambourine 2	CR78 Tamb	CR78 Tamb	CR78 Tamb	Tambourine 3
67	CYM	NaturalCrash	TR909 Crash	TR909 Crash	TR909 Crash	TR909 Crash
68	TOM/PERC	TR808Cowbell	TR808Cowbell	TR808Cowbell	CR78 Cowbell	Cowbell
69	CYM	TR606 Cym 1	TR909 Crash	TR909 Crash	TR909 Ride	TR606 Cym 1
70	TOM/PERC	PC-2 Machine	CR78 Guiro	CR78 Guiro	TR808Cowbell	TR808Cowbell
71	CYM	Natural Ride	Natural Ride	Natural Ride	TR707 Ride	Natural Ride
C5 72	TOM/PERC	HiBongo Open	TR808 Conga	TR808 Conga	TR808 Conga	HiBongo LoFi
73	TOM/PERC	LoBongo Open	TR808 Conga	TR808 Conga	TR808 Conga	LoBongo LoFi
74	TOM/PERC	HiConga Mute	TR808 Conga	TR808 Conga	TR808 Conga	HiCnga Mt LF
75	TOM/PERC	HiConga Open	TR808 Conga	TR808 Conga	TR808 Conga	HiCnga Op LF
76	TOM/PERC	LoConga Open	TR808 Conga	TR808 Conga	TR808 Conga	LoConga LoFi
77	TOM/PERC	Hi Timbale	Hi Timbale	Hi Timbale	CR78 Beat	HiTimbale LF
78	TOM/PERC	Lo Timbale	Lo Timbale	Lo Timbale	CR78 Beat	LoTimbale LF
79	TOM/PERC	TR727 Agogo	TR727 Agogo	CR78 Beat	TR727 Agogo	CR78 Beat
80	TOM/PERC	TR727 Agogo	TR808 Claves	CR78 Beat	TR727 Agogo	CR78 Beat
81	TOM/PERC	Cabasa Up	Cabasa Up	Cabasa Up	CR78 Guiro	TechnoShaker
82	TOM/PERC	808 Maracas	808 Maracas	808 Maracas	808 Maracas	TR626 Shaker
83	HIT	Beam HiQ	Beam HiQ	Beam HiQ	Syn Hit	Wao!
C6 84	HIT	Air Blip	Air Blip	Buzzer	Beam HiQ	Come on!
85	HIT	MG Blip	Syn Hit	Air Blip	Analog Bird	Ooh! 1
86	HIT	Techno Scene	Techno Scene	Rezo Noise	MG Attack	MG White Nz
87	HIT	Air Gun	Beam HiQ	Hyoshigi	Tape Rewind	Bomb Noise
88	HIT	Tekno Hit	PC-2 Machine	Analog Bird	Air Blip	Wah Gtr 2b
89	OTHERS	Come on!	P5 Noise	Retro UFO	Reso FX	Toy Gun 3
90	OTHERS	Wao!	Toy Gun 1	PC-2 Machine	Ring Osc	Toy Gun 3
91	OTHERS	Ooh! 1	Syn Tom	Syn Hit	MG Blip	Buzzer
92	OTHERS	Canvas	Cup Cym	Retro UFO	MG White Nz	Bomb Noise
93	OTHERS	JP8000 FBK	TR808 OHH 1	Thrill	Rezo Noise	Sea
94	CLP	Funky Clap	Hip Clap	Comp Clap	Cheap Clap	Flange Snr
95	BD	TR808 Kick 1	TR808 Kick 2	TR808 Kick 1	TR808 Kick 1	TR909 Dst BD
C7 96	BD	Gabba Kick	TR909 Kick 4	Plastic BD 4	TR909 Kick 1	Plastic BD 4
97	SD	Synth Snare	CR78 Snare	TR909 Snr 3	TR909 Snr 1	Break Snare2
98	SD	TR808 Snr 2	TR808 Snr 3	CR78 Snare	Sim Snare	Ragga Rim 2

Preset Rhythm Set List

Note No.	Rhythm Group	P:06 Techno 2	P:07 Techno 3	P: A08 Hardcore	P: A08 Ambient	P: A08 House 1
35	BD	TR808 Kick 5	Plastic BD 3	TR909 Kick 5	TR909 Kick 5	TR808 Kick 5
C2 36	BD	TR707 Kick 1	Plastic BD 4	Gabba Kick	Wet Kick	TR909 Kick 2
37	TOM/PERC	TR909 Rim	Jungle Snr 2	SideStiker	Ragga Rim 1	TR808 Rim
38	SD	Real Snare	TR808 Snr 7	Jungle Snr 1	DJ Snare	SNR MENU 1
39	CLP	Down Clap	Comp Clap	Fuzzy Clap	Comp Clap	CLAP MENU 1
40	SD	Rap Snare	Indus Snare	TR909 Snr 4	SideStiker	TR909 Snr 6
41	TOM/PERC	TR808 Tom	Air Blip	TR606 CmpTom	TR707 Tom	TOM MENU
42	HH	TR808 CHH 2	CHH MENU 2	TR909 CHH 2	Closed Hat	TR707 OHH
43	TOM/PERC	TR808 Tom	MG Blip	TR606 CmpTom	TR707 Tom	TR909 Tom
44	HH	TR808 PHH 1	Jungle Rim 2	TR909 PHH 1	Pedal Hat 1	TR707 OHH
45	TOM/PERC	TR808 Tom	HIT MENU	TR606 CmpTom	TR707 Tom	TR909 Tom
46	HH	TR808 OHH 1	TR909 OHH 2	TR909 OHH 1	Real OHH	TR707 OHH
47	BD	TR909 Kick 2	KICK MENU 2	Amsterdam BD	Wet Kick	TR808 Kick 1
C3 48	BD	Plastic BD 4	West Kick	TR909 Dst BD	TR808 Kick 3	TR909 Kick 3
49	TOM/PERC	TR808 RimLng	Natural Rim	Lo-Fi Rim	TR808 RimLng	TR808 RimLng
50	SD	TR909 Snr 4	TR808 Snr 8	TR909 DstSnr	CR78 Snare	Break Snare2
51	CLP	Claptail	Comp Clap	Funk Clap 2	TR909 Clap 1	Claptail
52	SD	Funky Clap	MC Snare	TR909 DstSnr	Beam HiQ	TR909 Snr 4
53	TOM/PERC	TR707 Tom	Uuh Formant	TR909 DstTom	TR808 Tom	TR808 Tom
54	HH	Closed Hat	TR606 PHH 2	TR909 PHH 1	DR55 CHH 1	TR909 CHH 1
55	TOM/PERC	TR707 Tom	Ooh Formant	TR909 DstTom	TR808 Tom	TR808 Tom
56	HH	TR909 OHH 2	CR78 CHH	TR909 PHH 2	TR606 PHH 2	OHH MENU 1
57	TOM/PERC	TR707 Tom	Iih Formant	TR909 DstTom	TR808 Tom	TR808 Tom
58	HH	TR909 OHH 2	TR606 OHH	TR909 DstOHH	CR78 OHH	OHH MENU 1
59	TOM/PERC	TR707 Tom	Can Tom	TR909 DstTom	TR808 Tom	TR707 Tom
C4 60	TOM/PERC	TR707 Tom	ElectricDunk	TR909 DstTom	TR808 Tom	TR707 Tom
61	CYM	TR909 Crash	TR606 Cym 2	TR909 Crash	TR606 Cym 1	TR909 Crash
62	TOM/PERC	TR707 Tom	HiBongo LoFi	TR909 DstTom	TR808 Tom	TR707 Tom
63	CYM	TR707 Ride	CYMBAL MENU	TR707 Ride	TR909 Ride	TR909 Ride
64	CYM	TR909 Crash	Cup Cym	TR909 Crash	TR606 Cym 1	NaturalCrash
65	CYM	Asian Gong	TR909 Ride	Asian Gong	Asian Gong	Tambourine 2
66	TOM/PERC	Tambourine 2	Tambourine 4	CR78 Tamb	Tambourine 3	Tambourine 1
67	CYM	TR909 Crash	CYMBAL MENU	NaturalCrash	TR606 Cym 2	TR909 Crash
68	TOM/PERC	TR808Cowbell	CR78 Beat	TR808Cowbell	CR78 Cowbell	TR707Cowbell
69	CYM	TR606 Cym 2	Natural Ride	Jungle Crash	NaturalCrash	Cup Cym
70	TOM/PERC	CR78 Tamb	CR78 Beat	TR727Quijada	TR808Cowbell	TR808Cowbell
71	CYM	Cup Cym	Cup Cym	Natural Ride	Natural Ride	Natural Ride
C5 72	TOM/PERC	HiBongo Open	HiBongo LoFi	HiBongo LoFi	HiBongo Open	HiBongo LoFi
73	TOM/PERC	LoBongo Open	HiBongo LoFi	LoBongo LoFi	LoBongo Open	LoBongo LoFi
74	TOM/PERC	HiConga Mute	HiBongo LoFi	HiCnga Mt LF	HiConga Mute	HiConga Mute
75	TOM/PERC	HiConga Open	HiCnga Mt LF	HiCnga Op LF	HiConga Open	HiConga Open
76	TOM/PERC	LoConga Open	HiConga Mute	LoConga LoFi	LoConga Open	LoConga Open
77	TOM/PERC	Hi Timbale	Triangle 2	HiTimbale LF	Hi Timbale	HiTimbale LF
78	TOM/PERC	Lo Timbale	ElectricDunk	LoTimbale LF	Lo Timbale	LoTimbale LF
79	TOM/PERC	TR727 Agogo	Air Blip	TR727 Agogo	TR727 Agogo	TR727 Agogo
80	TOM/PERC	TR727 Agogo	MG Attack	TR727 Agogo	TR727 Agogo	TR727 Agogo
81	TOM/PERC	TechnoShaker	TechnoShaker	TechnoShaker	TechnoShaker	808 Maracas
82	TOM/PERC	Maracas	808 Maracas	Dance Shaker	808 Maracas	TR626 Shaker
83	HIT	Beam HiQ	Reso FX	Beam HiQ	Air Blip	TR606 CHH 1
C6 84	HIT	Techno Scene	Beam HiQ	Air Gun	Wind Chime	TR727Quijada
85	HIT	Thin Beef	Toy Gun 3	ElectricDunk	Thrill	Short Guiro
86	HIT	Come on!	MG Blip	Thin Beef	CR78 Beat	Long Guiro
87	HIT	Ooh! 1	Toy Gun 3	Drill Hit	Retro UFO	TR808 Claves
88	HIT	Wao!	Air Blip	TAO Hit	Hyoshigi	Hyoshigi
89	OTHERS	Analog Bird	Reso FX	Rezo Noise	Pizzy Techno	Bomb Noise
90	OTHERS	Retro UFO	Emergency	Toy Gun 1	Org Chord	Come on!
91	OTHERS	Metal Sweep	MG Blip	Toy Gun 3	Feedbackwave	Triangle 1
92	OTHERS	Emergency	MG Pink Nz	Gtr FX	Stream	Cup Cym
93	OTHERS	Tonality	Jet Plane	Dist Synth	Bird	TR808 OHH 1
94	CLP	TR909 Clap 1	Roll Snare	Funk Clap	Claptail	Hip Clap
95	BD	Wet Kick	TR808 Kick 1	TR909 Kick 2	TR808 Kick 1	TR808 Kick 2
C7 96	BD	Hip Kick	TR909 Kick 1	Turbo Kick	JungleKick 2	TR909 Kick 4
97	SD	TR909 Snr 5	TR909 Snr 1	Rage Snare	TR808 Snr 2	CR78 Snare
98	SD	Clap Snare 2	Urban RollSD	Big Trash SD	Jungle Snr 1	TR808 Snr 3

Note No.	Rhythm Group	P: A11 House 2	P: A12 Jungle	P: A13 Drum'n'Bass1	P: A14 Drum'n'Bass2	P: A15 Hip-Hop 1
35	BD	Wet Kick	TR909 Kick 3	Roll Kick	TR909 Kick 3	Lo-Fi Kick 1
C2 36	BD	Plastic BD 2	Lo-Fi Kick 2	Analog Kick	Lo-Fi Kick 2	TR808 Kick 3
37	TOM/PERC	TR808 Rim	SideStiker	RaggaTightSD	SideStiker	Solid Snare
38	SD	Clap Snare 2	Urban RollSD	Cross Snare	Urban RollSD	HipJazz Snr
39	CLP	Group Clap	Down Clap	Roll Snare	Down Clap	Funk Clap 2
40	SD	TR808 Snr 7	Jungle Rim 1	Headz Snare	Jungle Snr 1	R&B Snare
41	TOM/PERC	TR808 Tom	Jungle Snr 2	TR606 Tom	Jungle Snr 2	TR808 Tom
42	HH	TR707 CHH	Tight CHH	Pop CHH	Tight CHH	Pop CHH
43	TOM/PERC	TR808 Tom	Jungle Snr 2	TR606 Tom	Jungle Snr 2	TR808 Tom
44	HH	TR707 PHH	Tambourine 1	Tambourine 3	Tambourine 1	Pedal Hat 1
45	TOM/PERC	TR808 Tom	Jungle Snr 2	TR606 Tom	Jungle Snr 2	TR808 Tom
46	HH	TR707 OHH	Cym OHH	Pop Hat Open	Cym OHH	Pop Hat Open
47	BD	TR909 Kick 2	TR909 Kick 5	Plastic BD 1	TR909 Kick 5	Break Kick
C3 48	BD	TR909 Kick 5	JungleKick 2	Hip Kick	JungleKick 2	Hip Kick
49	TOM/PERC	TR909 Rim	Jungle Rim 2	Scratch SD r	Jungle Rim 2	Lo-Fi Rim
50	SD	Break Snare2	Urban Snare	Break Snare2	Urban Snare	Jazz Snare
51	CLP	TR909 Clap 1	Jungle Rim 3	Funky Clap	Jungle Rim 3	Funky Clap
52	SD	TR909 Snr 4	Jungle Snr 1	Ragga Snr 2	Jungle Snr 1	East Snare
53	TOM/PERC	TR707 Tom	TR606 CmpTom	Kick Tom	TR909 DstTom	Natural Tom
54	HH	TR909 CHH 1	Real CHH	Real CHH	Real CHH	Tight CHH
55	TOM/PERC	TR707 Tom	TR606 CmpTom	Kick Tom	TR909 DstTom	Natural Tom
56	HH	TR909 PHH 1	Jungle Hat	TR808 PHH 1	Jungle Hat	Pedal Hat 2
57	TOM/PERC	TR707 Tom	TR606 CmpTom	Kick Tom	TR909 DstTom	Natural Tom
58	HH	TR909 OHH 3	Hip OHH	TR606 OHH	Hip OHH	Hip OHH
59	TOM/PERC	TR707 Tom	TR606 CmpTom	Kick Tom	TR909 DstTom	Natural Tom
C4 60	TOM/PERC	TR707 Tom	TR606 CmpTom	Kick Tom	TR909 DstTom	Natural Tom
61	CYM	TR909 Crash	Jungle Crash	TR909 Crash	Jungle Crash	TR909 Crash
62	TOM/PERC	TR707 Tom	TR606 CmpTom	Kick Tom	TR606 CmpTom	Natural Tom
63	CYM	TR909 Ride	Natural Ride	TR909 Ride	Natural Ride	TR707 Ride
64	CYM	NaturalCrash	NaturalCrash	TR909 Crash	NaturalCrash	TR909 Crash
65	CYM	Tambourine 3	Asian Gong	Asian Gong	Asian Gong	Cup Cym
66	TOM/PERC	Tambourine 4	Tambourine 3	Tambourine 2	Tambourine 3	Tambourine 3
67	CYM	TR909 Crash	TR606 Cym 1	TR909 Crash	TR606 Cym 1	Tambourine 4
68	TOM/PERC	TR707Cowbell	Cowbell	CR78 Cowbell	Cowbell	TR808Cowbell
69	CYM	Cup Cym	TR909 Crash	TR606 Cym 2	TR909 Crash	TR606 Cym 1
70	TOM/PERC	TR808Cowbell	CR78 Tamb	TR808Cowbell	CR78 Tamb	CR78 Cowbell
71	CYM	Natural Ride	TR707 Ride	Natural Ride	TR707 Ride	Natural Ride
C5 72	TOM/PERC	HiBongo LoFi	HiBongo LoFi	HiBongo Open	HiBongo LoFi	HiBongo LoFi
73	TOM/PERC	LoBongo LoFi	LoBongo LoFi	LoBongo Open	LoBongo LoFi	LoBongo LoFi
74	TOM/PERC	HiCnga Mt LF	HiCnga Mt LF	HiConga Mute	HiCnga Mt LF	HiCnga Mt LF
75	TOM/PERC	HiCnga Op LF	HiCnga Op LF	HiConga Open	HiCnga Op LF	HiCnga Op LF
76	TOM/PERC	LoConga LoFi	LoConga LoFi	LoConga Open	LoConga LoFi	LoConga LoFi
77	TOM/PERC	HiTimbale LF	HiTimbale LF	Hi Timbale	HiTimbale LF	HiTimbale LF
78	TOM/PERC	LoTimbale LF	LoTimbale LF	Lo Timbale	LoTimbale LF	LoTimbale LF
79	TOM/PERC	TR727 Agogo	Open Surdo	TR727 Agogo	Open Surdo	TR727 Agogo
80	TOM/PERC	TR727 Agogo	Mute Surdo	TR727 Agogo	Mute Surdo	TR727 Agogo
81	TOM/PERC	Cabasa Up	TechnoShaker	Cabasa Up	Cabasa Up	Dance Shaker
82	TOM/PERC	TR626 Shaker	TR626 Shaker	Maracas	Maracas	808 Maracas
83	HIT	Belltree	Beam HiQ	MG Blip	Beam HiQ	Scratch BD f
C6 84	HIT	TR727Quijada	Air Blip	Air Blip	ElectricDunk	Scratch BD r
85	HIT	Short Guiro	Thin Beef	Hyoshigi	Bomb	Scratch SD f
86	HIT	Long Guiro	Analog Bird	CR78 Guiro	Analog Bird	Scratch SD r
87	HIT	TR808 Claves	Tape Rewind	Mt Pandeiro	Tape Rewind	Scratch ALT
88	HIT	Hyoshigi	Wao!	Chenchen	Wao!	Vinyl Stop
89	OTHERS	Bomb Noise	Emergency	Thrill	Emergency	Vinyl Noise
90	OTHERS	Come on!	Toy Gun 3	Retro UFO	Toy Gun 3	Kick it!
91	OTHERS	Ooh! 1	Reso FX	Rezo Noise	Reso FX	Ooh! 2
92	OTHERS	Wao!	Toy Gun 2	Feedbackwave	Toy Gun 2	Ooh! 1
93	OTHERS	Laugh	Toy Gun 1	Space Noise	Toy Gun 1	Laugh
94	CLP	Claptail	Big Clap	Little Clap	Big Clap	Funk Clap
95	BD	TR808 Kick 1	TR808 Kick 2	TR808 Kick 2	TR808 Kick 2	TR808 Kick 1
C7 96	BD	Plastic BD 3	Roll Kick	TR909 Kick 1	Roll Kick	Dance Kick 1
97	SD	TR808 Snr 6	Roll Snare	Solid Snare	Roll Snare	Break Snare2
98	SD	TR909 Snr 7	Break Snare2	Flange Snr	Break Snare2	HH Soul Snr

Preset Rhythm Set List

Note No.		Rhythm Group	P: A16 Hip-Hop 2	P: A17 Funk	P: A18 Electro	P: A19 Jazz	P: A20 Brush
35		BD	TR707 Kick 1	TR707 Kick 2	TR808 Kick 1	Lo-Fi Kick 1	Video Kick
C2 36		BD	Optic Kick	West Kick	TR808 Kick 5	Hip Kick	West Kick
	37	TOM/PERC	TR808 RimLng	Lo-Fi Rim	TR808 RimLng	SideStiker	Natural Rim
38		SD	Headz Snare	Deep Snare	TR808 Snr 8	Deep Snare	R&B Snare
	39	CLP	Claptail	Funky Clap	Down Clap	Real Clap 1	Brush Slap 1
40		SD	TR808 Snr 7	Disco Snare	TR808 Snr 5	HH Soul Snr	MC Snare
41		TOM/PERC	TR808 Tom	TR707 Tom	TR808 Tom	Natural Tom	TR707 Tom
	42	HH	TR808 CHH 1	Tight CHH	TR808 CHH 1	Real CHH	Pop CHH
43		TOM/PERC	TR808 Tom	TR707 Tom	TR808 Tom	Natural Tom	TR707 Tom
	44	HH	TR808 PHH 1	Hip PHH	TR808 PHH 1	Pedal Hat 1	Room CHH
45		TOM/PERC	TR808 Tom	TR707 Tom	TR808 Tom	Natural Tom	TR707 Tom
	46	HH	TR808 OHH 2	Funk OHH	TR808 OHH 1	Real OHH	Pop Hat Open
47		BD	TR909 Kick 3	Hazy Kick	Ele Kick	Optic Kick	Hip Kick
C3 48		BD	TR808 Kick 3	Turbo Kick	TR707 Kick 2	Video Kick	Optic Kick
	49	TOM/PERC	Gate Rim	SideStiker	TR707 Rim	Gate Rim	R8 BrshSwill
50		SD	Tiny Snare 2	Whack Snare	ElectroSnr 2	Headz Snare	R8 Brush Tap
	51	CLP	Little Clap	Funk Clap 2	TR707 Clap	Big Clap	Brush Slap 2
52		SD	R&B Snare	Macho Snare	Sim Snare	Cross Snare	R8 BrushRoll
53		TOM/PERC	Natural Tom	TR909 Tom	Deep Tom	TR707 Tom	Natural Tom
	54	HH	Pop CHH	Real CHH	Closed Hat	Closed Hat	R8 Brush CHH
55		TOM/PERC	Natural Tom	TR909 Tom	Deep Tom	TR707 Tom	Natural Tom
	56	HH	Pedal Hat 1	Pedal Hat 1	Pedal Hat 1	Bristol CHH	Pedal Hat 1
57		TOM/PERC	Natural Tom	TR909 Tom	Deep Tom	TR707 Tom	Natural Tom
	58	HH	Pop Hat Open	Cym OHH	Open Hat	Cym OHH	R8 OHH
59		TOM/PERC	Natural Tom	TR909 Tom	Deep Tom	TR707 Tom	Natural Tom
C4 60		TOM/PERC	Natural Tom	TR909 Tom	Deep Tom	TR707 Tom	Natural Tom
	61	CYM	NaturalCrash	NaturalCrash	TR909 Crash	NaturalCrash	NaturalCrash
62		TOM/PERC	Natural Tom	TR909 Tom	Deep Tom	TR707 Tom	Natural Tom
	63	CYM	TR909 Ride	TR909 Ride	TR707 Ride	TR909 Ride	TR909 Ride
64		CYM	TR909 Crash	TR909 Crash	NaturalCrash	NaturalCrash	NaturalCrash
65		CYM	Cup Cym	Cup Cym	Asian Gong	Cup Cym	Cup Cym
	66	TOM/PERC	Tambourine 4	CR78 Tamb	Tambourine 2	Tambourine 2	Tambourine 2
67		CYM	TR909 Crash	TR909 Crash	TR909 Crash	TR909 Crash	TR606 Cym 1
	68	TOM/PERC	Cowbell	TR707Cowbell	TR808Cowbell	Cowbell	Cowbell
69		CYM	TR606 Cym 1	TR606 Cym 1	TR606 Cym 1	TR606 Cym 1	TR909 Crash
	70	TOM/PERC	TR808Cowbell	TR808Cowbell	TR727Quijada	TR808Cowbell	TR808Cowbell
71		CYM	Natural Ride	Natural Ride	Natural Ride	Natural Ride	Natural Ride
C5 72		TOM/PERC	HiBongo Open	HiBongo Open	HiBongo Open	HiBongo Open	HiBongo Open
	73	TOM/PERC	LoBongo Open	LoBongo Open	LoBongo Open	LoBongo Open	LoBongo Open
74		TOM/PERC	HiConga Mute	HiConga Mute	HiConga Mute	HiConga Mute	HiConga Mute
	75	TOM/PERC	HiConga Open	HiConga Open	HiConga Open	HiConga Open	HiConga Open
76		TOM/PERC	LoConga Open	LoConga Open	LoConga Open	LoConga Open	LoConga Open
77		TOM/PERC	Hi Timbale	Hi Timbale	Hi Timbale	Hi Timbale	Hi Timbale
	78	TOM/PERC	Lo Timbale	Lo Timbale	Lo Timbale	Lo Timbale	Lo Timbale
79		TOM/PERC	TR727 Agogo	TR727 Agogo	TR727 Agogo	TR727 Agogo	TR727 Agogo
	80	TOM/PERC	TR727 Agogo	TR727 Agogo	TR727 Agogo	TR727 Agogo	TR727 Agogo
81		TOM/PERC	TechnoShaker	TechnoShaker	Cabasa Up	Cabasa Up	Cabasa Up
	82	TOM/PERC	808 Maracas	808 Maracas	808 Maracas	Maracas	Maracas
83		HIT	Scratch BD f	Scratch BD f	Air Blip	TR727Quijada	Whistle
C6 84		HIT	Scratch BD r	Scratch BD r	Thin Beef	Jingle Bell	Whistle
	85	HIT	Scratch SD f	Scratch SD f	Back Hit	Short Guiro	Short Guiro
86		HIT	Scratch SD r	Scratch SD r	Analog Bird	Long Guiro	Long Guiro
	87	HIT	Scratch ALT	Scratch ALT	Hoo	TR808 Claves	TR808 Claves
88		HIT	Funky Bass	Vinyl Stop	Metal Sweep	Hyoshigi	Hyoshigi
		OTHERS	Vinyl Noise	Vinyl Noise	Emergency	Hyoshigi	Hyoshigi
89	90	OTHERS	Philly Hit	Philly Hit	Buzzer	Mute Cuica	Mute Cuica
91		OTHERS	Brass Fall	Brass Fall	Tonality	Open Cuica	Open Cuica
	92	OTHERS	Ooh! 1	Kick it!	Ring Osc	Triangle 1	Triangle 1
93		OTHERS	Ooh! 2	Harmo Gtr	Toy Gun 3	Triangle 1	Triangle 1
	94	CLP	Finger Snap	Big Clap	Hip Clap	Finger Snap	Real Clap 1
95		BD	TR808 Kick 1	Plastic BD 2	Plastic BD 1	TR808 Kick 1	TR909 Kick 2
C7 96		BD	Hazy Kick	TR909 Kick 5	Lo-Fi Kick 1	TR909 Kick 1	TR707 Kick 1
	97	SD	TR606 Snr 2	DanceHall SD	Synth Snare	R8 BrshSwill	Real Snare
98		SD	Machine Snr	Machine Snr	TR808 Snr 6	R8 Brush Tap	Deep Snare

Note No.	Rhythm Group	P: A21 Disco	P: A22 Ragga	P: A23 Rock	P: A24 Industrial	P: A25 Ethnic
35	BD	TR707 Kick 2	Analog Kick	Optic Kick	TR909 Dst BD	Open Surdo
C2 36	BD	TR808 Kick 3	TR707 Kick 2	TR909 Kick 4	Lo-Fi Kick 2	Mute Surdo
37	TOM/PERC	TR707 Rim	Gate Rim	TR808 RimLng	Drill Hit	Jungle Snap
38	SD	Real Snare	Jungle Rim 1	Hash Snare	Big Trash SD	Natural Rim
39	CLP	Real Clap 1	Hip Clap	Funk Clap 2	Dist Swish	Big Clap
40	SD	Fat Snare	Ragga Snr 2	DJ Snare	Rage Snare	Jungle Snr 1
41	TOM/PERC	TR707 Tom	TR808 Tom	Kick Tom	Can Tom	Jungle Snr 2
42	HH	Real CHH	Bristol CHH	TR909 CHH 2	Air Blip	Mt Pandeiro
43	TOM/PERC	TR707 Tom	TR808 Tom	Kick Tom	Can Tom	Jungle Snr 2
44	HH	Pedal Hat 1	Pedal Hat 1	TR909 PHH 1	Beam HiQ	R8 Brush CHH
45	TOM/PERC	TR707 Tom	TR808 Tom	Kick Tom	Can Tom	Jungle Snr 2
46	HH	Real OHH	Cym OHH	TR909 OHH 1	TR909 DstOHH	Metal Sweep
47	BD	Turbo Kick	Plastic BD 4	TR909 Kick 5	Bomb	Afro Feet
C3 48	BD	TR707 Kick 1	Video Kick	Turbo Kick	Iron Door	Mute Surdo
49	TOM/PERC	TR808 RimLng	Beam HiQ	SideStiker	Thrill	Jungle Snap
50	SD	Deep Snare	DanceHall SD	Lo-Fi Snare	PCM Press	Op Pandeiro
51	CLP	Big Clap	Little Clap	Claptail	Air Gun	Real Clap 2
52	SD	TR707 Snare	Ragga Rim 2	Macho Snare	PCM Press	Hi Timbale
53	TOM/PERC	Deep Tom	Deep Tom	TR707 Tom	TekRok Snare	TablaBaya
54	HH	TR808 CHH 1	TR707 CHH	TR909 PHH 1	Real PHH	Chenchen
55	TOM/PERC	Kick Tom	Deep Tom	TR707 Tom	TekRok Snare	TablaBaya
56	HH	Pop CHH	Pop CHH	TR909 OHH 3	TR909 PHH 1	Tambourine 1
57	TOM/PERC	Deep Tom	Deep Tom	TR707 Tom	TekRok Snare	TablaBaya
58	HH	TR707 OHH	TR707 OHH	Cym OHH	TR909 DstOHH	Tambourine 4
59	TOM/PERC	Kick Tom	Deep Tom	TR707 Tom	TekRok Snare	TablaBaya
C4 60	TOM/PERC	Deep Tom	Deep Tom	TR707 Tom	TekRok Snare	Udo
61	CYM	NaturalCrash	NaturalCrash	TR909 Crash	Bomb Noise	Asian Gong
62	TOM/PERC	Kick Tom	Deep Tom	TR707 Tom	TekRok Snare	Udo
63	CYM	TR909 Ride	TR909 Ride	TR909 Ride	TR909 Ride	Cup Cym
64	CYM	NaturalCrash	NaturalCrash	TR909 Crash	Drill Hit	NaturalCrash
65	CYM	Cup Cym	Asian Gong	Asian Gong	ElectricDunk	Cup Cym
66	TOM/PERC	Tambourine 2	Tambourine 3	Tambourine 3	Mt Pandeiro	Tambourine 2
67	CYM	TR909 Crash	TR909 Crash	TR909 Crash	TR606 Cym 1	TR606 Cym 1
68	TOM/PERC	Cowbell	Cowbell	Cowbell	PC-2 Machine	Cowbell
69	CYM	TR606 Cym 1	TR606 Cym 1	TR606 Cym 2	TR909 Crash	NaturalCrash
70	TOM/PERC	TR808Cowbell	TR808Cowbell	TR808Cowbell	Crash	CR78 Beat
71	CYM	Natural Ride	TR707 Ride	Natural Ride	Natural Ride	Natural Ride
C5 72	TOM/PERC	HiBongo Open	HiBongo Open	HiBongo LoFi	HiBongo LoFi	HiBongo LoFi
73	TOM/PERC	LoBongo Open	LoBongo Open	LoBongo LoFi	LoBongo LoFi	LoBongo LoFi
74	TOM/PERC	HiConga Mute	HiConga Mute	HiCnga Mt LF	HiCnga Mt LF	HiCnga Mt LF
75	TOM/PERC	HiConga Open	HiConga Open	HiCnga Op LF	HiCnga Op LF	HiCnga Op LF
76	TOM/PERC	LoConga Open	LoConga Open	LoConga LoFi	LoConga LoFi	LoConga LoFi
77	TOM/PERC	Hi Timbale	Hi Timbale	HiTimbale LF	HiTimbale LF	HiTimbale LF
78	TOM/PERC	Lo Timbale	Lo Timbale	LoTimbale LF	LoTimbale LF	LoTimbale LF
79	TOM/PERC	TR727 Agogo	TR727 Agogo	TR727 Agogo	Analog Bird	TR727 Agogo
80	TOM/PERC	TR727 Agogo	TR727 Agogo	TR727 Agogo	Analog Bird	TR727 Agogo
81	TOM/PERC	Cabasa Up	TechnoShaker	TR727Quijada	TechnoShaker	Cabasa Up
82	TOM/PERC	Maracas	808 Maracas	TR626 Shaker	TR626 Shaker	TR626 Shaker
83	HIT	Triangle 1	MG Attack	Bounce	One!	Whistle
C6 84	HIT	Triangle 1	Air Blip	ElectricDunk	Two!	Whistle
85	HIT	Beam HiQ	Syn Hit	Iron Door	Three!	Short Guiro
86	HIT	Back Hit	TAO Hit	Drill Hit	Kick it!	Long Guiro
87	HIT	Back Hit	Chiki!	Thrill	Wao!	TR808 Claves
88	HIT	Philly Hit	Hey!	PCM Press	Come on!	Hyoshigi
89	OTHERS	Brass Fall	Toy Gun 1	Dist TekGtr	Fuzzy Clap	AfroDrum Rat
90	OTHERS	Rezo Noise	Toy Gun 2	Dist TekGtr	Roll Kick	Mute Cuica
91	OTHERS	Iih Formant	Toy Gun 3	Dist TekGtr	Bomb	Open Cuica
92	OTHERS	Analog Bird	Reso FX	Dist TekGtr	LoTimbale LF	Triangle 2
93	OTHERS	Emergency	Emergency	Gtr FX	TR909 DstOHH	Triangle 1
94	CLP	Down Clap	Big Clap	Air Gun	Fuzzy Clap	Real Clap 1
95	BD	TR808 Kick 1	TR808 Kick 1	TR909 Kick 2	TR909 Kick 2	Boost Kick
C7 96	BD	TR909 Kick 1	TR909 Kick 1	Gabba Kick	Roll Kick	Kick Ghost
97	SD	TR909 Snr 3	HH Soul Snr	ElectroSnr 2	TR909 DstSnr	Voice loop
98	SD	TR808 Snr 5	TR909 Snr 4	Big Trash SD	Flange Snr	Chiki!

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Preset Rhythm Set List

Note No.	Rhythm Group	P: A26 Reverse	P: B01 DR-110&220	P: B02 TR-505&626	P: B03 TR-707&727	P: B04 Techno 4
35	BD	Ele Kick	DR110 Kick	Hip Kick	Optic Kick	HipHop Kick2
C2 36	BD	Turbo Kick	DR110 Kick	TR505 Kick	Lo-Fi Kick 1	Wet Kick
37	TOM/PERC	TR909 Rim	DR220 Rim	TR505 Rim	TR808 Rim	Jungle Snap
38	SD	TR606 Snr 2	DR110 Snr	TR505 Snr	Whack Snare	TR626 Snr 2
39	CLP	Comp Clap	DR110 Clap	TR505 Clap	TR707 Clap	Funk Clap
40	SD	Real Snare	DR110 Snr	TR505 Snr	Antigua Snr	Synth Snare
41	TOM/PERC	Can Tom	TR606 CmpTom	TR505 Tom	Deep Tom	Kick Tom
42	HH	TR808 CHH 2	DR110 CHH	TR505 CHH	Closed Hat	TR606 CHH 1
43	TOM/PERC	Can Tom	TR606 CmpTom	TR505 Tom	Deep Tom	Kick Tom
44	HH	TR808 PHH 1	DR110 CHH	TR505 CHH	Pedal Hat 1	Tight PHH
45	TOM/PERC	Can Tom	TR606 CmpTom	TR505 Tom	Deep Tom	Kick Tom
46	HH	TR808 OHH 1	DR110 OHH	TR505 OHH	Open Hat	DR110 OHH
47	BD	TR707 Kick 1	TR808 Kick 1	TR626 Kick 1	TR707 Kick 1	TR909 Kick 8
C3 48	BD	Plastic BD 3	DR220 Kick	TR626 Kick 2	TR707 Kick 2	Plastic BD 4
49	TOM/PERC	TR707 Rim	DR220 Rim	TR626 Rim	TR707 Rim	MG Pink Nz
50	SD	TR909 Snr 4	DR220 Snr	TR626 Snr 2	Real Snare	CR78 Snare
51	CLP	TR707 Clap	DR220 Clap	TR505 Clap	TR707 Clap	Funk Clap
52	SD	Comp Clap	DR220 Snr	TR626 Snr 3	TR707 Snare	Sim Snare
53	TOM/PERC	TR707 Tom	DR220 Tom	TR626 Tom	TR707 Tom	Deep Tom
54	HH	TR909 CHH 1	DR220 CHH	TR626 CHH	TR707 CHH	DR110 CHH
55	TOM/PERC	TR707 Tom	DR220 Tom	TR626 Tom	TR707 Tom	Deep Tom
56	HH	TR909 PHH 1	DR220 CHH	TR626 CHH	TR707 PHH	Lil' Hat
57	TOM/PERC	TR707 Tom	DR220 Tom	TR626 Tom	TR707 Tom	Deep Tom
58	HH	TR909 DstOHH	DR220 OHH	TR626 OHH	TR707 OHH	Pop Hat Open
59	TOM/PERC	TR707 Tom	DR220 Tom	TR626 Tom	TR707 Tom	Deep Tom
C4 60	TOM/PERC	TR707 Tom	DR220 Tom	TR626 Tom	TR707 Tom	Deep Tom
61	CYM	TR909 Crash	DR220 Cym	TR626 Crash	NaturalCrash	TR909 Crash
62	TOM/PERC	TR707 Tom	DR220 Tom	TR626 Tom	TR707 Tom	Deep Tom
63	CYM	TR707 Ride	DR220 Ride	TR626 Ride	Natural Ride	TR707 Ride
64	CYM	TR909 Crash	DR220 Cym	TR626 Crash	NaturalCrash	TR909 Crash
65	CYM	Asian Gong	Cup Cym	TR626 CupCym	TR707 Ride	TR606 Cym 2
66	TOM/PERC	Tambourine 2	TR626 Tamb	TR626 Tamb	Tambourine 3	Tambourine 4
67	CYM	TR909 Crash	DR110 Cym	TR626 China	DR220 Cym	NaturalCrash
68	TOM/PERC	TR808Cowbell	MG Zap 6	TR626Cowbell	TR707Cowbell	CR78 Beat
69	CYM	TR606 Cym 2	DR220 Ride	TR909 Crash	TR909 Crash	TR707 Ride
70	TOM/PERC	CR78 Tamb	MG Zap 10	TR505HiCwbel	TR808Cowbell	CR78 Tamb
71	CYM	Cup Cym	MetallicShot	TR505LoCwbel	TR606 Cym 1	Cup Cym
C5 72	TOM/PERC	HiBongo Open	HiBongo Open	TR505 LoCong	TR727HiBongo	Udu Pot1 Hi
73	TOM/PERC	LoBongo Open	LoBongo Open	TR505 HiCong	TR727LoBongo	Udu Pot1 Acc
74	TOM/PERC	HiConga Mute	HiConga Mute	TR626MtConga	TR626MtConga	Udu Pot 2
75	TOM/PERC	HiConga Open	HiConga Open	TR626OpConga	TR626OpConga	Udu Pot2 Mut
76	TOM/PERC	LoConga Open	LoConga Open	TR626LoConga	TR626LoConga	Udu Pot2 Lng
77	TOM/PERC	Hi Timbale	Hi Timbale	TR626 HiTimb	TR727 HiTimb	MG Zap 6
78	TOM/PERC	Lo Timbale	Lo Timbale	TR626 LoTimb	TR727 LoTimb	MG Zap 12
79	TOM/PERC	TR727 Agogo	TR727 Agogo	TR626 HiAgo	TR727 Agogo	MG Sweep 5
80	TOM/PERC	TR727 Agogo	TR727 Agogo	TR626 LoAgo	TR727 Agogo	P-Zing
81	TOM/PERC	TechnoShaker	Cabasa Up	TR727 Cabasa	TR727 Cabasa	MG Sweep 2
82	TOM/PERC	Maracas	808 Maracas	TR727 Maracs	TR727 Maracs	MG Zap 7
83	HIT	Beam HiQ	MG Zap 1	TR626 Claves	ClassicHseHt	Beam HiQ
C6 84	HIT	Tape Rewind	MG Zap 2	MG Zap 9	Construct. 2	Jet Plane
85	HIT	Vinyl Stop	MG Zap 2	MG Sweep 4	MG Zap 1	Air Blip
86	HIT	Come on!	Smear Hit 1	Sawing	Space FX Swp	Dolphin Lo
87	HIT	One!	Construct. 2	D.MuteGt mp	Boing	Back Hit
88	HIT	Pa!	Tekno Hit	Bull Scream	MG Sweep 6	MetallicShot
89	OTHERS	Analog Bird	Boing	Hey! 2	TR727 Chime	Metal Bang
90	OTHERS	Retro UFO	MG Zap 8	MG Sweep 2	Sitar Gliss	Construct. 2
91	OTHERS	Metal Sweep	Ho	MG Zap 2	TR727Whistle	Firebomb
92	OTHERS	Dst Solo Gtr	Canvas	MG Zap 7	TR727Whistle	TR626 LoAgo
93	OTHERS	Emergency	MG Sweep 3	Boing	Siren 2	Thunderbolt
94	CLP	Down Clap	TR909 SnClp1	Group Clap	TR909 Clap 4	Jack Hammer
95	BD	Wet Kick	Dance Kick 1	TR909 Kick 3	TR909 Kick10	JungleKick 2
C7 96	BD	Hip Kick	Toy Kick	TR909 Kick 5	TR808 Kick 1	Hip Kick
97	SD	TR909 Snr 5	Sim Snare	Headz Snare	TR808 Snr 1	Picc. rol Sn
98	SD	Jazz Snare	TR808 Snr 5	TR909 Snr 5	Clap Snare 3	Picc. hrd Sn

Note No.	Rhythm Group	P: B05 NU-NRG	P: B06 Hard House	P: B07 Drum'n'Bass3	P: B08 Breakbeats	P: B09 Hip-Hop 3
35	BD	TR909 Kick 5	TR909 Kick10	Hall Kick 2	HipHop Kick1	HipHop Kick3
C2 36	BD	Plastic BD 3	TR909 Kick 6	HipHop Kick3	Hall Kick 2	HipHop Kick1
37	TOM/PERC	Gate Rim	TR909 Rim	Jungle Snap	Gate Rim	MG Zap 7
38	SD	TR909 SnClp2	TR909 Snr 7	Picc. rol Sn	Fat Snare	Slamn' Snr
39	CLP	TR909 Clap 4	Fuzzy Clap	Little Clap	Comp Clap	Real Clap 2
40	SD	TR909 DstSnr	TR909 Snr 8	Picc. hrd Sn	Lo-Fi Snare	PurePhat Snr
41	TOM/PERC	TR909 Tom	TR909 Tom	Deep Tom	Kick Tom	TR606 Tom
42	HH	TR909 CHH 3	TR707 CHH	Real CHH	Real CHH	DR110 CHH
43	TOM/PERC	TR909 Tom	TR909 Tom	Deep Tom	Kick Tom	TR606 Tom
44	HH	TR909 PHH 2	TR707 PHH	Real PHH	Pedal Hat 1	DR110 CHH
45	TOM/PERC	TR909 Tom	TR909 Tom	Deep Tom	Kick Tom	TR606 Tom
46	HH	TR909 OHH 2	TR707 OHH	R8 OHH	Real OHH	DR110 OHH
47	BD	TR909 Kick 8	TR909 Kick 5	JungleKick 2	TR707 Kick 2	TR808 Kick 2
C3 48	BD	TR909 Kick 9	TR909 Kick 9	HipHop Kick2	HipHop Kick3	HipHop Kick2
49	TOM/PERC	Natural Rim	Lo-Fi Rim	Ragga Rim 1	Snap	DR220 Rim
50	SD	Real Snare	TR909 SnClp1	Slamn' Snr	Funk Snr 1	TR626 Snr 2
51	CLP	Claptail	TR909 Clap 1	TR909 SnClp2	Real Clap 1	Funk Clap
52	SD	TR909 Snr 5	TR909 SnClp2	PurePhat Snr	Slamn' Snr	PurePhat Snr
53	TOM/PERC	TR808 Tom	TR909 DstTom	TR606 CmpTom	TR505 Tom	Natural Tom
54	HH	TR909 PHH 1	TR909 CHH 3	Room CHH	Tight CHH	Real CHH
55	TOM/PERC	TR808 Tom	TR909 DstTom	TR606 CmpTom	TR505 Tom	Natural Tom
56	HH	TR909 PHH 2	TR909 PHH 1	Tight PHH	Tight PHH	Real PHH
57	TOM/PERC	TR808 Tom	TR909 DstTom	TR606 CmpTom	TR505 Tom	Natural Tom
58	HH	TR909 DstOHH	TR909 OHH 2	Hip OHH	Funk OHH	Open Hat
59	TOM/PERC	TR808 Tom	TR909 DstTom	TR606 CmpTom	TR505 Tom	Natural Tom
C4 60	TOM/PERC	TR808 Tom	TR909 DstTom	TR606 CmpTom	TR505 Tom	Natural Tom
61	CYM	TR909 Crash	TR909 Crash	Jungle Crash	NaturalCrash	16 Drk Crash
62	TOM/PERC	TR808 Tom	TR909 DstTom	TR606 CmpTom	TR505 Tom	Natural Tom
63	CYM	TR909 Ride	TR909 Ride	TR909 Ride	TR606 Cym 2	Natural Ride
64	CYM	TR909 Crash	TR909 Crash	Jungle Crash	NaturalCrash	16 Drk Crash
65	CYM	Cup Cym	TR626 Ride	NaturalCrash	Natural Ride	TR626 China
66	TOM/PERC	CR78 Tamb	Tambourine 2	Tambourine 4	Tambourine 3	Tambourine 2
67	CYM	16 Drk Crash	TR626 China	TR606 Cym 2	Asian Gong 5	DR220 Cym
68	TOM/PERC	TR808Cowbell	CR78 Cowbell	TR808Cowbell	CR78 Cowbell	TR808Cowbell
69	CYM	DR220 Ride	TR626 CupCym	TR909 Crash	DR220 Ride	TR606 Cym 2
70	TOM/PERC	TR727Quijada	TR626Cowbell	CR78 Tamb	TR626 Claves	MG Zap 5
71	CYM	TR626 CupCym	DR110 Cym	Natural Ride	TR626 CupCym	MetallicShot
C5 72	TOM/PERC	HiBongo LoFi	Udu Pot2 Mut	Wadaiko	HiBongo Open	HiBongo Open
73	TOM/PERC	LoBongo LoFi	Udu Pot2 Lng	Wadaiko Rim	LoBongo Open	LoBongo Open
74	TOM/PERC	HiCnga Mt LF	Udu Pot1 Acc	Tsuzumi 2 p	HiConga Mute	HiConga Mute
75	TOM/PERC	HiCnga Op LF	Udu Pot1 Hi	Tsuzumi 2 mf	HiConga Open	HiConga Open
76	TOM/PERC	LoConga LoFi	Udu Pot1 Lo	Tsuzumi 2 Hi	LoConga Open	LoConga Open
77	TOM/PERC	HiTimbale LF	TR727 HiTimb	Shimedaiko 2	Hi Timbale	Hi Timbale
78	TOM/PERC	LoTimbale LF	TR727 LoTimb	Ohkawa 2	Lo Timbale	Lo Timbale
79	TOM/PERC	TR626 HiAgo	TR727 Agogo	Mokugyo 1	TR727 Agogo	TR727 Agogo
80	TOM/PERC	TR626 LoAgo	TR727 Agogo	Mokugyo 2	TR727 Agogo	TR727 Agogo
81	TOM/PERC	TR727 Cabasa	TR626 Shaker	Kane	Cabasa Up	TechnoShaker
82	TOM/PERC	TR727 Maracs	TR626 Shaker	Wind Bell	Maracas	808 Maracas
83	HIT	Mute Cuica	Smear Hit 1	Bendir	TR727Quijada	Scratch SD f
C6 84	HIT	Dist Swish	P-Zing	MG Zap 5	Bendir	Scratch SD r
85	HIT	Bounce	Mute Cuica	Dist Swish	Short Guiro	Metal Sweep
86	HIT	MG Sweep 3	Open Cuica	Dolphin Hi 1	Long Guiro	Boing
87	HIT	MG Zap 15	OrchPrc Hit	Dolphin Hi 2	Smear Hit 1	P-Zing
88	HIT	MG Zap 9	Philly Hit	Dolphin Md	Lo-Fi RoomTp	MG Sweep 5
89	OTHERS	Hoo!	MG Sweep 5	Dolphin Lo	Str Attack	Sitar Gliss
90	OTHERS	JP Hoover	Hoo!	MG Zap 11	Berimbau Mut	Smear Hit 1
91	OTHERS	MG Big Lead	Ooh! 2	MG Sweep 3	Construct. 2	Bull Scream
92	OTHERS	Bull Scream	Wao!	Space FX Swp	Ooh! 2	Wao!
93	OTHERS	Turbine	Shout	MG Sweep 5	Shout	Hey! 2
94	CLP	Real Clap 2	Big Clap	Funk Clap	TR909 Clap 3	Cheap Clap
95	BD	TR909 Kick 9	HipHop Kick2	TR808 Kick 2	Hazy Kick	Hall Kick 2
C7 96	BD	TR909 Kick 3	TR909 Kick 6	Lo-Fi Kick 2	TR808 Kick 2	TR909 Kick 9
97	SD	Flange Snr	TR606 Snr 2	TR808 Snr 8	Picc. rol Sn	TR808 Snr 5
98	SD	Lo-Hard Snr	Lo-Hard Snr	MC Snare	PurePhat Snr	RaggaTightSD

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Preset Rhythm Set List

Note No.	Rhythm Group	P: B10 Trip-Hop	P: B11 R&B	P: B12 Electro 2	P: B13 Monde	P: B14 World Perc
35	BD	TR909 Kick10	TR909 Kick 9	Toy Kick	MG Attack	Bendir
C2 36	BD	TR909 Kick 7	HipHop Kick1	TR909 Kick 7	Amsterdam BD	Wadaiko
37	TOM/PERC	Natural Rim	Gate Rim	Analog Rim	TR808 RimLng	Wadaiko Rim
38	SD	TR808 Snr 6	Deep Snare	TR808 Snr 2	Toy Gun 3	Tsuzumi 2 mf
39	CLP	Real Clap 2	Hip Clap	Finger Snap	TR909 SnClp1	Ohkawa 2
40	SD	Headz Snare	Funk Snr 1	ElectroSnr 2	TR808 Snr 3	Tsuzumi 2 Hi
41	TOM/PERC	TR606 Tom	DR220 Tom	MG Zap 6	MG Zap 7	Tsuzumi 2 p
42	HH	TR606 CHH 1	TR808 CHH 1	DR220 CHH	TR808 CHH 2	Mokugyo 2
43	TOM/PERC	TR606 Tom	DR220 Tom	MG Zap 6	MG Zap 7	Tsuzumi 2 p
44	HH	TR606 PHH 1	TR808 PHH 1	DR220 CHH	P5 Noise	Mokugyo 1
45	TOM/PERC	TR606 Tom	DR220 Tom	MG Zap 6	MG Zap 7	Tsuzumi 2 p
46	HH	TR606 OHH	TR808 OHH 1	DR220 OHH	TR606 OHH	Wind Bell
47	BD	Lo-Fi Kick 1	TR909 Kick 7	TR808 Kick 2	TR808 Kick 1	Afro Feet
C3 48	BD	JungleKick 2	HipHop Kick2	TR909 Kick 8	TR909 Kick 8	Open Surdo
49	TOM/PERC	SideStiker	Lo-Fi Rim	Boing	MG Zap 1	DR220 Rim
50	SD	Tiny Snare 1	TR909 Snr 8	Flange Snr	Flange Snr	Afro Clap
51	CLP	Clap Snare 3	Big Clap	TR808 Clap	Claptail	Real Clap 1
52	SD	TekRok Snare	Solid Snare	Synth Snare	CR78 Snare	OrchPrc Hit
53	TOM/PERC	TR808 Tom	Natural Tom	Syn Tom	TR808 Tom	Tabla
54	HH	DR550 CHH 2	Closed Hat	Metal Bang	Tight CHH	Chenchen
55	TOM/PERC	TR808 Tom	Natural Tom	Syn Tom	TR909 Tom	LoConga Open
56	HH	Pedal Hat 1	Bristol CHH	Metal Bang	DR220 OHH	Tambourine 1
57	TOM/PERC	TR808 Tom	Natural Tom	Syn Tom	TR808 Tom	Tabla
58	HH	DR550 OHH	Cym OHH	MetallicShot	TR909 OHH 3	Tambourine 4
59	TOM/PERC	TR808 Tom	Natural Tom	Syn Tom	TR909 Tom	LoConga Open
C4 60	TOM/PERC	TR808 Tom	Natural Tom	Syn Tom	TR808 Tom	Tabla
61	CYM	NaturalCrash	NaturalCrash	TR626 Crash	TR909 Crash	Asian Gong 3
62	TOM/PERC	TR808 Tom	Natural Tom	Syn Tom	TR909 Tom	LoConga Open
63	CYM	TR606 Cym 1	TR909 Ride	TR626 Ride	TR909 Ride	Asian Gong 6
64	CYM	NaturalCrash	NaturalCrash	TR626 Crash	TR909 Crash	Asian Gong 3
65	CYM	MG Zap 10	Cup Cym	Asian Gong 7	MetallicShot	Asian Gong 2
66	TOM/PERC	Tambourine 4	Tambourine 2	CR78 Tamb	Tambourine 3	Chenchen
67	CYM	DR220 Ride	TR909 Crash	TR626 CupCym	NaturalCrash	Asian Gong 4
68	TOM/PERC	CR78 Cowbell	Cowbell	CR78 Cowbell	TR808Cowbell	Kane
69	CYM	Cup Cym	TR626 China	TR606 Cym 1	TR606 Cym 1	Asian Gong 5
70	TOM/PERC	MG Zap 2	TR808Cowbell	MG Attack	Retro UFO	Triangle 2
71	CYM	Kane	Natural Ride	P-Zing	Natural Ride	Asian Gong 7
C5 72	TOM/PERC	HiBongo Open	TablaBaya 6	MG Zap 1	PC-2 Machine	TablaBaya 2
73	TOM/PERC	LoBongo Open	TablaBaya 1	MG Zap 2	PC-2 Machine	TablaBaya 1
74	TOM/PERC	HiConga Mute	TR626MtConga	MG Zap 3	Sine	TablaBaya 5
75	TOM/PERC	HiConga Open	TR626OpConga	MG Zap 4	Sine	TablaBaya 4
76	TOM/PERC	LoConga Open	TR626LoConga	MG Zap 5	Sine	TablaBaya 3
77	TOM/PERC	Hi Timbale	TR626 HiTimb	MG Zap 6	Boing	TablaBaya 7
78	TOM/PERC	Lo Timbale	TR626 LoTimb	MG Zap 7	MG Sweep 1	TablaBaya 6
79	TOM/PERC	TR727 Agogo	TR727 Agogo	MG Zap 8	MG Sweep 2	Udu Pot2 Mut
80	TOM/PERC	TR727 Agogo	TR727 Agogo	MG Zap 9	MG Sweep 4	Udu Pot2 Lng
81	TOM/PERC	TechnoShaker	Cabasa Up	MG Zap 10	MG Sweep 5	Hyoshigi
82	TOM/PERC	808 Maracas	Maracas	MG Zap 13	Cabasa Up	TablaBaya 8
83	HIT	Emergency	TR727Quijada	MG Zap 14	Beam HiQ	Udu Pot 1
C6 84	HIT	Scratch SD r	TR727 Chime	MG Zap 15	MG Sweep 6	Udu Pot 2
85	HIT	MG Pink Nz	Short Guiro	Analog Bird	MG Blip	Udu Pot1 Lo
86	HIT	Vinyl Stop	Long Guiro	PC-2 Machine	Chiki!	Udu Pot1 Hi
87	HIT	LoFi MinorHt	MG Zap 11	Drill Hit	Air Gun	Udu Pot1 Slp
88	HIT	Punch	Wah Gtr 2c	Dolphin Lo	Frog Wave	Udu Pot1 Acc
89	OTHERS	Hey! 2	Wah Gtr 2d	Toy Gun 3	Metal Bang	Ho
90	OTHERS	ElectricDunk	Dolphin Hi 1	Emergency	Bendir	Yoh
91	OTHERS	Bounce	Dolphin Hi 2	Turbine	MetallicShot	iYooh
92	OTHERS	MetallicShot	Triangle 1	Shout	MetallicShot	Hey! 2
93	OTHERS	MG Sweep 5	Triangle 1	Come on!	JP8000 FBK	Sitar Gliss
94	CLP	Down Clap	Snap	Udu Pot1 Acc	Funky Clap	Funky Clap
95	BD	TR808 Kick 2	TR808 Kick 2	Plastic BD 4	TR909 Kick 6	JungleKick 2
C7 96	BD	HipHop Kick2	Hip Kick	TR909 Kick 3	TR505 Kick	HipHop Kick2
97	SD	Fat Snare	Picc. rol Sn	Jungle Rim 3	Deep Tom	East Snare
98	SD	Funk Snr 1	Picc. hrd Sn	TR606 Snr 1	TR626 Snr 2	PurePhat Snr

Waveform List

Group-A

No.	Name	No.	Name	No.	Name	No.	Name	No.	Name
001	TB Dst Saw	052	Ac Bass	103	Trumpet	154	Dist Hit	205	TR808 Tom
002	TB Dst Sqr 1	053	Voco Bass	104	Mute Trumpet	155	Thin Beef	206	TR606 Tom
003	TB Dst Sqr 2	054	Fingered Bs	105	Soprano Sax	156	Tekno Hit	207	TR606 CmpTom
004	TB Reso Sqr1	055	Pick Bass	106	Solo Sax	157	Back Hit	208	TR707 Tom
005	TB Reso Sqr2	056	Fretless Bs	107	Baritone Sax	158	TAO Hit	209	Syn Tom
006	TB Saw	057	Slap Bass	108	Brass Fall	159	Philly Hit	210	Deep Tom
007	TB SolidSaw1	058	Juno Rave	109	Flute	160	INDUST. MENU	211	Can Tom
008	TB SolidSaw2	059	Blaster	110	Pan Flute	161	Analog Bird	212	Kick Tom
009	TB Square 1	060	Fat JP-6	111	Shakuhachi	162	Retro UFO	213	Natural Tom
010	TB Square 2	061	OB Strings	112	Bagpipe	163	PC-2 Machine	214	PERCUS MENU1
011	TB Sqr Decay	062	Orch Strings	113	Breath	164	Hoo	215	PERCUS MENU2
012	TB Natural	063	Pizzy Techno	114	Feedbackwave	165	Metal Sweep	216	TR808 Conga
013	JP8000 Saw 1	064	Choir	115	Atmosphere	166	Afro Feet	217	HiBongo Open
014	JP8000 Saw 2	065	Syn Vox 1	116	Rezo Noise	167	Bomb	218	LoBongo Open
015	MG Saw	066	Syn Vox 2	117	MG White Nz	168	Bounce	219	HiConga Mute
016	Synth Saw 1	067	Syn Vox 3	118	P5 Noise	169	ElectricDunk	220	HiConga Open
017	JP-8 Saw	068	Ac Piano	119	MG Pink Nz	170	Iron Door	221	LoConga Open
018	P5 Saw	069	D-50 EP	120	Bomb Noise	171	Dist Swish	222	HiBongo LoFi
019	Synth Saw 2	070	E.Piano	121	Sea	172	Drill Hit	223	LoBongo LoFi
020	OB Saw	071	Clavi	122	Brush Noise	173	Thrill	224	HiCnga Mt LF
021	D-50 Saw	072	Full Stop	123	Space Noise	174	PCM Press	225	HiCnga Op LF
022	JP-6 Square	073	FM Club Org	124	Scream	175	Air Gun	226	LoConga LoFi
023	MG Square	074	E.Organ 1	125	Jet Plane	176	VOICE MENU	227	Timpani
024	P5 Square	075	E.Organ 2	126	Toy Gun 1	177	One!	228	Mute Surdo
025	JP-8 Pulse	076	Church Org	127	Crash	178	Two!	229	Open Surdo
026	JP-6 Pulse	077	Power B fst	128	Toy Gun 2	179	Three!	230	Hi Timbale
027	MG Pulse	078	Power B slw	129	Toy Gun 3	180	Kick it!	231	Lo Timbale
028	260 Pulse	079	Org Chord	130	Emergency	181	Come on!	232	HiTimbale LF
029	JU-2 Sub OSC	080	Tubular	131	Buzzer	182	Wao!	233	LoTimbale LF
030	Frog wave	081	Glockenspiel	132	Insect	183	Shout	234	Tabla
031	Digiwave	082	Vibraphone	133	Tonality	184	Ooh! 1	235	TablaBaya
032	FM Pulse	083	FantabellSub	134	Ring Osc	185	Ooh! 2	236	Udo
033	JP8000 PWM	084	DIGI Bell	135	Reso FX	186	Voice loop	237	AfroDrum Rat
034	JP8000 FBK	085	Steel Drum	136	SCRATCH MENU	187	Pa!	238	Chenchen
035	260 Sub OSC	086	Marimba	137	Vinyl Noise	188	Canvas	239	Op Pandeiro
036	Dist Synth	087	Balaphone	138	Scratch BD f	189	Punch	240	Mt Pandeiro
037	Dist Square	088	Kalimba	139	Scratch BD r	190	Chiki!	241	Tambourine 1
038	MG Triangle	089	Steel Gtr	140	Scratch SD f	191	Hey!	242	Tambourine 2
039	Jungle Bass	090	Clean TC	141	Scratch SD r	192	Laugh	243	Tambourine 3
040	260 Sine Bs	091	Dst Solo Gtr	142	Scratch ALT	193	Aah Formant	244	Tambourine 4
041	MC-202 Bass	092	Dist TekGtr	143	Tape Rewind	194	Eeh Formant	245	CR78 Tamb
042	SH-101 Bass	093	Gtr FX	144	Vinyl Stop	195	Iih Formant	246	COWBELL MENU
043	Octa Bass	094	Harmo Gtr	145	HIT MENU	196	Ooh Formant	247	TR808Cowbell
044	Funky Bass	095	Wah Gtr 1	146	MG Blip	197	Uuh Formant	248	TR707Cowbell
045	Poly Bass	096	Wah Gtr 2	147	Beam HiQ	198	Dist Ooh Vox	249	CR78 Cowbell
046	MG Bass	097	Wah Gtr 2a	148	MG Attack	199	Auh Voice	250	Cowbell
047	FM Super Bs	098	Wah Gtr 2b	149	Air Blip	200	Stream	251	TR727 Agogo
048	Solid Bass	099	Wah Gtr 2c	150	Org Click	201	Bird	252	CR78 Beat
049	Organ Bass	100	Wah Gtr 2d	151	Syn Hit	202	TOM MENU	253	Triangle 1
050	Dirty Bass	101	Sitar	152	Techno Scene	203	TR909 Tom	254	Triangle 2
051	Upright Bs	102	Brass	153	Techno Chord	204	TR909 DstTom		

Waveform List

Group-B

No.	Name	No.	Name	No.	Name	No.	Name	No.	Name
001	SHKR+ MENU	052	R8 Brush CHH	103	TR707 Clap	154	Rap Snare	205	ElectroSnr 2
002	808 Maracas	053	Jungle Hat	104	Cheap Clap	155	Jungle Snr 1	206	Synth Snare
003	Maracas	054	PHH MENU	105	Funk Clap	156	Antigua Snr	207	Roll Snare
004	Cabasa Up	055	TR909 PHH 1	106	Little Clap	157	Real Snare	208	KICK MENU 1
005	TechnoShaker	056	TR909 PHH 2	107	Real Clap 1	158	Tiny Snare 1	209	KICK MENU 2
006	TR626 Shaker	057	TR808 PHH 1	108	Real Clap 2	159	Tiny Snare 2	210	KICK MENU 3
007	Dance Shaker	058	TR808 PHH 2	109	Funky Clap	160	Break Snare1	211	TR909 Kick 1
008	CR78 Guiro	059	TR606 PHH 1	110	Comp Clap	161	Break Snare2	212	TR909 Kick 2
009	Long Guiro	060	TR606 PHH 2	111	Hip Clap	162	MC Snare	213	TR909 Kick 3
010	Short Guiro	061	TR707 PHH	112	Down Clap	163	East Snare	214	TR909 Kick 4
011	Mute Cuica	062	Hip PHH	113	Group Clap	164	Phat Snare	215	Plastic BD 1
012	Open Cuica	063	Tight PHH	114	Big Clap	165	Brush Slap 1	216	Plastic BD 2
013	Whistle	064	Pedal Hat 1	115	Claptail	166	Brush Slap 2	217	Plastic BD 3
014	TR727Quijada	065	Real PHH	116	Clap Snare 1	167	Deep Snare	218	Plastic BD 4
015	Jingle Bell	066	Pedal Hat 2	117	Fuzzy Clap	168	Fat Snare	219	TR909 Kick 5
016	Belltree	067	OHH MENU 1	118	Snap	169	Disco Snare	220	TR808 Kick 1
017	Wind Chime	068	OHH MENU 2	119	Finger Snap	170	DJ Snare	221	TR808 Kick 2
018	RIM MENU	069	TR909 OHH 1	120	SNR MENU 1	171	Macho Snare	222	TR808 Kick 3
019	TR909 Rim	070	TR909 OHH 2	121	SNR MENU 2	172	Hash Snare	223	TR808 Kick 4
020	TR808 Rim	071	TR909 OHH 3	122	SNR MENU 3	173	Lo-Hard Snr	224	TR808 Kick 5
021	TR808 RimLng	072	TR909 DstOHH	123	SNR MENU 4	174	Indus Snare	225	TR606 Kick
022	TR707 Rim	073	TR808 OHH 1	124	SNR MENU 5	175	Rage Snare	226	TR606 Dst BD
023	Analog Rim	074	TR808 OHH 2	125	SNR MENU 6	176	TekRok Snare	227	TR707 Kick 1
024	Natural Rim	075	TR606 OHH	126	TR909 Snr 1	177	Big Trash SD	228	TR707 Kick 2
025	Ragga Rim 1	076	TR606 DstOHH	127	TR909 Snr 2	178	Ragga Rim 2	229	Toy Kick
026	Lo-Fi Rim	077	TR707 OHH	128	TR909 Snr 3	179	Gate Rim	230	Analog Kick
027	Wood Block	078	CR78 OHH	129	TR909 Snr 4	180	SideStiker	231	Boost Kick
028	Jungle Snap	079	Hip OHH	130	TR909 Snr 5	181	HipJazz Snr	232	West Kick
029	TR808 Claves	080	Pop Hat Open	131	TR909 Snr 6	182	HH Soul Snr	233	JungleKick 1
030	Hyoshigi	081	Open Hat	132	TR909 Snr 7	183	Cross Snare	234	Optic Kick
031	CHH MENU 1	082	Cym OHH	133	TR909 DstSnr	184	Jungle Rim 1	235	Wet Kick
032	CHH MENU 2	083	DR550 OHH	134	TR808 Snr 1	185	Ragga Snr 2	236	Lo-Fi Kick 1
033	TR909 CHH 1	084	Funk OHH	135	TR808 Snr 2	186	Upper Snare	237	Hazy Kick
034	TR909 CHH 2	085	Real OHH	136	TR808 Snr 3	187	Lo-Fi Snare	238	Hip Kick
035	TR808 CHH 1	086	R8 OHH	137	TR808 Snr 4	188	RaggaTightSD	239	Video Kick
036	TR808 CHH 2	087	CYMBAL MENU	138	TR808 Snr 5	189	Flange Snr	240	Tight Kick
037	TR808 CHH 3	088	TR606 Cym 1	139	TR808 Snr 6	190	Machine Snr	241	Break Kick
038	TR606 CHH 1	089	TR606 Cym 2	140	TR808 Snr 7	191	Clap Snare 3	242	Turbo Kick
039	TR606 CHH 2	090	TR909 Ride	141	TR808 Snr 8	192	Solid Snare	243	Ele Kick
040	TR606 DstCHH	091	TR707 Ride	142	TR808 Snr 9	193	Funk Clap 2	244	Dance Kick 1
041	TR707 CHH	092	Natural Ride	143	TR606 Snr 1	194	Jungle Rim 2	245	Kick Ghost
042	CR78 CHH	093	Cup Cym	144	TR606 Snr 2	195	Jungle Rim 3	246	Lo-Fi Kick 2
043	DR55 CHH 1	094	TR909 Crash	145	TR606 Snr 3	196	Jungle Snr 2	247	JungleKick 2
044	Closed Hat	095	NaturalCrash	146	DanceHall SD	197	Urban Snare	248	TR909 Dst BD
045	Pop CHH	096	Jungle Crash	147	TR707 Snare	198	Urban RollSD	249	Amsterdam BD
046	Real CHH	097	Asian Gong	148	CR78 Snare	199	R&B Snare	250	Gabba Kick
047	Bristol CHH	098	CLAP MENU 1	149	Clap Snare 2	200	R8 Brush Tap	251	Roll Kick
048	DR550 CHH 2	099	CLAP MENU 2	150	Jngl Tiny SD	201	R8 BrshSwill		
049	Tight CHH	100	TR909 Clap 1	151	Jazz Snare	202	R8 BrushRoll		
050	Hip CHH	101	TR909 Clap 2	152	Headz Snare	203	Sim Snare		
051	Room CHH	102	TR808 Clap	153	Whack Snarel	204	ElectroSnr 1		

Group-C

No.	Name	No.	Name	No.	Name	No.	Name	No.	Name
1	MG Big Lead	48	Str Attack	95	Hoo!	142	TablaBaya 7	189	TR626 China
2	JP Hardcore	49	Lo-Fi RoomTp	96	Hey! 2	143	TablaBaya 8	190	TR626 CupCym
3	JP Hoover	50	Smear Hit 1	97	Ho	144	UDU POT MENU	191	ASIAGNG MENU
4	JP Seq.Synth	51	Smear Hit 2	98	Yoh	145	Udu Pot 1	192	Asian Gong 1
5	P5 Unisync	52	LoFi MinorHt	99	iYooh	146	Udu Pot 2	193	Asian Gong 2
6	P5 UnisyncLp	53	ClassicHseHt	100	Dolphin Hi 1	147	Udu Pot1 Lo	194	Asian Gong 3
7	Mondigital	54	OrchPrc Hit	101	Dolphin Hi 2	148	Udu Pot1 Hi	195	Asian Gong 4
8	MondigitalLp	55	Sitar Gliss	102	Dolphin Md	149	Udu Pot1 Slp	196	Asian Gong 5
9	OSC Saw	56	Thunderbolt	103	Dolphin Lo	150	Udu Pot1 Acc	197	Asian Gong 6
10	OSC Reso Saw	57	Construct. 2	104	TOM MENU 2	151	Udu Pot2 Lng	198	Asian Gong 7
11	Siren Synth	58	Jack Hammer	105	DR220 Tom	152	Udu Pot2 Mut	199	CLAP MENU 3
12	Sine	59	Turbine	106	TR505 Tom	153	JAPAN MENU	200	DR110 Clap
13	MG Bass 2	60	Sawing	107	TR626 Tom	154	Wadaiko	201	DR220 Clap
14	MG Big Bass	61	120:Steaming	108	PERCUS MENU3	155	Wadaiko Rim	202	TR505 Clap
15	Solid Bass 2	62	SteamWhistle	109	PERCUS MENU4	156	Shimedaiko 2	203	TR909 Clap 3
16	Jazz Bass	63	Firebomb	110	TR505 HiCong	157	Tsuzumi 2 p	204	TR909 Clap 4
17	Ac.Bass A	64	Metal Bang	111	TR505 LoCong	158	Tsuzumi 2 mf	205	TR909 SnClp1
18	Ac.Bass C	65	MetallicShot	112	TR626MtConga	159	Tsuzumi 2 Hi	206	TR909 SnClp2
19	Tremolo sfz	66	P-Zing	113	TR626OpConga	160	Ohkawa 2	207	Afro Clap
20	Choir Aah A	67	Boing	114	TR626LoConga	161	Mokugyo 1	208	SNR MENU 7
21	Choir Aah B	68	MG Zap MENU	115	TR727HiBongo	162	Mokugyo 2	209	DR110 Snr
22	Choir Aah C	69	MG Zap 1	116	TR727LoBongo	163	Kane	210	DR220 Snr
23	Piano 2	70	MG Zap 2	117	TR626 HiTimb	164	Wind Bell	211	TR505 Snr
24	Lo-Fi Wurly	71	MG Zap 3	118	TR626 LoTimb	165	RIM MENU 2	212	TR626 Snr 2
25	E.Organ 3	72	MG Zap 4	119	TR727 HiTimb	166	DR220 Rim	213	TR626 Snr 3
26	Overdrive 1A	73	MG Zap 5	120	TR727 LoTimb	167	TR505 Rim	214	TR909 Snr 8
27	Overdrive 1C	74	MG Zap 6	121	Bendir	168	TR626 Rim	215	Funk Snr 1
28	Funk Gt	75	MG Zap 7	122	Timpani 2	169	HIHAT MENU 2	216	Picc. hrd Sn
29	Funk Gt Mute	76	MG Zap 8	123	TR505 Tabla	170	DR110 CHH	217	Picc. rol Sn
30	D.MuteGt mp	77	MG Zap 9	124	TR626 Tamb	171	DR220 CHH	218	PurePhat Snr
31	Sitar 2	78	MG Zap 10	125	TR505HiCwbel	172	TR505 CHH	219	Slamn' Snr
32	Bagpipe 2	79	MG Zap 11	126	TR505LoCwbel	173	TR626 CHH	220	KICK MENU 4
33	Solo Tpt. A	80	MG Zap 12	127	TR626Cowbell	174	TR909 CHH 3	221	KICK MENU 5
34	Solo Tpt. C	81	MG Zap 13	128	TR626 Claves	175	Lil' Hat	222	DR110 Kick
35	Blow Sax A	82	MG Zap 14	129	TR626 HiAgo	176	HipHop Hat 1	223	DR220 Kick
36	Blow Sax B	83	MG Zap 15	130	TR626 LoAgo	177	HipHop Hat 2	224	TR505 Kick
37	Blow Sax C	84	SWEEP MENU	131	TR727 Maracs	178	DR110 OHH	225	TR626 Kick 1
38	Tron Flute	85	MG Sweep 1	132	TR727 Cabasa	179	DR220 OHH	226	TR626 Kick 2
39	DIDGERI MENU	86	MG Sweep 2	133	TR727Whistle	180	TR505 OHH	227	TR909 Kick 6
40	Didgeridoo 1	87	MG Sweep 3	134	TR727 Chime	181	TR626 OHH	228	TR909 Kick 7
41	Didgeridoo 2	88	MG Sweep 4	135	TABLABY MENU	182	CYNBAL MENU2	229	TR909 Kick 8
42	Didgeridoo 3	89	MG Sweep 5	136	TablaBaya 1	183	DR110 Cym	230	TR909 Kick 9
43	BERIMBA MENU	90	MG Sweep 6	137	TablaBaya 2	184	DR220 Cym	231	TR909 Kick10
44	Berimbau Opn	91	Space FX Swp	138	TablaBaya 3	185	TR626 Crash	232	HipHop Kick1
45	Berimbau Up	92	Siren 2	139	TablaBaya 4	186	16 Drk Crash	233	JungleKick 2
46	Berimbau Dn	93	VOICE MENU	140	TablaBaya 5	187	DR220 Ride	234	HipHop Kick2
47	Berimbau Mut	94	Bull Scream	141	TablaBaya 6	188	TR626 Ride	235	HipHop Kick3
								236	Hall Kick 2

Preset Pattern List

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Techno

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
1	Psy Trance 1	138	8	MASA
2	Psy Trance 2	138	8	MASA
3	Psy Trance 3	140	4	MASA
4	Psy Trance 4	139	4	MASA
5	Psy Trance 5	144	4	MASA
6	Psy Trance 6	141	4	MASA
7	Psy Trance 7	140	4	MASA
8	Psy Trance 8	141	4	MASA
9	Psy Trance 9	138	8	MASA
10	Psy Trance 10	138	4	MASA
11	Trance 1	139	4	MASA
12	Trance 2	138	8	MASA
13	Trance 3	140	4	Cappadocia Productions
14	Trance 4	140	4	Cappadocia Productions
15	Trance 5	140	8	YOJI BIOMEHANIKA
16	Trance 6	140	8	HEIGO TANI
17	Trance 7	138	4	MASA
18	Trance 8	143	4	B.U.S
19	Minimal 1	137	4	SHUFFLEMASTER
20	Minimal 2	137	4	Roland Corporation
21	Minimal 3	137	4	SHUFFLEMASTER
22	Minimal 4	137	4	Roland Corporation
23	Minimal 5	137	4	SHUFFLEMASTER
24	Minimal 6	137	4	Roland Corporation
25	Minimal 7	137	4	SHUFFLEMASTER
26	Minimal 8	137	4	SHUFFLEMASTER
27	Minimal 9	137	4	SHUFFLEMASTER
28	Minimal 10	137	8	SHUFFLEMASTER
29	Minimal 11	137	4	SHUFFLEMASTER
30	Minimal 12	137	4	SHUFFLEMASTER
31	DetroitTechno 1	136	8	HEIGO TANI
32	DetroitTechno 2	132	4	HEIGO TANI
33	DetroitTechno 3	130	8	HEIGO TANI
34	DetroitTechno 4	135	4	Cappadocia Productions
35	DetroitTechno 5	136	8	Cappadocia Productions
36	DetroitTechno 6	135	4	Cappadocia Productions
37	DetroitTechno 7	137	4	SHUFFLEMASTER
38	DetroitTechno 8	137	8	SHUFFLEMASTER
39	DetroitTechno 9	132	8	HEIGO TANI
40	New Electro 1	138	4	MASA
41	New Electro 2	133	4	SHUFFLEMASTER
42	New Electro 3	134	4	SHUFFLEMASTER

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
43	New Electro 4	138	4	MASA
44	New Electro 5	131	4	SHUFFLEMASTER
45	New Electro 6	137	4	SHUFFLEMASTER
46	New Electro 7	137	8	SHUFFLEMASTER
47	New Electro 8	135	4	Cappadocia Productions
48	Early Techno 1	130	4	Cappadocia Productions
49	Early Techno 2	140.5	4	Cappadocia Productions
50	Early Techno 3	140	4	Cappadocia Productions
51	Early Techno 4	125	4	Cappadocia Productions
52	Early Techno 5	138.5	4	Cappadocia Productions
53	Industrial 1	127	4	MASA
54	Industrial 2	129	4	MASA
55	Industrial 3	130	8	MASA
56	Industrial 4	128	4	MASA
57	Industrial 5	128	4	MASA
58	Ambient 1	83	4	HEIGO TANI
59	Ambient 2	75	4	Cappadocia Productions
60	Ambient 3	70	4	HEIGO TANI
61	Ambient 4	100	4	Cappadocia Productions
62	Ambient 5	75	4	Cappadocia Productions
63	Ambient 6	75	6	HEIGO TANI
64	Dream Trance 1	143	4	B.U.S
65	Dream Trance 2	136	4	Roland Corporation
66	Dream Trance 3	140	8	B.U.S
67	Dream Trance 4	136	4	B.U.S
68	Dream Trance 5	136	4	B.U.S
69	Dream Trance 6	145	4	HEIGO TANI
70	Dream Trance 7	138	4	HEIGO TANI
71	Dream Trance 8	139	4	B.U.S
72	Dream Trance 9	143	4	B.U.S
73	Dream Trance 10	138	4	B.U.S
74	NU-NRG 1	150	8	YOJI BIOMEHANIKA
75	NU-NRG 2	150	8	YOJI BIOMEHANIKA
76	NU-NRG 3	147	8	YOJI BIOMEHANIKA
77	NU-NRG 4	146	8	YOJI BIOMEHANIKA
78	NU-NRG 5	147	8	YOJI BIOMEHANIKA
79	Gabba 1	180	4	YOJI BIOMEHANIKA
80	Gabba 2	180	4	Cappadocia Productions
81	Gabba 3	185	4	Cappadocia Productions
82	Gabba 4	185	8	Cappadocia Productions
83	Gabba 5	205	4	HEIGO TANI
84	Gabba 6	200	4	HEIGO TANI
85	Gabba 7	230	4	HEIGO TANI
86	HappyHardcore 1	175	8	YOJI BIOMEHANIKA
87	HappyHardcore 2	175	8	YOJI BIOMEHANIKA
88	HappyHardcore 3	176	8	YOJI BIOMEHANIKA
89	HappyHardcore 4	173	8	YOJI BIOMEHANIKA
90	HappyHardcore 5	175	8	YOJI BIOMEHANIKA

House

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
91	Garage House 1	127	4	Roland Corporation
92	Garage House 2	128	8	Soulmates Graphica
93	Garage House 3	126	8	Soulmates Graphica
94	Garage House 4	130	8	B.U.S
95	Garage House 5	127	4	Roland Corporation
96	Garage House 6	126	8	Soulmates Graphica
97	Garage House 7	135	8	B.U.S
98	House 1	128	8	Soulmates Graphica
99	House 2	126	8	Soulmates Graphica
100	House 3	130	8	Soulmates Graphica
101	House 4	126	4	Soulmates Graphica
102	House 5	133	8	B.U.S
103	House 6	125	8	Soulmates Graphica
104	House 7	134	8	B.U.S
105	House 8	134	16	B.U.S
106	Chicago House 1	130	4	HEIGO TANI
107	Chicago House 2	130	4	HEIGO TANI
108	Chicago House 3	133	12	HEIGO TANI
109	Chicago House 4	133	4	SHUFFLEMASTER
110	Chicago House 5	133	8	SHUFFLEMASTER
111	Chicago House 6	133	8	SHUFFLEMASTER
112	US HardHouse 1	128	4	Roland Corporation
113	US HardHouse 2	133	8	Soulmates Graphica
114	US HardHouse 3	133	4	Soulmates Graphica
115	US HardHouse 4	128	8	Soulmates Graphica
116	US HardHouse 5	133	8	Soulmates Graphica
117	US HardHouse 6	132	4	Soulmates Graphica
118	US HardHouse 7	130	4	Soulmates Graphica
119	US HardHouse 8	132	8	Soulmates Graphica
120	US HardHouse 9	132	4	Soulmates Graphica
121	US HardHouse 10	132	8	Soulmates Graphica
122	US HardHouse 11	128	8	Soulmates Graphica
123	US HardHouse 12	130	8	Soulmates Graphica
124	Latin House 1	135	8	Roland Corporation
125	Latin House 2	130	8	Roland Corporation
126	Latin House 3	126	4	Roland Corporation
127	UK HardHouse 1	140	8	YOJI BIOMEHANIKA
128	UK HardHouse 2	145	8	YOJI BIOMEHANIKA
129	UK HardHouse 3	139	4	YOJI BIOMEHANIKA
130	UK HardHouse 4	138	4	B.U.S
131	UK HardHouse 5	143	4	B.U.S
132	UK HardHouse 6	136	8	B.U.S
133	UK HardHouse 7	136	8	B.U.S
134	UK HardHouse 8	139	4	B.U.S
135	UK HardHouse 9	136	4	Roland Corporation
136	UK HardHouse 10	138	4	B.U.S
137	Progressive 1	132	16	YOJI BIOMEHANIKA
138	Progressive 2	145	16	YOJI BIOMEHANIKA

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
139	Progressive 3	145	8	YOJI BIOMEHANIKA
140	Progressive 4	135	8	YOJI BIOMEHANIKA
141	Progressive 5	130	8	YOJI BIOMEHANIKA
142	Progressive 6	130	8	YOJI BIOMEHANIKA

HipHop

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
143	HipHop East 1	92	4	DJ KENT
144	HipHop East 2	92	4	DJ KENT
145	HipHop East 3	94	4	DJ KENT
146	HipHop East 4	90	4	DJ KENT
147	HipHop East 5	88	4	Roland Corporation
148	HipHop East 6	92	4	DJ KENT
149	HipHop East 7	93	4	DJ KENT
150	HipHop East 8	90	4	DJ KENT
151	HipHop East 9	65	4	DJ KENT
152	HipHop East 10	93	4	DJ KENT
153	HipHop East 11	84	4	Roland Corporation
154	HipHop East 12	88	4	Roland Corporation
155	G-Funk 1	94	4	Roland Corporation
156	G-Funk 2	94	4	Roland Corporation
157	G-Funk 3	94	4	Roland Corporation
158	G-Funk 4	88	4	Roland Corporation
159	G-Funk 5	92	4	Roland Corporation
160	G-Funk 6	92	4	Roland Corporation
161	G-Funk 7	96	4	Roland Corporation
162	G-Funk 8	90	4	Roland Corporation
163	Abstract 1	82	4	DJ KENT
164	Abstract 2	88	4	Roland Corporation
165	Abstract 3	88	4	DJ KENT
166	Abstract 4	94	4	Roland Corporation
167	Abstract 5	90	4	DJ KENT
168	Electro 1	108	4	Cappadocia Productions
169	Electro 2	110	4	DJ KENT
170	Electro 3	125	4	Cappadocia Productions
171	Electro 4	105	4	DJ KENT
172	Electro 5	120	4	DJ KENT
173	R&B 1	80	4	Roland Corporation
174	R&B 2	78	4	Roland Corporation
175	R&B 3	60	4	Roland Corporation
176	R&B 4	85	4	Roland Corporation
177	R&B 5	110	4	Roland Corporation
178	NewJackSwing 1	102	8	presto
179	NewJackSwing 2	86	8	presto

Drum'n'Bass

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
180	Artcore 1	165	8	Roland Corporation
181	Artcore 2	165	8	Roland Corporation
182	Artcore 3	160	8	Roland Corporation
183	Artcore 4	160	4	Cappadocia Productions
184	Artcore 5	160	4	Cappadocia Productions
185	JazzStep 1	170	4	HEIGO TANI
186	JazzStep 2	165	4	HEIGO TANI
187	JazzStep 3	168	8	presto
188	JazzStep 4	160	8	presto
189	JazzStep 5	172	4	Roland Corporation
190	Drum'n'Bass 1	164	8	presto
191	Drum'n'Bass 2	170	8	Roland Corporation
192	Drum'n'Bass 3	176	8	Roland Corporation
193	Drum'n'Bass 4	170	8	Roland Corporation
194	HardStep 1	164	4	presto
195	HardStep 2	173	4	Cappadocia Productions
196	HardStep 3	165	8	HEIGO TANI
197	Darkcore 1	160	4	Cappadocia Productions
198	Darkcore 2	160	8	Roland Corporation
199	Darkcore 3	170	8	Roland Corporation
200	Darkcore 4	175	8	Roland Corporation
201	Jungle 1	165	4	Cappadocia Productions
202	Jungle 2	180	8	Roland Corporation
203	Jungle 3	166	8	Roland Corporation

BreakBeats

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
204	BreakBeats 1	130	8	Roland Corporation
205	BreakBeats 2	133	8	HEIGO TANI
206	BreakBeats 3	130	4	Cappadocia Productions
207	BreakBeats 4	137	8	presto
208	BreakBeats 5	145	4	presto
209	BreakBeats 6	137	8	presto
210	BreakBeats 7	138	8	presto

Jazz,Lounge

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
211	Jazz 1	140	16	presto
212	Jazz 2	138	16	presto
213	Jazz 3	120	8	presto
214	Jazz 4	215	24	presto
215	Jazz 5	215	16	presto
216	Lounge 1	88	4	presto
217	Lounge 2	70	8	presto
218	Lounge 3	120	4	presto
219	Lounge 4	100	4	presto

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
220	Lounge 5	95	4	presto

Reggae

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
221	Reggae 1	72	4	presto
222	Reggae 2	89	8	presto
223	Reggae 3	105	8	presto
224	Reggae 4	87	8	presto
225	Reggae 5	103	4	presto

Latin

Pattern No.	Pattern Name	BPM	Measure Length	Programmer
226	Salsa 1	112	4	Roland Corporation
227	Samba 1	124	8	Roland Corporation
228	Merengue 1	192	4	Roland Corporation
229	Merengue 2	218	8	Roland Corporation
230	ChaCha 1	160	4	Roland Corporation
231	ChaCha 2	148	4	Roland Corporation
232	Mambo 1	172	4	Roland Corporation
233	Mambo 2	184	4	Roland Corporation
234	Mambo 3	184	4	Roland Corporation
235	Plena 1	180	4	Roland Corporation
236	Son 1	154	4	Roland Corporation
237	Son 2	160	4	Roland Corporation
238	Mozambique 1	168	4	Roland Corporation
239	Cumbia 1	174	8	Roland Corporation
240	Cumbia 2	182	8	Roland Corporation

RPS Pattern List

RPS Drum Pattern (Used Rhythm Patrt)

No.	Name	BPM	Measures	RPS set	Keyboard Pad
241	Techno Drums 1	140	2	Trance 1	1
242	Techno Drums 2	140	2	Trance 1	2
243	Techno Drums 3	140	2	Trance 2	1
244	Techno Drums 4	140	2	Trance 2	2
245	Techno Drums 5	150	2	NU-NRG	1
246	Techno Drums 6	150	2	NU-NRG	2
247	Techno Drums 7	137	2	Minimal	1
248	Techno Drums 8	137	2	Minimal	2
249	Techno Drums 9	135	2	Detroit Techno	1
250	Techno Drums 10	135	2	Detroit Techno	2
251	Techno Drums 11	128	2	Industrial	1
252	Techno Drums 12	128	2	Industrial	2
253	Techno Drums 13	175	2	HappyHardcore	1
254	Techno Drums 14	175	2	HappyHardcore	2
255	Techno Drums 15	75	2	Ambient	1
256	Techno Drums 16	75	2	Ambient	2
257	Techno Drums 17	190	4	Gabba	1
258	Techno Drums 18	190	2	Gabba	2
259	Techno Drums 19	120	2	Electro	1
260	Techno Drums 20	120	2	Electro	2
261	Techno Drums 21	137	2	Early Techno	1
262	Techno Drums 22	137	2	Early Techno	2
263	Techno Drums 23	140	2	Dream Trance	1
264	Techno Drums 24	140	2	Dream Trance	2
265	House Drums 1	130	2	House	1
266	House Drums 2	130	2	House	2
267	House Drums 3	130	2	Garage	1
268	House Drums 4	130	2	Garage	2
269	House Drums 5	130	2	Chicago House	1
270	House Drums 6	130	2	Chicago House	2
271	House Drums 7	133	2	US House	1
272	House Drums 8	133	2	US House	2
273	House Drums 9	140	2	UK House	1
274	House Drums 10	140	2	UK House	2
275	House Drums 11	135	2	Progressive House	1
276	House Drums 12	135	2	Progressive House	2
277	HipHop Drums 1	90	2	HipHop East	1
278	HipHop Drums 2	90	2	HipHop East	2
279	HipHop Drums 3	95	2	G-Funk	1
280	HipHop Drums 4	95	2	G-Funk	2
281	HipHop Drums 5	87	2	Abstract	1
282	HipHop Drums 6	87	2	Abstract	2
283	HipHop Drums 7	87	2	R&B	1
284	HipHop Drums 8	87	2	R&B	2
285	DnB Drums 1	160	2	Drum 'n' Bass 1	1
286	DnB Drums 2	160	2	Drum 'n' Bass 1	2
287	DnB Drums 3	165	4	Drum 'n' Bass 2	1
288	DnB Drums 4	165	4	Drum 'n' Bass 2	2
289	B.Beats Drums 1	137	2	BreakBeats	1

No.	Name	BPM	Measures	RPS set	Keyboard Pad
290	B.Beats Drums 2	137	2	BreakBeats	2
291	Jazz Drums 1	215	4	Jazz	1
292	Jazz Drums 2	215	4	Jazz	2
293	Lounge Drums 1	95	2	Lounge	1
294	Lounge Drums 2	95	2	Lounge	2
295	Reggae Drums 1	85	4	Reggae	1
296	Reggae Drums 2	85	4	Reggae	2
297	Latin Rhythm 1	172	4	Latin 1	1
298	Latin Rhythm 2	172	4	Latin 1	2
299	Latin Rhythm 3	160	2	Latin 2	1
300	Latin Rhythm 4	160	2	Latin 2	2

PRS Bass Pattern (Used Part 1)

No.	Name	BPM	Measures	RPS set	Keyboard Pad
301	Techno Bass 1	140	2	Trance 1	3
302	Techno Bass 2	140	2	Trance 1	4
303	Techno Bass 3	140	2	Trance 2	3
304	Techno Bass 4	140	2	Trance 2	4
305	Techno Bass 5	150	2	NU-NRG	3
306	Techno Bass 6	150	2	NU-NRG	4
307	Techno Bass 7	137	2	Minimal	3
308	Techno Bass 8	137	2	Minimal	4
309	Techno Bass 9	135	2	Detroit Techno	3
310	Techno Bass 10	135	2	Detroit Techno	4
311	Techno Bass 11	128	2	Industrial	3
312	Techno Bass 12	128	2	Industrial	4
313	Techno Bass 13	175	2	HappyHardcore	3
314	Techno Bass 14	175	2	HappyHardcore	4
315	Techno Bass 15	75	2	Ambient	3
316	Techno Bass 16	75	2	Ambient	4
317	Techno Bass 17	190	4	Gabba	3
318	Techno Bass 18	190	2	Gabba	4
319	Techno Bass 19	120	2	Electro	3
320	Techno Bass 20	120	2	Electro	4
321	Techno Bass 21	137	2	Early Techno	3
322	Techno Bass 22	137	2	Early Techno	4
323	Techno Bass 23	140	4	Dream Trance	3
324	Techno Bass 24	140	2	Dream Trance	4
325	House Bass 1	130	2	House	3
326	House Bass 2	130	2	House	4
327	House Bass 3	130	2	Garage	3
328	House Bass 4	130	4	Garage	4
329	House Bass 5	130	2	Chicago House	3
330	House Bass 6	130	2	Chicago House	4
331	House Bass 7	133	2	US House	3
332	House Bass 8	133	2	US House	4
333	House Bass 9	140	2	UK House	3
334	House Bass 10	140	2	UK House	4
335	House Bass 11	135	2	Progressive House	3
336	House Bass 12	135	2	Progressive House	4

RPS Pattern List

No.	Name	BPM	Measures	RPS set	Keyboard Pad
337	HipHop Bass 1	90	2	HipHop East	3
338	HipHop Bass 2	90	2	HipHop East	4
339	HipHop Bass 3	95	2	G-Funk	3
340	HipHop Bass 4	95	2	G-Funk	4
341	HipHop Bass 5	87	2	Abstract	3
342	HipHop Bass 6	87	2	Abstract	4
343	HipHop Bass 7	87	2	R&B	3
344	HipHop Bass 8	87	2	R&B	4
345	DnB Bass 1	160	2	Drum 'n' Bass 1	3
346	DnB Bass 2	160	2	Drum 'n' Bass 1	4
347	DnB Bass 3	165	2	Drum 'n' Bass 2	3
348	DnB Bass 4	165	2	Drum 'n' Bass 2	4
349	B.Beats Bass 1	137	4	BreakBeats	3
350	B.Beats Bass 2	137	2	BreakBeats	4
351	Jazz Bass 1	215	2	Jazz	3
352	Jazz Bass 2	215	4	Jazz	4
353	Lounge Bass 1	95	2	Lounge	3
354	Lounge Bass 2	95	2	Lounge	4
355	Reggae Bass 1	85	2	Reggae	3
356	Reggae Bass 2	85	2	Reggae	4
357	Latin Bass 1	172	4	Latin 1	3
358	Latin Bass 2	172	4	Latin 1	4
359	Latin Bass 3	160	4	Latin 2	3
360	Latin Bass 4	160	4	Latin 2	4

RPS Rhythm Fill in (Used Part 1)

No.	Name	BPM	Measures	RPS set	Keyboard Pad
361	BD Fill 1	140	2	Trance 1	8
362	BD Fill 2	150	1	NU-NRG	5
363	BD Fill 3	150	1	NU-NRG	6
364	BD Fill 4	128	2	Industrial	6
365	BD Fill 5	175	1	HappyHardcore	6
366	BD Fill 6	190	1	Gabba	5
367	BD Fill 7	190	1	Gabba	7
368	BD Fill 8	137	1	Early Techno	6
369	BD Fill 9	140	1	Dream Trance	8
370	BD Fill 10	130	1	House	7
371	BD Fill 11	130	1	Chicago House	5
372	BD Fill 12	130	2	Chicago House	7
373	BD Fill 13	130	1	Chicago House	8
374	BD Fill 14	140	1	UK House	6
375	BD Fill 15	135	1	Progressive House	6
376	BD Fill 16	160	1	Drum 'n' Bass 1	8
377	BD Fill 17	165	1	Drum 'n' Bass 2	7
378	BD Fill 18	137	1	BreakBeats	7
379	CHH Fill 1	75	1	Ambient	5
380	OHH Fill 1	87	1	R&B	8
381	OHH Fill 2	215	1	Jazz	8
382	Ride Cymbal 1	90	1	HipHop East	5
383	Ride Cymbal 2	137	1	BreakBeats	8

No.	Name	BPM	Measures	RPS set	Keyboard Pad
384	Ride Cymbal 3	95	1	Lounge	7
385	Crash Fill 1	140	2	Trance 1	7
386	Crash Fill 2	150	1	NU-NRG	8
387	Crash Fill 3	175	1	HappyHardcore	5
388	Crash Fill 4	190	1	Gabba	6
389	Crash Fill 5	140	1	Dream Trance	6
390	Crash Fill 6	130	1	House	5
391	Crash Fill 7	130	1	Garage	6
392	Crash Fill 8	130	1	Garage	8
393	Crash Fill 9	133	2	US House	6
394	Crash Fill 10	140	2	UK House	7
395	Crash Fill 11	135	1	Progressive House	8
396	Crash Fill 12	95	1	Lounge	8
397	Rev.Cymbal 1	150	1	NU-NRG	7
398	Rev.Cymbal 2	135	1	Progressive House	7
399	Clap Fill 1	140	1	Trance 2	8
400	Clap Fill 2	137	1	Minimal	8
401	Clap Fill 3	135	1	Detroit Techno	5
402	Clap Fill 4	120	1	Electro	7
403	Clap Fill 5	137	1	Early Techno	5
404	Clap Fill 6	140	1	Dream Trance	7
405	Snare Fill 1	140	1	Trance 1	5
406	Snare Fill 2	140	1	Trance 1	6
407	Snare Fill 3	140	1	Trance 2	5
408	Snare Fill 4	140	1	Trance 2	7
409	Snare Fill 5	137	1	Minimal	5
410	Snare Fill 6	137	1	Minimal	7
411	Snare Fill 7	135	1	Detroit Techno	6
412	Snare Fill 8	135	1	Detroit Techno	7
413	Snare Fill 9	175	1	HappyHardcore	7
414	Snare Fill 10	175	1	HappyHardcore	8
415	Snare Fill 11	190	1	Gabba	8
416	Snare Fill 12	120	1	Electro	5
417	Snare Fill 13	140	4	Dream Trance	5
418	Snare Fill 14	130	2	House	6
419	Snare Fill 15	130	1	House	8
420	Snare Fill 16	130	1	Garage	7
421	Snare Fill 17	130	1	Chicago House	6
422	Snare Fill 18	133	2	US House	5
423	Snare Fill 19	133	2	US House	7
424	Snare Fill 20	133	1	US House	8
425	Snare Fill 21	140	1	UK House	5
426	Snare Fill 22	140	1	UK House	8
427	Snare Fill 23	135	1	Progressive House	5
428	Snare Fill 24	160	1	Drum 'n' Bass 1	5
429	Snare Fill 25	160	1	Drum 'n' Bass 1	6
430	Snare Fill 26	160	1	Drum 'n' Bass 1	7
431	Snare Fill 27	165	1	Drum 'n' Bass 2	5
432	Snare Fill 28	165	1	Drum 'n' Bass 2	6
433	Snare Fill 29	165	1	Drum 'n' Bass 2	8

RPS Pattern List

No.	Name	BPM	Measures	RPS set	Keyboard Pad
434	Snare Fill 30	137	1	BreakBeats	5
435	Snare Fill 31	137	1	BreakBeats	6
436	Snare Fill 32	215	1	Jazz	5
437	Snare Fill 33	215	1	Jazz	9
438	Snare Fill 34	95	1	Lounge	5
439	Snare Fill 35	85	1	Reggae	6
440	Snare Fill 36	85	1	Reggae	7
441	Rim Fill 1	135	1	Detroit Techno	8
442	Rim Fill 2	87	1	R&B	7
443	Rim Fill 3	85	1	Reggae	5
444	Tom Fill 1	128	1	Industrial	8
445	Tom Fill 2	75	1	Ambient	8
446	Tom Fill 3	120	1	Electro	6
447	Tom Fill 4	137	1	Early Techno	7
448	Tom Fill 5	137	1	Early Techno	8
449	Tom Fill 6	215	2	Jazz	6
450	Tom Fill 7	215	1	Jazz	7
451	Tom Fill 8	95	1	Lounge	6
452	Tom Fill 9	85	1	Reggae	8
453	Perc.Fill 1	137	1	Minimal	6
454	Perc.Fill 2	75	1	Ambient	6
455	Perc.Fill 3	75	1	Ambient	7
456	Perc.Fill 4	130	1	Garage	5
457	Perc.Fill 5	172	2	Latin 1	5
458	Perc.Fill 6	172	2	Latin 1	6
459	Perc.Fill 7	172	1	Latin 1	7
460	Perc.Fill 8	172	1	Latin 1	8
461	Perc.Fill 9	160	2	Latin 2	5
462	Perc.Fill 10	160	2	Latin 2	6
463	Tambourine 1	90	1	HipHop East	8
464	Shaker 1	140	2	Trance 2	6
465	Quijada	172	1	Latin 1	16
466	Blip Fill 1	120	1	Electro	8
467	Industry Fill 1	128	1	Industrial	5
468	Industry Fill 2	128	1	Industrial	7
469	Noise Fill	87	1	R&B	5
470	Voice Fill	87	2	R&B	6
471	Scratch 1	120	1	Electro	14
472	Scratch 2	90	1	HipHop East	6
473	Scratch 3	90	1	HipHop East	7

RPS Accompaniment (Used Part 1)

No.	Name	BPM	Measures	RPS set	Keyboard Pad
474	Piano Chord 1	130	2	House	9
475	Piano Chord 2	130	4	Garage	9
476	Piano Chord 3	130	2	Garage	10
477	Piano Chord 4	130	1	Chicago House	10
478	Piano Chord 5	87	2	R&B	9
479	Piano Chord 6	165	4	Drum 'n' Bass 2	10
480	Piano Chord 7	215	4	Jazz	11

No.	Name	BPM	Measures	RPS set	Keyboard Pad
481	Piano Chord 8	85	2	Reggae	9
482	Piano Chord 9	172	4	Latin 1	9
483	Piano Chord 10	172	4	Latin 1	10
484	Piano Chord 11	160	4	Latin 2	9
485	Piano Chord 12	160	4	Latin 2	10
486	Piano Seq 1	140	2	Dream Trance	11
487	Piano Seq 2	135	2	Progressive House	11
488	Piano EFX	165	2	Drum 'n' Bass 2	11
489	E.Piano Chord 1	90	1	HipHop East	9
490	E.Piano Chord 2	90	2	HipHop East	10
491	E.Piano Chord 3	95	1	G-Funk	10
492	E.Piano Chord 4	165	4	Drum 'n' Bass 2	9
493	E.Piano Chord 5	137	2	BreakBeats	10
494	E.Piano Chord 6	95	4	Lounge	9
495	E.Piano Lead 1	75	2	Ambient	13
496	E.Piano Lead 2	137	1	BreakBeats	13
497	E.Piano Pad 1	160	2	Drum 'n' Bass 1	9
498	Vibe Lead	215	4	Jazz	14
499	Organ Lead	95	4	Lounge	13
500	Organ Riff 1	135	2	Detroit Techno	9
501	Organ Riff 2	140	2	Dream Trance	10
502	Organ Riff 3	140	2	UK House	10
503	Clav.Chord 1	137	2	BreakBeats	9
504	Guitar Chord 1	90	1	HipHop East	13
505	Guitar Chord 2	95	1	G-Funk	9
506	Guitar Chord 3	95	1	G-Funk	13
507	Guitar Chord 4	137	1	BreakBeats	11
508	Guitar Chord 5	215	2	Jazz	10
509	Guitar Chord 6	95	4	Lounge	11
510	Guitar Chord 7	85	2	Reggae	10
511	Guitar Lead 1	87	1	Abstract	13
512	Guitar Riff 1	128	2	Industrial	11
513	Guitar Riff 2	130	2	House	12
514	Guitar Riff 3	130	1	Garage	16
515	Guitar Riff 4	137	2	BreakBeats	12
516	Guitar Riff 5	137	1	BreakBeats	14
517	Guitar Riff 6	85	2	Reggae	12
518	Guitar Riff 7	85	2	Reggae	13
519	Ac.Gt.Seq 1	75	2	Ambient	12
520	Ac.Gt.Seq 2	130	4	Garage	12
521	Sitar Lead	87	1	R&B	11
522	Berimbau	85	2	Reggae	14
523	Strings 1	130	4	House	13
524	Strings 2	95	4	G-Funk	12
525	Strings 3	87	1	R&B	10
526	Strings 4	95	4	Lounge	10
527	Strings Pizz 1	135	2	Progressive House	10
528	Strings Pizz 2	87	1	R&B	16
529	Choir Orch.	87	1	R&B	13
530	Vox 1	128	2	Industrial	9

RPS Pattern List

No.	Name	BPM	Measures	RPS set	Keyboard Pad
531	Vox 2	87	2	R&B	14
532	Vox 3	160	4	Drum 'n' Bass 1	12
533	Vox Lead	95	4	Lounge	12
534	Voice Riff 1	190	2	Gabba	14
535	Voice Riff 2	190	1	Gabba	16
536	Brass 1	215	4	Jazz	12
537	Brass 2	172	4	Latin 1	13
538	Brass 3	172	4	Latin 1	14
539	Brass 4	160	4	Latin 2	12
540	Brass 5	160	2	Latin 2	13
541	Brass 6	160	1	Latin 2	14
542	Brass Fall 1	130	1	House	15
543	Brass Fall 2	215	1	Jazz	15
544	Trumpet Lead 1	215	4	Jazz	13
545	Trumpet Lead 2	215	2	Jazz	16
546	Sax Lead	172	2	Latin 1	12
547	Flute Lead 1	172	1	Latin 1	11
548	Flute Lead 2	160	4	Latin 2	12
549	Flute Lead 3	160	1	Latin 2	16
550	Steel Drum 1	120	2	Electro	9
551	Synth Lead 1	140	2	Trance 1	11
552	Synth Lead 2	120	2	Electro	11
553	Synth Lead 3	120	4	Electro	12
554	Synth Lead 4	130	4	House	11
555	Synth Lead 5	130	4	House	14
556	Synth Lead 6	130	4	Chicago House	13
557	Synth Lead 7	133	2	US House	14
558	Synth Lead 8	95	1	G-Funk	11
559	Synth Lead 9	95	1	G-Funk	14
560	Synth Lead 10	165	2	Drum 'n' Bass 2	12
561	Synth Lead 11	95	4	Lounge	14
562	Synth Lead 12	85	2	Reggae	11
563	Synth Pad 1	140	4	Trance 1	9
564	Synth Pad 2	140	4	Trance 2	9
565	Synth Pad 3	150	4	NU-NRG	10
566	Synth Pad 4	137	1	Minimal	9
567	Synth Pad 5	137	2	Minimal	10
568	Synth Pad 6	135	2	Detroit Techno	10
569	Synth Pad 7	135	2	Detroit Techno	13
570	Synth Pad 8	175	2	HappyHardcore	12
571	Synth Pad 9	75	4	Ambient	9
572	Synth Pad 10	137	4	Early Techno	10
573	Synth Pad 11	140	4	Dream Trance	9
574	Synth Pad 12	135	4	Progressive House	9
575	Synth Pad 13	87	2	Abstract	9
576	Synth Pad 14	87	3	Abstract	12
577	Synth Pad 15	160	4	Drum 'n' Bass 1	10
578	Synth Riff 1	140	2	Trance 1	12
579	Synth Riff 2	140	1	Trance 1	13
580	Synth Riff 3	140	2	Trance 2	10

No.	Name	BPM	Measures	RPS set	Keyboard Pad
581	Synth Riff 4	140	2	Trance 2	11
582	Synth Riff 5	150	2	NU-NRG	9
583	Synth Riff 6	150	2	NU-NRG	11
584	Synth Riff 7	150	2	NU-NRG	12
585	Synth Riff 8	150	2	NU-NRG	13
586	Synth Riff 9	137	1	Minimal	11
587	Synth Riff 10	137	1	Minimal	12
588	Synth Riff 11	137	1	Minimal	14
589	Synth Riff 12	135	2	Detroit Techno	11
590	Synth Riff 13	128	2	Industrial	10
591	Synth Riff 14	175	2	HappyHardcore	9
592	Synth Riff 15	175	2	HappyHardcore	10
593	Synth Riff 16	175	2	HappyHardcore	11
594	Synth Riff 17	175	2	HappyHardcore	14
595	Synth Riff 18	175	1	HappyHardcore	16
596	Synth Riff 19	190	4	Gabba	9
597	Synth Riff 20	190	2	Gabba	11
598	Synth Riff 21	190	2	Gabba	12
599	Synth Riff 22	190	2	Gabba	13
600	Synth Riff 23	120	1	Electro	10
601	Synth Riff 24	120	4	Electro	13
602	Synth Riff 25	137	2	Early Techno	14
603	Synth Riff 26	130	2	House	10
604	Synth Riff 27	130	2	Garage	11
605	Synth Riff 28	130	2	Chicago House	11
606	Synth Riff 29	130	1	Chicago House	14
607	Synth Riff 30	133	2	US House	9
608	Synth Riff 31	133	2	US House	10
609	Synth Riff 32	133	2	US House	11
610	Synth Riff 33	133	2	US House	12
611	Synth Riff 34	133	2	US House	13
612	Synth Riff 35	140	2	UK House	9
613	Synth Riff 36	140	2	UK House	11
614	Synth Riff 37	140	1	UK House	14
615	Synth Seq 1	140	2	Trance 1	10
616	Synth Seq 2	140	4	Trance 1	14
617	Synth Seq 3	140	2	Trance 2	12
618	Synth Seq 4	140	2	Trance 2	13
619	Synth Seq 5	140	2	Trance 2	14
620	Synth Seq 6	135	2	Detroit Techno	14
621	Synth Seq 7	128	2	Industrial	12
622	Synth Seq 8	175	2	HappyHardcore	13
623	Synth Seq 9	75	4	Ambient	10
624	Synth Seq 10	75	2	Ambient	11
625	Synth Seq 11	75	2	Ambient	14
626	Synth Seq 12	137	2	Early Techno	9
627	Synth Seq 13	137	2	Early Techno	11
628	Synth Seq 14	137	2	Early Techno	12
629	Synth Seq 15	137	2	Early Techno	13
630	Synth Seq 16	140	2	Dream Trance	12

RPS Pattern List

No.	Name	BPM	Measures	RPS set	Keyboard Pad
631	Synth Seq 17	140	2	Dream Trance	13
632	Synth Seq 18	140	2	Dream Trance	14
633	Synth Seq 19	130	2	Garage	14
634	Synth Seq 20	130	1	Chicago House	9
635	Synth Seq 21	135	2	Progressive House	12
636	Synth Seq 22	135	2	Progressive House	13
637	Synth Seq 23	135	2	Progressive House	14
638	Synth Seq 24	87	1	Abstract	11
639	Synth Seq 25	87	1	R&B	12
640	Synth Seq 26	165	2	Drum 'n' Bass 2	13
641	Synth Seq 27	165	2	Drum 'n' Bass 2	14

RPS Hit & SFX

No.	Name	BPM	Measures	RPS set	Keyboard Pad
642	Orchestra Hit 1	120	1	Electro	15
643	Orchestra Hit 2	140	1	Dream Trance	15
644	Industry Hit1	128	1	Industrial	15
645	Industry Hit2	128	1	Industrial	16
646	HipHop Hit 1	90	2	HipHop East	15
647	G Laughter	95	1	G-Funk	16
648	Phono Noise	90	1	HipHop East	16
649	Voice Hit 1	140	1	UK House	16
650	Voice Hit 2	137	1	BreakBeats	15
651	Voice Hit 3	137	1	BreakBeats	16
652	Wind Chime 1	172	1	Latin 1	15
653	Wind Chime 2	160	1	Latin 2	15
654	Gong	160	4	Drum 'n' Bass 1	16
655	SFX 1	140	2	Trance 1	15
656	SFX 2	140	1	Trance 1	16
657	SFX 3	140	1	Trance 2	15
658	SFX 4	140	1	Trance 2	16
659	SFX 5	150	2	NU-NRG	14
660	SFX 6	150	4	NU-NRG	15
661	SFX 7	150	4	NU-NRG	16
662	SFX 8	137	1	Minimal	13
663	SFX 9	135	2	Detroit Techno	12
664	SFX 10	135	4	Detroit Techno	15
665	SFX 11	128	2	Industrial	13
666	SFX 12	128	2	Industrial	14
667	SFX 13	175	4	HappyHardcore	15
668	SFX 14	75	2	Ambient	15
669	SFX 15	75	1	Ambient	16
670	SFX 16	190	2	Gabba	10
671	SFX 17	190	1	Gabba	15
672	SFX 18	120	4	Electro	16
673	SFX 19	137	1	Early Techno	15
674	SFX 20	137	1	Early Techno	16
675	SFX 21	130	2	Garage	13
676	SFX 22	130	4	Garage	15
677	SFX 23	130	2	Chicago House	12

No.	Name	BPM	Measures	RPS set	Keyboard Pad
678	SFX 24	130	1	Chicago House	15
679	SFX 25	130	1	Chicago House	16
680	SFX 26	133	2	US House	16
681	SFX 27	140	2	UK House	12
682	SFX 28	140	2	UK House	13
683	SFX 29	135	1	Progressive House	15
684	SFX 30	90	1	HipHop East	11
685	SFX 31	90	1	HipHop East	12
686	SFX 32	90	1	HipHop East	14
687	SFX 33	95	4	G-Funk	15
688	SFX 34	87	2	Abstract	10
689	SFX 34	87	2	Abstract	14
690	SFX 35	87	2	Abstract	15
691	SFX 36	87	4	Abstract	16
692	SFX 37	160	3	Drum 'n' Bass 1	11
693	SFX 38	160	2	Drum 'n' Bass 1	13
694	SFX 39	160	1	Drum 'n' Bass 1	14
695	SFX 40	160	2	Drum 'n' Bass 1	15
696	SFX 41	95	1	Lounge	15
697	SFX 42	95	1	Lounge	16
698	SFX 43	85	2	Reggae	15
699	SFX Hit 1	137	1	Minimal	15
700	SFX Hit 2	137	1	Minimal	16
701	SFX Hit 3	135	2	Detroit Techno	16
702	SFX Hit 4	140	1	Dream Trance	16
703	SFX Hit 5	130	1	House	16
704	SFX Hit 6	133	1	US House	15
705	SFX Hit 7	140	1	UK House	15
706	SFX Hit 8	135	1	Progressive House	16
707	SFX Hit 9	87	1	R&B	15
708	SFX Hit 10	165	1	Drum 'n' Bass 2	15
709	SFX Hit 11	165	1	Drum 'n' Bass 2	16
710	SFX Hit 12	85	1	Reggae	16

RPS Set List

1. Trance 1

Name	BPM	Meas.	Keyboard Pad
Techno Drums 1	140	2	1
Techno Drums 2	140	2	2
Techno Bass 1	140	2	3
Techno Bass 2	140	2	4
Snare Fill 1	140	1	5
Snare Fill 2	140	1	6
Crash Fill 1	140	2	7
BD Fill 1	140	2	8
Synth Pad 1	140	4	9
Synth Seq 1	140	2	10
Synth Lead 1	140	2	11
Synth Riff 1	140	2	12
Synth Riff 2	140	1	13
Synth Seq 2	140	4	14
SFX 1	140	2	15
SFX 2	140	1	16

2. Trance 2

Name	BPM	Meas.	Keyboard Pad
Techno Drums 3	140	2	1
Techno Drums 4	140	2	2
Techno Bass 3	140	2	3
Techno Bass 4	140	2	4
Snare Fill 3	140	1	5
Shaker 1	140	2	6
Snare Fill 4	140	1	7
Clap Fill 1	140	1	8
Synth Pad 2	140	4	9
Synth Riff 3	140	2	10
Synth Riff 4	140	2	11
Synth Seq 3	140	2	12
Synth Seq 4	140	2	13
Synth Seq 5	140	2	14
SFX 3	140	1	15
SFX 4	140	1	16

3. NU-NRG

Name	BPM	Meas.	Keyboard Pad
Techno Drums 5	150	2	1
Techno Drums 6	150	2	2
Techno Bass 5	150	2	3
Techno Bass 6	150	2	4
BD Fill 2	150	1	5
BD Fill 3	150	1	6
Rev.Cymbal 1	150	1	7
Crash Fill 2	150	1	8
Synth Riff 5	150	2	9
Synth Pad 3	150	4	10
Synth Riff 6	150	2	11
Synth Riff 7	150	2	12
Synth Riff 8	150	2	13
SFX 5	150	2	14
SFX 6	150	4	15
SFX 7	150	4	16

4. Minimal

Name	BPM	Meas.	Keyboard Pad
Techno Drums 7	137	2	1
Techno Drums 8	137	2	2
Techno Bass 7	137	2	3
Techno Bass 8	137	2	4
Snare Fill 5	137	1	5
Perc.Fill 1	137	1	6
Snare Fill 6	137	1	7
Clap Fill 2	137	1	8
Synth Pad 4	137	1	9
Synth Pad 5	137	2	10
Synth Riff 9	137	1	11
Synth Riff 10	137	1	12
SFX 8	137	1	13
Synth Riff 11	137	1	14
SFX Hit 1	137	1	15
SFX Hit 2	137	1	16

5. Detroit Techno

Name	BPM	Meas.	Keyboard Pad
Techno Drums 9	135	2	1
Techno Drums 10	135	2	2
Techno Bass 9	135	2	3
Techno Bass 10	135	2	4
Clap Fill 3	135	1	5
Snare Fill 7	135	1	6
Snare Fill 8	135	1	7
Rim Fill 1	135	1	8
Organ Riff 1	135	2	9
Synth Pad 6	135	2	10
Synth Riff 12	135	2	11
SFX 9	135	2	12
Synth Pad 7	135	2	13
Synth Seq 6	135	2	14
SFX 10	135	4	15
SFX Hit 3	135	2	16

6. Industrial

Name	BPM	Meas.	Keyboard Pad
Techno Drums 11	128	2	1
Techno Drums 12	128	2	2
Techno Bass 11	128	2	3
Techno Bass 12	128	2	4

Name	BPM	Meas.	Keyboard Pad
Industry Fill 1	128	1	5
BD Fill 4	128	2	6
Industry Fill 2	128	1	7
Tom Fill 1	128	1	8
Vox 1	128	2	9
Synth Riff 13	128	2	10
Guitar Riff 1	128	2	11
Synth Seq 7	128	2	12
SFX 11	128	2	13
SFX 12	128	2	14
Industry Hit1	128	1	15
Industry Hit2	128	1	16

7. HappyHardcore

Name	BPM	Meas.	Keyboard Pad
Techno Drums 13	175	2	1
Techno Drums 14	175	2	2
Techno Bass 13	175	2	3
Techno Bass 14	175	2	4
Crash Fill 3	175	1	5
BD Fill 5	175	1	6
Snare Fill 9	175	2	7
Snare Fill 10	175	1	8
Synth Riff 14	175	2	9
Synth Riff 15	175	2	10
Synth Riff 16	175	2	11
Synth Pad 8	175	2	12
Synth Seq 8	175	2	13
Synth Riff 17	175	2	14
SFX 13	175	4	15
Synth Riff 18	175	1	16

8. Ambient

Name	BPM	Meas.	Keyboard Pad
Techno Drums 15	75	2	1
Techno Drums 16	75	2	2
Techno Bass 15	75	2	3
Techno Bass 16	75	2	4
CHH Fill 1	75	1	5
Perc.Fill 2	75	1	6
Perc.Fill 3	75	1	7
Tom Fill 2	75	1	8
Synth Pad 9	75	4	9
Synth Seq 9	75	4	10
Synth Seq 10	75	2	11
Ac.Gt.Seq 1	75	2	12
E.Piano Lead 1	75	2	13
Synth Seq 11	75	2	14
SFX 14	75	2	15
SFX 15	75	1	16

9. Gabba

Name	BPM	Meas.	Keyboard Pad
Techno Drums 17	190	4	1
Techno Drums 18	190	2	2
Techno Bass 17	190	4	3
Techno Bass 18	190	2	4
BD Fill 6	190	1	5
Crash Fill 4	190	1	6
BD Fill 7	190	1	7
Snare Fill 11	190	1	8
Synth Riff 19	190	4	9
SFX 16	190	2	10
Synth Riff 20	190	2	11
Synth Riff 21	190	2	12
Synth Riff 22	190	2	13
Voice Riff 1	190	2	14
SFX 17	190	1	15
Voice Riff 2	190	1	16

10. Electro

Name	BPM	Meas.	Keyboard Pad
Techno Drums 19	120	2	1
Techno Drums 20	120	2	2
Techno Bass 19	120	2	3
Techno Bass 20	120	2	4
Snare Fill 12	120	1	5
Tom Fill 3	120	1	6
Clap Fill 4	120	1	7
Blip Fill 1	120	1	8
Steel Drum 1	120	2	9
Synth Riff 23	120	1	10
Synth Lead 2	120	2	11
Synth Lead 3	120	4	12
Synth Riff 24	120	4	13
Scratch 1	120	1	14
Orchestra Hit 1	120	1	15
SFX 18	120	4	16

11. Early Techno

Name	BPM	Meas.	Keyboard Pad
Techno Drums 21	137	2	1
Techno Drums 22	137	2	2
Techno Bass 21	137	2	3
Techno Bass 22	137	2	4
Clap Fill 5	137	1	5
BD Fill 8	137	1	6
Tom Fill 4	137	1	7
Tom Fill 5	137	1	8
Synth Seq 12	137	2	9
Synth Pad 10	137	4	10

Name	BPM	Meas.	Keyboard Pad
Synth Seq 13	137	2	11
Synth Seq 14	137	2	12
Synth Seq 15	137	2	13
Synth Riff 25	137	2	14
SFX 19	137	1	15
SFX 20	137	1	16

12. Dream Trance

Name	BPM	Meas.	Keyboard Pad
Techno Drums 23	140	2	1
Techno Drums 24	140	2	2
Techno Bass 23	140	4	3
Techno Bass 24	140	2	4
Snare Fill 13	140	4	5
Crash Fill 5	140	1	6
Clap Fill 6	140	1	7
BD Fill 9	140	1	8
Synth Pad 11	140	4	9
Organ Riff 2	140	2	10
Piano Seq 1	140	2	11
Synth Seq 16	140	2	12
Synth Seq 17	140	2	13
Synth Seq 18	140	2	14
Orchestra Hit 2	140	1	15
SFX Hit 4	140	1	16

13. House

Name	BPM	Meas.	Keyboard Pad
House Drums 1	130	2	1
House Drums 2	130	2	2
House Bass 1	130	2	3
House Bass 2	130	2	4
Crash Fill 6	130	1	5
Snare Fill 14	130	2	6
BD Fill 10	130	1	7
Snare Fill 15	130	1	8
Piano Chord 1	130	2	9
Synth Riff 26	130	2	10
Synth Lead 4	130	4	11
Guitar Riff 2	130	2	12
Strings 1	130	4	13
Synth Lead 5	130	4	14
Brass Fall 1	130	1	15
SFX Hit 5	130	1	16

14. Garage

Name	BPM	Meas.	Keyboard Pad
House Drums 3	130	2	1
House Drums 4	130	2	2
House Bass 3	130	2	3
House Bass 4	130	4	4
Perc.Fill 4	130	1	5
Crash Fill 7	130	1	6
Snare Fill 16	130	1	7
Crash Fill 8	130	1	8
Piano Chord 2	130	4	9
Piano Chord 3	130	2	10
Synth Riff 27	130	2	11
Ac.Gt.Seq 2	130	4	12
SFX 21	130	2	13
Synth Seq 19	130	2	14
SFX 22	130	4	15
Guitar Riff 3	130	1	16

15. Chicago House

Name	BPM	Meas.	Keyboard Pad
House Drums 5	130	2	1
House Drums 6	130	2	2
House Bass 5	130	2	3
House Bass 6	130	2	4
BD Fill 11	130	1	5
Snare Fill 17	130	1	6
BD Fill 12	130	2	7
BD Fill 13	130	1	8
Synth Seq 20	130	1	9
Piano Chord 4	130	1	10
Synth Riff 28	130	2	11
SFX 23	130	2	12
Synth Lead 6	130	4	13
Synth Riff 29	130	1	14
SFX 24	130	1	15
SFX 25	130	1	16

16. US HardHouse

Name	BPM	Meas.	Keyboard Pad
House Drums 7	133	2	1
House Drums 8	133	2	2
House Bass 7	133	2	3
House Bass 8	133	2	4
Snare Fill 18	133	2	5
Crash Fill 9	133	2	6
Snare Fill 19	133	2	7
Snare Fill 20	133	1	8
Synth Riff 30	133	2	9
Synth Riff 31	133	2	10
Synth Riff 32	133	2	11
Synth Riff 33	133	2	12
Synth Riff 34	133	2	13
Synth Lead 7	133	2	14
SFX Hit 6	133	1	15

SFX 26	133	2	16

17. UK HardHouse

Name	BPM	Meas.	Keyboard Pad
House Drums 9	140	2	1
House Drums 10	140	2	2
House Bass 9	140	2	3
House Bass 10	140	2	4
Snare Fill 21	140	1	5
BD Fill 14	140	1	6
Crash Fill 10	140	2	7
Snare Fill 22	140	1	8
Synth Riff 35	140	2	9
Organ Riff 3	140	2	10
Synth Riff 36	140	2	11
SFX 27	140	2	12
SFX 28	140	2	13
Synth Riff 37	140	1	14
SFX Hit 7	140	1	15
Voice Hit 1	140	1	16

18. Progressive

Name	BPM	Meas.	Keyboard Pad
House Drums 11	135	2	1
House Drums 12	135	2	2
House Bass 11	135	2	3
House Bass 12	135	2	4
Snare Fill 23	135	1	5
BD Fill 15	135	1	6
Rev.Cymbal 2	135	1	7
Crash Fill 11	135	1	8
Synth Pad 12	135	4	9
Strings Pizz 1	135	2	10
Piano Seq 2	135	2	11
Synth Seq 21	135	2	12
Synth Seq 22	135	2	13
Synth Seq 23	135	2	14
SFX 29	135	1	15
SFX Hit 8	135	1	16

19. HipHop East

Name	BPM	Meas.	Keyboard Pad
HipHop Drums 1	90	2	1
HipHop Drums 2	90	2	2
HipHop Bass 1	90	2	3
HipHop Bass 2	90	2	4
Ride Cymbal 1	90	1	5
Scratch 2	90	1	6
Scratch 3	90	1	7
Tambourine 1	90	1	8
E.Piano Chord 1	90	1	9
E.Piano Chord 2	90	2	10
SFX 30	90	1	11
SFX 31	90	1	12
Guitar Chord 1	90	1	13
SFX 32	90	1	14
HipHop Hit 1	90	2	15
Phono Noise	90	1	16

20. G-Funk

Name	BPM	Meas.	Keyboard Pad
HipHop Drums 3	95	2	1
HipHop Drums 4	95	2	2
HipHop Bass 3	95	2	3
HipHop Bass 4	95	2	4
Ride Cymbal 1	90	1	5
Scratch 2	90	1	6
Scratch 3	90	1	7
Tambourine 1	90	1	8
Guitar Chord 2	95	1	9
E.Piano Chord 3	95	1	10
Synth Lead 8	95	1	11
Strings 2	95	4	12
Guitar Chord 3	95	1	13
Synth Lead 9	95	1	14
SFX 33	95	4	15
G Laughter	95	1	16

21. Abstract

Name	BPM	Meas.	Keyboard Pad
HipHop Drums 5	87	2	1
HipHop Drums 6	87	2	2
HipHop Bass 5	87	2	3
HipHop Bass 6	87	2	4
Ride Cymbal 1	90	1	5
Scratch 2	90	1	6
Scratch 3	90	1	7
Tambourine 1	90	1	8
Synth Pad 13	87	2	9
SFX 34	87	2	10
Synth Seq 24	87	1	11
Synth Pad 14	87	3	12
Guitar Lead 1	87	1	13
SFX 34	87	2	14
SFX 35	87	2	15
SFX 36	87	4	16

22. R&B

Name	BPM	Meas.	Keyboard Pad
HipHop Drums 7	87	2	1

Name	BPM	Meas.	Keyboard Pad
HipHop Drums 8	87	2	2
HipHop Bass 7	87	2	3
HipHop Bass 8	87	2	4
Noise Fill	87	1	5
Voice Fill	87	2	6
Rim Fill 2	87	1	7
OHH Fill 1	87	1	8
Piano Chord 5	87	2	9
Strings 3	87	1	10
Sitar Lead	87	1	11
Synth Seq 25	87	1	12
Choir Orch.	87	1	13
Vox 2	87	2	14
SFX Hit 9	87	1	15
Strings Pizz 2	87	1	16

23. Drum 'n' Bass 1

Name	BPM	Meas.	Keyboard Pad
DnB Drums 1	160	2	1
DnB Drums 2	160	2	2
DnB Bass 1	160	2	3
DnB Bass 2	160	2	4
Snare Fill 24	160	1	5
Snare Fill 25	160	1	6
Snare Fill 26	160	1	7
BD Fill 16	160	1	8
E.Piano Pad 1	160	2	9
Synth Pad 15	160	4	10
SFX 37	160	3	11
Vox 3	160	4	12
SFX 38	160	2	13
SFX 39	160	1	14
SFX 40	160	2	15
Gong	160	4	16

24. Drum 'n' Bass 2

Name	BPM	Meas.	Keyboard Pad
DnB Drums 3	165	4	1
DnB Drums 4	165	4	2
DnB Bass 3	165	2	3
DnB Bass 4	165	2	4
Snare Fill 27	165	1	5
Snare Fill 28	165	1	6
BD Fill 17	165	1	7
Snare Fill 29	165	1	8
E.Piano Chord 4	165	4	9
Piano Chord 6	165	4	10
Piano EFX	165	2	11
Synth Lead 10	165	2	12
Synth Seq 26	165	2	13

Name	BPM	Meas.	Keyboard Pad
Synth Seq 27	165	2	14
SFX Hit 10	165	1	15
SFX Hit 11	165	1	16

25. BreakBeats

Name	BPM	Meas.	Keyboard Pad
B.Beats Drums 1	137	2	1
B.Beats Drums 2	137	2	2
B.Beats Bass 1	137	4	3
B.Beats Bass 2	137	2	4
Snare Fill 30	137	1	5
Snare Fill 31	137	1	6
BD Fill 18	137	1	7
Ride Cymbal 2	137	1	8
Clav.Chord 1	137	2	9
E.Piano Chord 5	137	2	10
Guitar Chord 4	137	1	11
Guitar Riff 4	137	2	12
E.Piano Lead 2	137	1	13
Guitar Riff 5	137	1	14
Voice Hit 2	137	1	15
Voice Hit 3	137	1	16

26. Jazz

Name	BPM	Meas.	Keyboard Pad
Jazz Drums 1	215	4	1
Jazz Drums 2	215	4	2
Jazz Bass 1	215	2	3
Jazz Bass 2	215	4	4
Snare Fill 32	215	1	5
Tom Fill 6	215	2	6
Tom Fill 7	215	1	7
OHH Fill 2	215	1	8
Snare Fill 33	215	1	9
Guitar Chord 5	215	2	10
Piano Chord 7	215	4	11
Brass 1	215	4	12
Trumpet Lead 1	215	4	13
Vibe Lead	215	4	14
Brass Fall 2	215	1	15
Trumpet Lead 2	215	2	16

27. Lounge

Name	BPM	Meas.	Keyboard Pad
Lounge Drums 1	95	2	1
Lounge Drums 2	95	2	2
Lounge Bass 1	95	2	3
Lounge Bass 2	95	2	4
Snare Fill 34	95	1	5
Tom Fill 8	95	1	6

Name	BPM	Meas.	Keyboard Pad
Ride Cymbal 3	95	1	7
Crash Fill 12	95	1	8
E.Piano Chord 6	95	4	9
Strings 4	95	4	10
Guitar Chord 6	95	4	11
Vox Lead	95	4	12
Organ Lead	95	4	13
Synth Lead 11	95	4	14
SFX 41	95	1	15
SFX 42	95	1	16

28. Reggae

Name	BPM	Meas.	Keyboard Pad
Reggae Drums 1	85	4	1
Reggae Drums 2	85	4	2
Reggae Bass 1	85	2	3
Reggae Bass 2	85	2	4
Rim Fill 3	85	1	5
Snare Fill 35	85	1	6
Snare Fill 36	85	1	7
Tom Fill 9	85	1	8
Piano Chord 8	85	2	9
Guitar Chord 7	85	2	10
Synth Lead 12	85	2	11
Guitar Riff 6	85	2	12
Guitar Riff 7	85	2	13
Berimbau	85	2	14
SFX 43	85	2	15
SFX Hit 12	85	1	16

29. Latin 1

Name	BPM	Meas.	Keyboard Pad
Latin Rhythm 1	172	4	1
Latin Rhythm 2	172	4	2
Latin Bass 1	172	4	3
Latin Bass 2	172	4	4
Perc.Fill 5	172	2	5
Perc.Fill 6	172	2	6
Perc.Fill 7	172	1	7
Perc.Fill 8	172	1	8
Piano Chord 9	172	4	9
Piano Chord 10	172	4	10
Flute Lead 1	172	1	11
Sax Lead	172	2	12
Brass 2	172	4	13
Brass 3	172	4	14
Wind Chime 1	172	1	15
Quijada	172	1	16

30.Latin 2

Name	BPM	Meas.	Keyboard Pad
Latin Rhythm 3	160	2	1
Latin Rhythm 4	160	2	2
Latin Bass 3	160	4	3
Latin Bass 4	160	4	4
Perc.Fill 9	160	2	5
Perc.Fill 10	160	2	6
Perc.Fill 7	172	1	7
Perc.Fill 8	172	1	8
Piano Chord 11	160	4	9
Piano Chord 12	160	4	10
Flute Lead 2	160	4	11
Brass 4	160	4	12
Brass 5	160	2	13
Brass 6	160	1	14
Wind Chime 2	160	1	15
Flute Lead 3	160	1	16

Transmit/Receive Setting List

Parameter		EDIT TX/RX		Value
		MODE1 (Default)	MODE2	
PITCH	COARSE TUNE	EXCLUSIVE	CC#21	16 - 112 Center=64) *1
	FINE TUNE	CC#77	CC#77	14 - 114 (Center=64) *1
FILTER	FILTER TYPE	EXCLUSIVE	CC#34	0 - 4 *1
	CUTOFF	CC#74	CC#74	0 - 127 *1
	RESONANCE	CC#71	CC#71	0 - 127 *1
AMPLIFIER	TONE LEVEL	EXCLUSIVE	CC#36	0 - 127 *1
	TONE PAN	EXCLUSIVE	CC#35	0 - 127 (Center=64) *1
	RND PAN	EXCLUSIVE	CC#37	0 (OFF), 63 (ON) *1
P-ENVELOPE	DEPTH	EXCLUSIVE	CC#25	52 - 76 (Center=64) *1
	A	EXCLUSIVE	CC#26	0 - 127 *1
	D	EXCLUSIVE	CC#27	0 - 127 *1
	S	EXCLUSIVE	CC#39	0 - 127 (Center=64) *1
	R	EXCLUSIVE	CC#40	0 - 127 *1
F-ENVELOPE	DEPTH	CC#81	CC#81	1 - 127 (Center=64) *1
	A	CC#82	CC#82	0 - 127 *1
	D	CC#83	CC#83	0 - 127 *1
	S	EXCLUSIVE	CC#28	0 - 127 *1
	R	EXCLUSIVE	CC#29	0 - 127 *1
A-ENVELOPE	A	CC#73	CC#73	0 - 127 *1
	D	CC#75	CC#75	0 - 127 *1
	S	EXCLUSIVE	CC#31	0 - 127 *1
	R	CC#72	CC#72	0 - 127 *1
LFO1	WAVEFORM	EXCLUSIVE	CC#15	0 - 7 *1
	RATE	CC#16	CC#16	0 - 127 *1
	P-DEPTH	CC#18	CC#18	1 - 127 (Center=64) *1
	F-DEPTH	CC#19	CC#19	1 - 127 (Center=64) *1
	A-DEPTH	CC#80	CC#80	1 - 127 (Center=64) *1
PORTAMENTO	SW	CC#65	CC#65	0 - 63 (OFF), 64 - 127 (ON)
	TIME	CC#5	CC#5	0 - 127
	SOLO	CC#126/127	CC#126/127	126=1 (ON), 127=0 (OFF)
PART MIXER	LEVEL	CC#7	CC#7	0 - 127
	PAN	CC#10	CC#10	0 - 127 (Center=64)
	KEY SHIFT	EXCLUSIVE	CC#85	16 - 112 (Center=64)
	REVERB	CC#91	CC#91	0 - 127
	DELAY	CC#94	CC#94	0 - 127
	M-FX SW	EXCLUSIVE	CC#86	0 (OFF), 1(ON), 4(M-FX)

*   *If these controls are moved during playback of a Pattern, the data stored in the sequencer stops being sent to the sound module (this is because operation of these controls takes precedence over the playing of sounds). The system remains in this status until another Pattern is called up.*

Main Specifications

MC-307: groovebox

SOUND GENERATOR SECTION

Maximum Polyphony:.. 64 voices

Parts:.. 24 (Main: 8, RPS: 16)

Patches

- Preset: 800
- User:.. 256

Rhythm Set

- Preset: 40
- User:.. 20

Effects Type

- Reverb:.. 6
- Delay:.. 2
- Multi-Effects (M-FX):.. 25

SEQUENCER SECTION

Parts:..8 + MUTE CTRL

Resolution:...................................... 96 ticks per quarter note

Tempo: .... 20.0–240.0 (Maximum)

Maximum Note Storage: .... approx. 95,000 notes

Patterns

- Preset: 240
- RPS:.. 470
- User:.. 200

Songs: 50

Recording Mode: .... Realtime, TR-REC

Quantize Type: .... Grid, Shuffle, Groove (71 types)

Arpeggiator Style:

- Preset 43
- User 10

RPS Set: 60

Pattern Set:.. 30

CONTROLLERS (Display, Knobs, Slider)

Display

- 136 x 32 Dots Graphic LCD (Backlit)
  + 7 segment 25 characters
- 7 segment 4 character (LED)

Knobs

- Cutoff
- Resonance
- LFO1
- Assignable 1 - 4

Turntable Emulation block

- Turntable Emulation slider
- Turntable PUSH/HOLD button

GRAB Switch

CONNECTORS

Headphones Jack

Output Jack (L (MONO), R)

MIDI Connectors (IN, OUT)

Foot Control Jack

DC IN Jack

POWER SUPPLY

DC9V

Current Draw

1000mA

DIMENSIONS

422 (W) x 277 (D) x 98 (H) mm
16 - 5/8 (W) x 10 - 15/16 (D) x 3 - 7/8 (H) inches

WEIGHT

2.2kg/ 4lbs 14oz

ACCESSORIES

Owner's Manual

- QuickStart Manual
- Reference Manual

AC Adopter (ACI-120C, ACI-230C, PSB-1U)

In the interest of product improvement, the specifications and/or appearance of this unit are subject to change without prior notice.

MIDI Implementation

Model: MC-307 (groovebox)
Date: Feb. 22, 2000
Version: 1.01

Symbol	Description	Range
n	MIDI Channel	0H–6H,9H (ch.1–ch.7,ch.10)
vv	Control value	00H–7FH (0–127)
kk	Note Number	00H–7FH (0–127)
xx	ON/OFF	00H–3FH (0–63:OFF), 40H–7FH (64–127:ON)

1. Data reception (sound source section)

■Channel voice messages

●Note Off

status	2nd byte	3rd byte
8nH	kkH	vvH
9nH	kkH	00H

*   Not received when the Rx Switch paramete is OFF.
*   Not received by the Rhythm Part when the Envelope Mode parameter is NO-SUS.
*   If the Remote Keyboard Switch is ON, the message will have the same effect as when a note is released on the MC-307's keyboard. This means that you can control the arpeggiator and RPS from an external MIDI keyboard.

●Note On

status	2nd byte	3rd byte
9nH	kkH	vvH

vv=Note On velocity:01H - 7FH (1 - 127)

*   Not received when the Rx Switch paramete is OFF.
*   If the Remote Keyboard Switch is ON, the message will have the same effect as when a note is played on the MC-307's keyboard. This means that you can control the arpeggiator and RPS from an external MIDI keyboard.

●Polyphonic Aftertouch

status	2nd byte	3rd byte
AnH	kkH	vvH

*   Not received when the Rx Switch parameter is OFF.
*   The effect will apply according to the Aftertouch Control setting.

●Control Change

*   Not received when the Rx Switch parameter is OFF.

❍Bank Select (Controller number 0,32)

status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

mm,ll=Bank number:00 00H–7F 7FH (bank.1–bank.16384)

*   Not received when the Rx Program Change Switch or Rx Bank Select Switch parameter is OFF.
*   The Patches corresponding to each Bank Select are as follows.

```
Bank Select | Program No | Group                      | Patch No.
  MSB | LSB |            |                            |
------+-----+------------+----------------------------+-----------
  81  |  0  | 001 - 128  | Preset A                   | 001 - 128
  81  |  1  | 001 - 128  | Preset B                   | 001 - 128
  81  |  2  | 001 - 128  | Preset C                   | 001 - 128
  81  |  3  | 001 - 128  | Preset D                   | 001 - 128
  83  |  0  | 001 - 128  | Preset E                   | 001 - 128
  83  |  1  | 001 - 128  | Preset F                   | 001 - 128
  83  |  2  | 001 - 128  | Preset G                   | 001 - 032
------+-----+------------+----------------------------+-----------
  85  |  0  | 001 - 128  | User A                     | 001 - 128
  85  |  1  | 001 - 128  | User B                     | 001 - 128
```

*   The Rhythm set corresponding to each Bank Select are as follows.

```
Bank Select | Program No | Group                      | Patch No.
  MSB | LSB |            |                            |
------+-----+------------+----------------------------+-----------
  81  |  0  |  1 - 26    | Preset A                   | 01 - 26
  83  |  0  |  1 - 14    | Preset B                   | 01 - 14
------+-----+------------+----------------------------+-----------
  85  |  0  |  1 - 20    | User A                     | 01 - 20
```

❍Modulation (Controller number 1)

status	2nd byte	3rd byte
BnH	01H	vvH

*   The effect will apply according to the Modulation Control setting.

❍Portamento Time (Controller number 5)

status	2nd byte	3rd byte
BnH	05H	vvH

*   The Portamento Time parameter will change.

❍Data Entry (Controller number 6,38)

status	2nd byte	3rd byte
BnH	06H	mmH
BnH	26H	llH

mm,ll= the value of the parameter specified by RPN   mm=MSB, ll=LSB

❍Volume (Controller number 7)

status	2nd byte	3rd byte
BnH	07H	vvH

*   Volume messages are used to adjust the volume balance of each part.

❍Panpot (Controller number 10)

status	2nd byte	3rd byte
BnH	0AH	vvH

*   Adjust the stereo location over 128 steps, where 0 is far left, 64 is center, and 127 is far right.

❍Expression (Controller number 11)

status	2nd byte	3rd byte
BnH	0BH	vvH

*   Expression messages are used to adjust the volume of each part.

❍General purpose Controller1 (Controller number 16)

status	2nd byte	3rd byte
BnH	10H	vvH

*   The LFO1 Rate parameter will change.

❍General purpose Controller3 (Controller number 18)

status	2nd byte	3rd byte
BnH	12H	vvH

*   The LFO1 Pitch Depth parameter will change.

❍General purpose Controller4 (Controller number 19)

status	2nd byte	3rd byte
BnH	13H	vvH

*   The LFO1 Filter Depth parameter will change relatively.

❍Hold 1 (Controller number 64)

status	2nd byte	3rd byte
BnH	40H	xxH

*   If the Remote Keyboard Switch is ON, it will be possible to control the Hold function of the arpeggiator.

❍Portamento (Controller number 65)

status	2nd byte	3rd byte
BnH	41H	xxH

*   The Portamento Switch Parameter will change.

❍Sostenuto (Controller number 66)

status	2nd byte	3rd byte
BnH	42H	xxH

❍Soft (Controller number 67)

status	2nd byte	3rd byte
BnH	43H	xxH

❍Hold 2 (Controller number 69)

status	2nd byte	3rd byte
BnH	45H	xxH

* If the Remote Keyboard Switch is ON, operation will be the same as when the switch pedal of the MC-307 is operated.

❍Sound Controller2 (Controller number 71)

status	2nd byte	3rd byte
BnH	47H	vvH

* The Resonance parameter will change.

❍Sound Controller3 (Controller number 72)

status	2nd byte	3rd byte
BnH	48H	vvH

* The Amp Envelope Time1 parameter will change.

❍Sound Controller4 (Controller number 73)

status	2nd byte	3rd byte
BnH	49H	vvH

* The Amp Envelope Time4 parameter will change.

❍Sound Controller5 (Controller number 74)

status	2nd byte	3rd byte
BnH	4AH	vvH

* The Cutoff Frequency parameter will change.

❍Sound Controller6 (Controller number 75)

status	2nd byte	3rd byte
BnH	4BH	vvH

* The Amp Envelope Time 3 parameter will change.

❍Sound Controller8 (Controller number 77)

status	2nd byte	3rd byte
BnH	4DH	vvH

* The Fine Tune parameter will change.

❍General purpose Controller5 (Controller number 80)

status	2nd byte	3rd byte
BnH	50H	vvH

* The LFO1 Amp Depth parameter will change.

❍General purpose Controller6 (Controller number 81)

status	2nd byte	3rd byte
BnH	51H	vvH

* The Filter Envelope Depth parameter will change.

❍General purpose Controller7 (Controller number 82)

status	2nd byte	3rd byte
BnH	52H	vvH

* The Filter Envelope Time 1 parameter will change.

❍General purpose Controller8 (Controller number 83)

status	2nd byte	3rd byte
BnH	53H	vvH

* The Filter Envelope Time 3 parameter will change.

❍Portamento Control (Controller number 84)

status	2nd byte	3rd byte
BnH	54H	kkH

* A Note On message received immediately after a Portamento control will be sounded with the pitch changing smoothly from the source note number. If a voice is already sounding at the same note number as the source note number, that voice will change pitch to the pitch of the newly received Note On, and continue sounding (i.e., will be played legato).
* The speed of the pitch change caused by Portamento is determined by the Portamento Time parameter.

❍Effect 1 (Reverb Send Level) (Controller number 91)

status	2nd byte	3rd byte

| BnH | 5BH | vvH |

* The Part Reverb Send Level will change.

❍Effect 4 (Reverb Send Level)(Controller number 94)

status	2nd byte	3rd byte
BnH	5EH	vvH

* The Part Reverb Send Level will change.

❍RPN MSB/LSB (Controller number 100,101)

status	2nd byte	3rd byte
BnH	65H	mmH
BnH	64H	llH

mm=MSB of the parameter number specified by RPN
ll=LSB of the parameter number specified by RPN

<< RPN >>

Control Changes include RPN (Registered Parameter Numbers), which are extended parameters whose function is defined in the MIDI specification.
When using RPNs, first the RPN (Controller numbers 100 and 101; they can be sent in any order) is transmitted to specify the parameter you wish to control. Then, Data Entry messages (Controller numbers 6 and 38) are used to set the value of the specified parameter. Once a RPN parameter has been specified, all further Data Entry messages on that channel are considered to apply to that specified parameter. In order to prevent accidents, when the desired setting has been made for the parameter, it is recommended that RPN be set to Null.

This device receives the following RPNs.

RPN	Data entry	
MSB LSB	MSB LSB	Notes
00H 00H	mmH —	Pitch Bend Sensitivity
		mm : 00H–0CH (0–12 semitones)
		ll : ignored (processed as 00H)

Up to 1 octave can be specified in semitone steps.
*The Bend Range up parameter, Bend Range Down parameter will also be changed.
*Not received by the Part R.

00H 01H	mmH llH	Master Fine Tuning

mm, ll: 20 00H–40 00H–60 00H (-4096 x 100 / 8192–0–+4096 x 100 / 8192 cent)
*The Fine Tune parameter of each Part will change.

00H 02H	mmH —	Master Coarse Tuning
		mm : 10H–40H–70H (-48–0–+48 semitones)
		ll : ignored (processed as 00H)

*The Key Shift parameter of each Part will change.

7FH 7FH	— —	RPN null

RPN will be set as "unspecified". Once this setting has been made, subsequent Data Entry messages will be ignored. (It is not necessary to transmit Data Entry for RPN Null settings. Parameter values that were previously set will not change.
mm, ll: ignored

● Program Change

status	2nd byte
CnH	ppH

pp=Program number:00H–7FH (prog.1–prog.128)

* Not received when the Rx Program Change Switch parameter is OFF.
* Not received when the Rx Switch parameter is OFF.

●Channel Aftertouch

status	2nd byte
DnH	vvH

* Not received when the Rx Switch parameter is OFF.
* The effect will apply according to the Aftertouch Control setting.

●Pitch Bend Change

status	2nd byte	3rd byte
EnH	llH	mmH

mm,ll=Pitch Bend value:00 00H–40 00H–7F 7FH (-8192–0–+8191)

* Not received when the Rx Switch parameter is OFF.
* The effect will apply according to the Pitch Bend Control setting.

MIDI Implementation

■Channel Mode messages

●All Sound Off (Controller number 120)

status	2nd byte	3rd byte
BnH	78H	00H

* When this message is received, all notes currently sounding on the corresponding channel will be turned off.
* Not received when the Rx Switch parameter is OFF.

●Reset All Controllers (Controller number 121)

status	2nd byte	3rd byte
BnH	79H	00H

* Not received when the Rx Switch parameter is OFF.
* When this message is received, the following controllers will be set to their reset values.

Controller	Reset value
Pitch Bend Change	±0 (center)
Polyphonic Key Pressure	0 (off)
Channel Pressure	0 (off)
Modulation	0 (off)
Expression	127 (maximum)
Hold 1	0 (off)
Sostenuto	0 (off)
Soft	0 (off)
Hold 2	0 (off)
RPN	Unset. Previously set data will not change.

●All Note Off (Controller number 123)

status	2nd byte	3rd byte
BnH	7BH	00H

* When All Note Off is received, all currently sounding notes of the corresponding channel will be turned off. However if Hold 1 or Sostenuto are on, the sound will be held until these are turned off.
* Not received when the Rx Switch parameter is OFF.

●Omni Off (Controller number 124)

status	2nd byte	3rd byte
BnH	7CH	00H

* The same processing as when All Note Off is received will be done.
* Not received when the Rx Switch parameter is OFF.

●Omni On (Controller number 125)

status	2nd byte	3rd byte
BnH	7DH	00H

* The same processing as when All Note Off is received will be done. The instrument will not be set to OMNI ON.
* Not received when the Rx Switch parameter is OFF.

●Mono (Controller number 126)

status	2nd byte	3rd byte
BnH	7EH	mmH

mm=Mono number: 00H–10H (0–16)

* The same processing as when All Note Off is received will be done, and the Solo Switch parameter will be set to ON.
* Not received when the Rx Switch parameter is OFF.

●Poly (Controller number 127)

status	2nd byte	3rd byte
BnH	7FH	00H

* The same processing as when All Note Off is received will be done, and the Solo Switch parameter will be set to OFF.
* Not received when the Rx Switch parameter is OFF.

■System Realtime messages

●Timing Clock

status
F8H

* This is received when Sync Mode is SLAVE. Settings can be made to synchronize or the LFO rate or the effect rate.

●Active Sensing

status
FEH

* When an Active Sensing message is received, the unit will begin monitoring the interval at which MIDI messages are received. During monitoring, if more than 420 ms passes without a message being received, the same processing will be done as when All Sound Off, All Note Off, and Reset All Controllers messages are received. Then monitoring will be halted.

■ System Exclusive messages

status	data byte	status
F0H	iiH, ddH, ..., eeH	F7H

F0H:	System Exclusive message status
ii = ID number:	This is the ID number (manufacturer ID) that specifies the manufacturer whose exclusive message this is. Roland's manufacturer ID is 41H.ID numbers 7EH and 7FH are defined in an expansion of the MIDI standard as Universal Non-realtime messages (7EH) and Universal Realtime Messages (7FH).
dd,..., ee = data:	00H–7FH (0–127)
F7H:	EOX (End Of Exclusive) This is the last status of system exclusive message.

●Universal Non-realtime System Exclusive Messages

Inquiry Request Message

Status	Data byte	Status
F0H	7EH, dev, 06H, 01H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (universal non-realtime message)
dev	Device ID (dev:10H(17)-1FH(32))
06H	Sub ID#1 (General Information)
01H	Sub ID#2 (Inquiry Request)
F7H	EOX (End Of Exclusive)

* The "dev" is own device number or 7FH (Broadcast)
* When Inquiry Request is received, Inquiry Reply message will be transmitted.

●Data Request 1 RQ1

This message requests the other device to transmit data. The address and size indicate the type and amount of data that is requested.

When a Data Request message is received, if the device is in a state in which it is able to transmit data, and if the address and size are appropriate, the requested data is transmitted as a Data Set 1 (DT1) message. If the conditions are not met, nothing is transmitted.

The model ID of the exclusive messages used by this instrument is 00 0BH.

status	data byte	status
F0H	41H, dev, 00H, 0BH, 11H, aaH, bbH, ccH, ddH, ssH, ttH, uuH, vvH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H–1FH)
00H	model ID (MC-307)
0BH	model ID (MC-307)
11H	command ID (RQ1)
aaH	address MSB
bbH	address
ccH	address
ddH	address LSB
ssH	size MSB
ttH	size
uuH	size
vvH	size LSB
sum	checksum
F7H	EOX (End Of Exclusive)

* For the address, size, and checksum, refer to "Examples of system exclusive messages

and calculating the checksum" (P. 206).
* This message is not received if the Rx.System Exclusive Switch Switch parameter is OFF.

●Data Set 1   DT1

This message transmits the actual data, and is used when you wish to set the data of the receiving device.

status	data byte	status
F0H	41H, dev, 00H, 0BH, 12H, aaH, bbH, ccH, ddH, eeH, ... ffH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H–1FH)
00H	model ID (MC-307)
0BH	model ID (MC-307)
12H	command ID (DT1)
aaH	address MSB
bbH	address
ccH	address
ddH	address LSB
eeH	data: The actual data to be transmitted. Multi-byte data is transmitted in the order of the address.
:	:
ffH	data
sum	checksum
F7H	EOX (End Of Exclusive)

* For the address, size, and checksum, refer to "Examples of system exclusive messages and calculating the checksum" (P. 206).
* Data whose size is greater than 128 bytes should be divided into packets of 128 bytes or less and transmitted. Successive "Data Set 1" messages should have at least 20 ms of time interval between them.
* This message is not received if the Rx.System Exclusive Switch parameter is OFF.

The only GS exclusive messages received by the MC-307 are Scale Tune settings (P. 116).

●Data Set 1   DT1

status	data byte	status
F0H	41H, dev, 42, 12H, aaH, bbH, ccH, ddH, ... eeH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H–1FH)
42H	model ID (GS)
12H	command ID (DT1)
aaH	address MSB
bbH	address
ccH	address LSB
ddH	data: The actual data to be transmitted. Multi-byte data is transmitted in the order of the address.
:	:
eeH	data
sum	checksum
F7H	EOX (End Of Exclusive)

* This message is not received if the Rx.System Exclusive Switch parameter is OFF.

In addition to conventional system exclusive messages, the MC-307 also uses special system exclusive messages for operations which require realtime handling, such as knobs.

●Data Set 1   DT1

status	data byte	status
F0H	41H, dev, 3AH, 12H, aaH, bbH, ccH, ddH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H–1FH)
3AH	model ID (MC-307 Quick)
12H	command ID (DT1)
aaH	address (Status/Channel)
bbH	address/Data H
ccH	Data L
ddH	Data E

sum	checksum
F7H	EOX (End Of Exclusive)

* For the address, size, and checksum, refer to "Examples of system exclusive messages and calculating the checksum" (P. 206).
* Transmission of consecutive addresses is not possible.
* This message is not received if the Rx.System Exclusive Switch parameter is OFF.

2. Data transmission (sound source section)

■Channel Voice messages

●Note Off

status	2nd byte	3rd byte
8nH	kkH	vvH

●Note On

status	2nd byte	3rd byte
9nH	kkH	vvH

vv=Note On velocity: 01H - 7FH (1 - 127)

●Control Change

* By selecting a controller number that corresponds to the setting of the Control Pedal Assign parameter, you can transmit any desired control change.

❍Bank Select (Controller number 0,32)

status	2nd byte	3rd byte
BnH	00H	mmH
BnH	20H	llH

mm,ll=Bank number: 00 00H - 7F 7FH (bank.1 - bank.16384)

* This message is not transmitted if Tx Program Change Switch parameter or Tx Bank Select Switch parameter is OFF.
* For the Bank Select that corresponds to each Patch, refer to section 1.

❍Modulation (Controller number 1)

status	2nd byte	3rd byte
BnH	01H	vvH

❍Portamento Time (Controller number 5)

status	2nd byte	3rd byte
BnH	05H	vvH

❍Volume (Controller number 7)

status	2nd byte	3rd byte
BnH	07H	vvH

❍Panpot (Controller number 10)

status	2nd byte	3rd byte
BnH	0AH	vvH

❍Expression (Controller number 11)

status	2nd byte	3rd byte
BnH	0BH	vvH

❍General purpose Controller1, 3, 4 (Controller number 16, 18, 19)

status	2nd byte	3rd byte
BnH	10H,12H,13H	vvH

❍Hold 1 (Controller number 64)

status	2nd byte	3rd byte
BnH	40H	xxH

❍Portamento (Controller number 65)

status	2nd byte	3rd byte
BnH	41H	xxH

❍**Sostenuto (Controller number 66)**

status	2nd byte	3rd byte
BnH	42H	xxH

❍**Soft (Controller number 67)**

status	2nd byte	3rd byte
BnH	43H	xxH

❍**Hold 2 (Controller number 69)**

status	2nd byte	3rd byte
BnH	45H	xxH

❍**Sound Controller2–6,8 (Controller number 71–75, 77)**

status	2nd byte	3rd byte
BnH	47H-4BH,4DH	vvH

❍**General purpose Controller5–8 (Controller number 80–83)**

status	2nd byte	3rd byte
BnH	50H-53H	vvH

❍**Portamento control (Controller number 84)**

status	2nd byte	3rd byte
BnH	54H	kkH

❍**Effect 1 (Controller number 91)**

status	2nd byte	3rd byte
BnH	5BH	vvH

❍**Effect 4 (Controller number 91)**

status	2nd byte	3rd byte
BnH	5EH	vvH

●**Program Change**

status	2nd byte
CnH	ppH

pp=Program number:00H - 7FH (prog.1 - prog.128)

* This message is not transmitted when the Tx Program Change Switch parameter is OFF.

■System Realtime messages

●Active Sensing

status
FEH

* Transmitted at intervals of approximately 250ms.
* Not transmitted if the Tx Active Sensing Switch parameter is OFF.

■System Exclusive messages

●Universal Non-realtime System Exclusive Messages

Inquiry Reply

Status	Data byte	Status
F0H	7EH, dev, 06H, 02H, 41H, 0BH, 01H, 01H, 00H, 00H, 03H, 00H, 00H	F7H

Byte	Explanation
F0H	Exclusive status
7EH	ID number (universal non-realtime message)
dev	Device ID (dev:10H(17)-1FH(32))
06H	Sub ID#1 (General Information)
02H	Sub ID#2 (Inquiry Reply)
41H	ID number (Roland)
0BH 01H	Device family code
01H 00H	Device family number code
00H 03H 00H 00H	Software revision level
F7H	EOX (End of Exclusive)

* When Inquiry Request is received, Inquiry Reply message will be transmitted.

●Data Set 1   DT1

status	data byte	status
F0H	41H, dev, 00H, 0BH, 12H, aaH, bbH, ccH, ddH, eeH, ... ffH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H–1FH)
00H	model ID (MC-307)
0BH	model ID (MC-307)
12H	command ID (DT1)
aaH	address MSB
bbH	address
ccH	address
ddH	address LSB
eeH	data: The actual data to be transmitted. Multi-byte data is transmitted in the order of the address.
:	:
ffH	data
sum	checksum
F7H	EOX (End Of Exclusive)

* For the address, size, and checksum, refer to "Examples of system exclusive messages and calculating the checksum" (P. 206).
* Data whose size is greater than 128 bytes should be divided into packets of 128 bytes or less and transmitted. Successive "Data Set 1" messages should have at least 20 ms of time interval between them.

●Data Set 1   DT1

status	data byte	status
F0H	41H, dev, 3AH, 12H, aaH, bbH, ccH, ddH, sum	F7H

Byte	Remarks
F0H	Exclusive status
41H	ID number (Roland)
dev	device ID (dev: 10H–1FH)
3AH	model ID (MC-307 Quick)
12H	command ID (DT1)
aaH	address (Status/Channel)
bbH	address/Data H
ccH	Data L
ddH	Data E
sum	checksum
F7H	EOX (End Of Exclusive)

* For the address, size, and checksum, refer to "Examples of system exclusive messages and calculating the checksum" (P. 206).
* Transmission of consecutive addresses is not possible.

3. Data reception (Sequencer section)
■1 Messages recorded during recording

■Channel voice messages

●Note Off
status	2nd byte	3rd byte
8nH	kkH	vvH
9nH	kkH	00H

●Note On
status	2nd byte	3rd byte
9nH	kkH	vvH

vv=Note On velocity:01H - 7FH (1 - 127)

●Polyphonic Aftertouch
status	2nd byte	3rd byte
AnH	kkH	vvH

●Control Change
status	2nd byte	3rd byte
BnH	kkH	vvH

kk=control number: 00H–78H (0–120)

●Program Change
status	2nd byte
CnH	ppH

pp=Program number:00H–7FH (prog.1–prog.128)

●Channel Aftertouch
status	2nd byte
DnH	vvH

●Pitch Bend Change
status	2nd byte	3rd byte
EnH	llH	mmH

mm,ll=Pitch Bend value:00 00H–40 00H–7F 7FH (-8192–0–+8191)

■Channel Mode messages

●All Sound Off (Controller number 120)
status	2nd byte	3rd byte
BnH	78H	00H

●Reset All Controllers (Controller number 121)
status	2nd byte	3rd byte
BnH	79H	00H

●Omni Off (Controller number 124)
status	2nd byte	3rd byte
BnH	7CH	00H

* The same processing will be done as when an All Note Off message is received.

●Omni On (Controller number 125)
status	2nd byte	3rd byte
BnH	7DH	00H

* The same processing will be done as when an All Note Off message is received.

●Mono (Controller number 126)
status	2nd byte	3rd byte
BnH	7EH	mmH

mm=mono number: 00H–10H (0–16)

* The same processing will be done as when an All Note Off message is received.

●Poly (Controller number 127)
status	2nd byte	3rd byte
BnH	7FH	00H

* The same processing will be done as when an All Note Off message is received.

■System Exclusive messages

status	data byte	status
F0H	iiH, ddH, ..., eeH	F7H

F0H: System Exclusive message status
ii = ID number: This is the ID number (manufacturer ID) that specifies the manufacturer whose exclusive message this is. Roland's manufacturer ID is 41H.ID numbers 7EH and 7FH are defined in an expansion of the MIDI standard as Universal Non-realtime messages (7EH) and Universal Realtime Messages (7FH).
dd,..., ee = data: 00H–7FH (0–127)
F7H: EOX (End Of Exclusive)

■2 Messages not recorded during recording

■Channel Mode messages

●Local On/Off (Controller number 122)
status	2nd byte	3rd byte
BnH	7AH	00H

vv=value: 00H,7FH (Local off, Local on)

●All Note Off (Controller number 123)
status	2nd byte	3rd byte
BnH	7BH	00H

* When an All Note Off message is received, all notes of the corresponding channel that are on will be sent Note Off's, and the resulting Note Off messages will be recorded.

■3 Messages acknowledged for synchronization

■System Common messages

●Song Position Pointer
status	2nd byte	3rd byte
F2H	mmH	llH

mm,ll=value: 00 00H–7F 7FH (0–16383)

■System Realtime messages

●Timing Clock
status
F8H

* This message will be received if the Sync Mode parameter is SLAVE.

●Start
status
FAH

* This message will be received if the Sync Mode parameter is SLAVE or REMOTE.

●Continue
status
FBH

* This message will be received if the Sync Mode parameter is SLAVE or REMOTE.

●Stop
status
FCH

* This message will be received if the Sync Mode parameter is SLAVE or REMOTE.

4. Data transmission (Sequencer section)

■1 Recorded messages are transmitted during playback.

■2 If the Through parameter is ON, messages received (except for System Common messages and System Realtime messages) will be transmitted.

■3 Messages that are generated and transmitted

■3.1 Messages automatically generated by the system

■Channel Mode messages

●Omni Off (Controller number 124)

status	2nd byte	3rd byte
BnH	7CH	00H

*   At start-up, this message is transmitted to all channels.

●Poly (Controller number 127)

status	2nd byte	3rd byte
BnH	7FH	00H

*   At start-up, this message is transmitted to all channels.

●3.2 Messages generated and transmitted when the Sync Out is ON

■System Common messages

●Song Position Pointer

status	2nd byte	3rd byte
F2H	mmH	llH

mm,ll=value: 00 00H–7F 7FH (0–16383)

■System Realtime messages

●Timing Clock

status
F8H

●Start

status
FAH

●Continue

status
FBH

●Stop

status
FCH

5. Parameter address map

1. MC-307 (Model ID=00H 0BH)

* For addresses marked by #, the data is transmitted in two parts. For example, the hexadecimal data ABH would be divided into 0AH and 0BH, and transmitted in this order.
* Addresses for which the Description field is listed as "Reserved" have no meaning for the MC-307. They will be ignored.
* Parameter values enclosed in < > have no meaning for the MC-307.

Start Address	Description	
00 00 00 00	System	1-1
01 00 00 00	Part Info	1-2
02 00 00 00	Patch(part 1)	1-3
02 01 00 00	Patch(part 2)	
:		
02 06 00 00	Patch(part 7)	
02 09 00 00	Rhythm Set	1-4
30 00 00 00	Pattern Setup	1-5
40 00 00 00	Pattern Body	1-6

■1-1.System

Offset Address	Description	
00 00	System Common	1-1-1
10 00	Part 1 Scale Tune	1-1-2
11 00	Part 2 Scale Tune	
:		
16 00	Part 7 Scale Tune	

■1-1-1.System Common

Offset Address	Size	Description	Data (Value)	
00 00-00 05	0aaa aaaa	Reserved	--	
00 06	0aaa aaaa	Master Tune	0 - 126	*1
00 07	0000 000a	Scale Tune Switch	0 - 1 (OFF,ON)	
00 08	0000 000a	M-FX Switch	0 - 1 (OFF,ON)	
00 09	0000 000a	Delay Switch	0 - 1 (OFF,ON)	
00 0A	0000 000a	Reverb Switch	0 - 1 (OFF,ON)	
00 0B	0000 000a	Patch Remain	0 - 1 (OFF,ON)	
00 0C-00 13	0aaa aaaa	Reserved	--	
00 14	0000 000a	Receive Program Change Switch	0 - 1 (OFF,ON)	
00 15	0000 000a	Receive Bank Select Switch	0 - 1 (OFF,ON)	
00 16-00 27	0aaa aaaa	Reserved	--	
00 28	0000 000a	Transmit Program Change Switch	0 - 1 (OFF,ON)	
00 29	0000 000a	Transmit Bank Select Switch	0 - 1 (OFF,ON)	
00 2A-00 61	0aaa aaaa	Reserved	--	
Total size	00 00 00 62			

* 1:427.4 - 452.6

■1-1-2.Scale Tune

Offset Address	Size	Description	Data (Value)
00 00	0aaa aaaa	Scale Tune for C	0 - 127 (-64 - +63)
00 01	0aaa aaaa	Scale Tune for C#	0 - 127 (-64 - +63)
00 02	0aaa aaaa	Scale Tune for D	0 - 127 (-64 - +63)
00 03	0aaa aaaa	Scale Tune for D#	0 - 127 (-64 - +63)
00 04	0aaa aaaa	Scale Tune for E	0 - 127 (-64 - +63)
00 05	0aaa aaaa	Scale Tune for F	0 - 127 (-64 - +63)
00 06	0aaa aaaa	Scale Tune for F#	0 - 127 (-64 - +63)
00 07	0aaa aaaa	Scale Tune for G	0 - 127 (-64 - +63)
00 08	0aaa aaaa	Scale Tune for G#	0 - 127 (-64 - +63)
00 09	0aaa aaaa	Scale Tune for A	0 - 127 (-64 - +63)
00 0A	0aaa aaaa	Scale Tune for A#	0 - 127 (-64 - +63)
00 0B	0aaa aaaa	Scale Tune for B	0 - 127 (-64 - +63)
Total size	00 00 00 0C		

■1-2.Part Info

Offset Address	Description	
00 00	Part Info Common	1-2-1
10 00	Part Info Part 1	1-2-2
11 00	Part Info Part 2	
:		
16 00	Part Info Part 7	
19 00	Part Info Part R	

■1-2-1.Part Info Common

Offset Address	Size	Description	Data (Value)
00 00-00 0C	0aaa aaaa	Reserved	--
00 0D	00aa aaaa	M-FX Type	0 - 24
00 0E	0aaa aaaa	M-FX Parameter 1	0 - 127
00 0F	0aaa aaaa	M-FX Parameter 2	0 - 127
00 10	0aaa aaaa	M-FX Parameter 3	0 - 127
00 11	0aaa aaaa	M-FX Parameter 4	0 - 127
00 12	0aaa aaaa	M-FX Parameter 5	0 - 127
00 13	0aaa aaaa	M-FX Parameter 6	0 - 127
00 14	0aaa aaaa	M-FX Parameter 7	0 - 127	
00 15	0aaa aaaa	M-FX Parameter 8	0 - 127	
00 16	0aaa aaaa	M-FX Parameter 9	0 - 127	
00 17	0aaa aaaa	M-FX Parameter 10	0 - 127	
00 18	0aaa aaaa	M-FX Parameter 11	0 - 127	
00 19	0aaa aaaa	M-FX Parameter 12	0 - 127	
00 1A-00 1B	0aaa aaaa	Reserved	--	
00 1C	0aaa aaaa	M-FX Delay Send Level	0 - 127	
00 1D	0aaa aaaa	M-FX Reverb Send Level	0 - 127	
00 1E-00 21	0aaa aaaa	Reserved	--	
00 22	0aaa aaaa	Delay Level	0 - 127	
00 23	0000 000a	Delay Type	0 - 1	*1
00 24	0aaa aaaa	Delay HF Damp	0 - 17	*4
00 25	0aaa aaaa	Delay Time	0 - 120	
00 26	0aaa aaaa	Delay Feedback Level	0 - 98	
00 27	0000 00aa	Delay Output Assign	0 - 2	*2
00 28	0000 0aaa	Reverb Type	0 - 7	*3
00 29	0aaa aaaa	Reverb Level	0 - 127	
00 2A	0aaa aaaa	Reverb Time	0 - 127	
00 2B	000a aaaa	Reverb HF Damp	0 - 17	*4
00 0C-00 2F	0aaa aaaa	Reserved	--	
00 30	0aaa aaaa	Voice Reserve 1	0 - 64	
00 31	0aaa aaaa	Voice Reserve 2	0 - 64	
00 32	0aaa aaaa	Voice Reserve 3	0 - 64	
00 33	0aaa aaaa	Voice Reserve 4	0 - 64	
00 34	0aaa aaaa	Voice Reserve 5	0 - 64	
00 35	0aaa aaaa	Voice Reserve 6	0 - 64	
00 36	0aaa aaaa	Voice Reserve 7	0 - 64	
00 37-00 38	0aaa aaaa	Reserved	--	
00 39	0aaa aaaa	Voice Reserve R	0 - 64	
00 3A-00 43	0aaa aaaa	Reserved	--	
Total size	00 00 00 44			

* 1:SHORT, LONG
* 2:LINE, REV, LINE+REV
* 3:ROOM1, ROOM2, STAGE1, STAGE2, HALL1, HALL2
* 4:200, 250, 315, 400, 500, 630, 800, 1000, 1250, 1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000, BYPASS

M-FX Parameter	Value	Display
Type 0: 4-BAND-EQ		
prm1	Low Freq	0 - 1	200,400
prm2	Low Gain	0 - 30	-15 - +15
prm3	High Freq	0 - 1	4000,8000
prm4	High Gain	0 - 30	-15 - +15
prm5	Peak1 Freq	0 - 16	*1
prm6	Peak1 Q	0 - 4	0.5,1.0,2.0,4.0,8.0
prm7	Peak1 Gain	0 - 30	-15 - +15
prm8	Peak2 Freq	0 - 16	*1
prm9	Peak2 Q	0 - 4	0.5,1.0,2.0,4.0,8.0
prm10	Peak2 Gain	0 - 30	-15 - +15
prm11	Output Level	0 - 127	
Type 1: SPECTRUM		
prm1	Low-High	0 - 30	-15 - +15
prm2	Middle Gain	0 - 30	-15 - +15
prm3	Width	0 - 4	1 - 5
prm4	Output Pan	0 - 127	L64 - 63R
prm5	Output Level	0 - 127	
Type 2: ENHANCER		
prm1	Sens	0 - 127	
prm2	Mix	0 - 127	
prm3	Low Gain	0 - 30	-15 - +15
prm4	High Gain	0 - 30	-15 - +15
prm5	Output Level	0 - 127	
Type 3: OVERDRIVE		
prm1	Input Level	0 - 127	
prm2	Drive	0 - 127	
prm3	AMP Type	0 - 3	
SMALL,BUILTIN,2STACK,3STACK		
prm4	Output Pan	0 - 127	L64 - 63R
prm5	Output Level	0 - 127	
Type 4: DISTORTION		
prm1	Input Level	0 - 127	
prm2	Drive	0 - 127	
prm3	AMP Type	0 - 3	
SMALL,BUILTIN,2STACK,3STACK		
prm4	Output Pan	0 - 127	L64 - 63R
prm5	Output Level	0 - 127	
Type 5: Lo-Fi		
prm1	BitDown	0 - 7	
prm2	S-Rate Down	0 - 3	32,16,8,4
prm3	Post Gain	0 - 3	0,+6,+12,+18
prm4	Low Gain	0 - 30	-15 - +15
prm5	High Gain	0 - 30	-15 - +15
prm6	Output	0 - 1	MONO,STEREO
prm7	Output Level	0 - 127	
Type 6: NOISE		
prm1	Noise Type	0 - 17	1 - 18
prm2	Noise Level	0 - 127	
prm3	N Filter	0 - 17	*1,BYPASS
prm4	Lo-Fi Level	0 - 127	
prm5	Output Pan	0 - 127	L64 - 63R
prm6	Output Level	0 - 127	
Type 7: RADIO-TUNG		

prm1	Radio Detune	0 - 127	
prm2	Noise Level	0 - 127	
prm3	Low Gain	0 - 30	-15 - +15
prm4	High Gain	0 - 30	-15 - +15
prm5	Output	0 - 1	MONO,STEREO
prm6	Output Level	0 - 127	

Type 8: PHONOGRAPH

prm1	Disc Type	0 - 2	LP,EP,SP
prm2	D Noise Level	0 - 127	
prm3	Depth	0 - 20	0 - +20
prm4	Output Pan	0 - 127	L64 - 63R
prm5	Output Level	0 - 127	

Type 9: COMPRESSOR

prm1	Attack	0 - 127	
prm2	Sustain	0 - 127	
prm3	Post Gain	0 - 3	0,+6,+12,+18
prm4	Low Gain	0 - 30	-15 - +15
prm5	High Gain	0 - 30	-15 - +15
prm6	Output Level	0 - 127	

Type 10: LIMITER

prm1	Threshold	0 - 127	
prm2	Ratio	0 - 3	1.5:1,2.0:1,4.0:1,100:1
prm3	Release	0 - 127	
prm4	Post Gain	0 - 3	0,+6,+12,+18
prm5	Output Pan	0 - 127	L64 - 63R
prm6	Output Level	0 - 127	

Type 11: SLICER

prm1	Timing Pattern	0 - 33	(pattern)
prm2	Rate	0 - 2	1/4,1/2,1/1
prm3	Accent Pattern	0 - 15	(pattern)
prm4	Accent Level	0 - 127	
prm5	Attack	0 - 9	1 - 10
prm6	Output Level	0 - 127	

Type 12: TREMOLO

prm1	LFO Type	0 - 5	TRI,TRP,SIN,SAW1,SAW2,SQR
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Depth	0 - 127	
prm4	Low Gain	0 - 30	-15 - +15
prm5	High Gain	0 - 30	-15 - +15
prm6	Output Level	0 - 127	

Type 13: PHASER

prm1	Manual	0 - 125	100 - 8000
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Depth	0 - 127	
prm4	Resonance	0 - 127	
prm5	Mix	0 - 127	
prm6	Output Pan	0 - 127	L64 - 63R
prm7	Output Level	0 - 127	

Type 14: CHORUS

prm1	Pre Delay	0 - 125	0.0 - 100
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Depth	0 - 127	
prm4	Phase	0 - 90	0 - 180
prm5	Filter Type	0 - 2	OFF,LPF,HPF
prm6	Cutoff	0 - 16	*1
prm7	Balance	0 - 100	D100:0W - D0:100W
prm8	Output Level	0 - 127	

Type 15: SPACE-D

prm1	Pre Delay	0 - 125	0.0 - 100
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Depth	0 - 127	
prm4	Phase	0 - 90	0 - 180
prm5	Low Gain	0 - 30	-15 - +15
prm6	High Gain	0 - 30	-15 - +15
prm7	Balance	0 - 100	D100:0W - D0:100W
ptm8	Output Level	0 - 127	

Type 16: TETRA-CHORUS

prm1	Pre Delay	0 - 125	0.0 - 100
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Depth	0 - 127	
prm4	Pre Dly Devi	0 - 20	
prm5	Depth Devi	0 - 40	-20 - +20
prm6	Pan Devi	0 - 20	
prm7	Balance	0 - 100	D100:0W - D0:100W
prm8	Output Level	0 - 127	

Type 17: FLANGER

prm1	Pre Delay	0 - 125	0.0 - 100
prm2	Rate	0 - 117	0.05 - 10.00,(rate)
prm3	Depth	0 - 127	
prm4	Feedback	0 - 98	0 - +98
prm5	Phase	0 - 90	0 - 180
prm6	Filter Type	0 - 2	OFF,LPF,HPF
prm7	Cutoff	0 - 16	*1
prm8	Balance	0 - 100	D100:0W - D0:100W
prm9	Output Level	0 - 127	

Type 18: ST-FLANGER

prm1	Pre Delay	0 - 125	0.0 - 100
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Depth	0 - 127	
prm4	Feedback	0 - 98	0 - +98

prm5	Phase	0 - 90	0 - 180
prm6	Step Rate	0 - 125	0.05 - 10.00,*2
prm7	Balance	0 - 100	D100:0W - D0:100W
prm8	Output Level	0 - 127	

Type 19: SHORT-DELAY

prm1	Time L	0 - 103	0.1 - 190
prm2	Time R	0 - 103	0.1 - 190
prm3	HF Damp	0 - 17	*1,BYPASS
prm4	Feedback	0 - 98	0 - +98
prm5	Auto Pan	0 - 18	OFF,(rate)
prm6	Low Gain	0 - 30	-15 - +15
prm7	High Gain	0 - 30	-15 - +15
prm8	Balance	0 - 100	D100:0W - D0:100W
prm9	Output Level	0 - 127	

Type 20: AUTO-PAN

prm1	LFO type	0 - 5	TRI,TRP,SIN,SAW1,SAW2,SQR
prm2	Rate	0 - 117	0.05 - 10.00,*2
prm3	Bass Sense	0 - 2	OFF,MODE1,MODE2
prm4	Depth	0 - 127	
prm5	Low Gain	0 - 30	-15 - +15
prm6	High Gain	0 - 30	-15 - +15
prm7	Output Level	0 - 127	

Type 21: FB-P-SHIFT

prm1	Coarse	0 - 36	-24 - +12
prm2	Fine	0 - 100	-100 - +100
prm3	Output Pan	0 - 127	
prm4	Pre Delay	0 - 125	0.0 - 100
prm5	Mode	0 - 4	1 - 5
prm6	Feedback	0 - 98	0 - +98
prm7	Low Gain	0 - 30	-15 - +15
prm8	High Gain	0 - 30	-15 - +15
prm9	Balance	0 - 100	D100:0W - D0:100W
prm10	Output Level	0 - 127	

Type 22: REVERB

prm1	Rev Type	0 - 5	ROOM1,ROOM2,STAGE1,STAGE2,HALL1,HALL2
prm2	Time	0 - 127	
prm3	HF Damp	0 - 17	*1,BYPASS
prm4	Balance	0 - 100	D100:0W - D0:100W
prm5	Output Level	0 - 127	

Type 23: GATE-REVERB

prm1	Gate Type	0 - 3	NORMAL,REVERSE,SWEEP1,SWEEP2
prm2	Gate Time	0 - 65	5 - 330
prm3	Balance	0 - 100	D100:0W - D0:100W
prm4	Output Level	0 - 127	

Type 24: ISOLATOR

prm1	Low Gain	0 - 127	
prm2	Mid Gain	0 - 127	
prm3	High Gain	0 - 127	
prm4	Pan	0 - 127	L64 - 63R
prm5	Level	0 - 127	

==

* 1: 200, 250, 315, 400, 500, 630, 800, 1000, 1250,1600, 2000, 2500, 3150, 4000, 5000, 6300, 8000
* 2: 1/16, 1/12, 3/32, 1/8, 1/6, 3/16, 1/4, 1/3, 3/8,1/2, 2/3, 3/4, 1/1, 2MES, 3MES, 4MES, 8MES, 16MES
* 3: 1/16, 1/12, 3/32, 1/8, 1/6, 3/16, 1/4, 1/3, 3/8,1/2

■1-2-2.Part Info Part

```
+-----------------------------------------------------------------------+
| Offset                                                                |
|   Address | Size      | Description        | Data (Value)             |
|-----------------------------------------------------------------------|
|   00 00   | 0000 000a | Receive Switch     | 0 - 1    (OFF,ON)        |
|-----------------------------------------------------------------------|
|   00 01   | 0aaa aaaa | Reserved           | --                       |
|-----------------------------------------------------------------------|
|   00 02   | 0000 00aa | Patch Group Type   | 0 - 3    *2              |
|   00 03   | 0aaa aaaa | Patch Group ID     | 0 - 127  *2              |
| # 00 04   | 0000 aaaa | Patch Number       | 0 - 254  *2              |
|           | 0000 bbbb |                    |         (001 - 255)      |
|   00 06   | 0aaa aaaa | Part Level         | 0 - 127                  |
|   00 07   | 0aaa aaaa | Part Pan           | 0 - 127  (L64 - 63R)     |
|   00 08   | 0aaa aaaa | Part Key Shift     | 0 - 96   (-48 - +48)     |
|   00 09   | 0aaa aaaa | Part Fine Tune     | 0 - 100  (-50 - +50)     |
|   00 0A   | 0000 0aaa | M-FX Switch        | 0 - 4    *1              |
|-----------------------------------------------------------------------|
|   00 0B   | 0aaa aaaa | Reserved           | --                       |
|-----------------------------------------------------------------------|
|   00 0C   | 0aaa aaaa | Delay Send Level   | 0 - 127                  |
|   00 0D   | 0aaa aaaa | Reverb Send Level  | 0 - 127                  |
|-----------------------------------------------------------------------|
| 00 0E-00 19 | 0aaa aaaa | Reserved         | --                       |
|-----------------------------------------------------------------------|
| Total size | 00 00 00 1A                                              |
+-----------------------------------------------------------------------+
```

1:OFF, ON, Reserved, Reserved, RHY, *2:refer to the chart below

```
[Patch]+------------------+----------------+---------------+--------------+
       |Group  (Patch #)|Patch Group Type|Patch Group ID|Patch Number|
       |------------------+----------------+---------------+--------------|
       |Preset A  (1 - 128)|      0       |      3       | 0 - 127    |
       |Preset B  (1 - 128)|      0       |      4       | 0 - 127    |
       |Preset C  (1 - 128)|      0       |      5       | 0 - 127    |
       |Preset D  (1 - 128)|      0       |      6       | 0 - 127    |
       |Preset E  (1 - 128)|      0       |      7       | 0 - 127    |
       |Preset F  (1 - 128)|      0       |      8       | 0 - 127    |
       |Preset G  (1 -  32)|      0       |      9       | 0 -  31    |
       |User A    (1 - 128)|      3       |      1       | 0 - 127    |
       |User B    (1 - 128)|      3       |      2       | 0 - 127    |
       +------------------+----------------+---------------+--------------+

[Rhythm]+------------------+----------------+---------------+--------------+
       |Group  (Patch #)|Patch Group Type|Patch Group ID|Patch Number|
       |------------------+----------------+---------------+--------------|
       |Preset A  (1 -  26)|      0       |      3       | 0 -  25    |
       |Preset B  (1 -  14)|      0       |      4       | 0 -  13    |
       |User A    (1 -  20)|      3       |      1       | 0 -  19    |
       +------------------+----------------+---------------+--------------+
```

■1-3.Patch

```
+----------------------------------------------------------+
| Offset                                                   |
|   Address   Description                                  |
+----------------------------------------------------------+
|    00 00    Patch Common                          1-3-1  |
|    10 00    Patch Tone 1                          1-3-2  |
|    12 00    Patch Tone 2                                 |
|    14 00    Patch Tone 3                                 |
|    16 00    Patch Tone 4                                 |
+----------------------------------------------------------+
```

■1-3-1.Patch Common

```
+-------------------------------------------------------------------------------+
| Offset                                                                        |
|   Address   Size        Description              Data (Value)                 |
+-------------------------------------------------------------------------------+
|    00 00    0aaa aaaa   Patch Name 1             32 - 125                      |
|    00 01    0aaa aaaa   Patch Name 2             32 - 125                      |
|    00 02    0aaa aaaa   Patch Name 3             32 - 125                      |
|    00 03    0aaa aaaa   Patch Name 4             32 - 125                      |
|    00 04    0aaa aaaa   Patch Name 5             32 - 125                      |
|    00 05    0aaa aaaa   Patch Name 6             32 - 125                      |
|    00 06    0aaa aaaa   Patch Name 7             32 - 125                      |
|    00 07    0aaa aaaa   Patch Name 8             32 - 125                      |
|    00 08    0aaa aaaa   Patch Name 9             32 - 125                      |
|    00 09    0aaa aaaa   Patch Name 10            32 - 125                      |
|    00 0A    0aaa aaaa   Patch Name 11            32 - 125                      |
|    00 0B    0aaa aaaa   Patch Name 12            32 - 125                      |
+-------------------------------------------------------------------------------+
| 00 0C-00 30 0aaa aaaa   Reserved                 ---                          |
+-------------------------------------------------------------------------------+
|    00 31    0000 aaaa   Bend Range Up            0 - 12                        |
|    00 32    0000 aaaa   Bend Range Down          0 - 48   (0 - -48)           |
|    00 33    0000 000a   Solo Switch              0 - 1    (OFF,ON)            |
|    00 34    0000 000a   Solo Legato Switch       0 - 1    (OFF,ON)            |
|    00 35    0000 000a   Portamento Switch        0 - 1    (OFF,ON)            |
|    00 36    0000 000a   Portamento Mode          0 - 1    *1                  |
|    00 37    0000 000a   Portamento Type          0 - 1    (RATE,TIME)        |
|    00 38    0000 000a   Portamento Start         0 - 1    (PITCH,NOTE)       |
|    00 39    0aaa aaaa   Portamento Time          0 - 127                      |
+-------------------------------------------------------------------------------+
| 00 3A-00 3F 0aaa aaaa   Reserved                 ---                          |
+-------------------------------------------------------------------------------+
|    00 40    0000 000a   Velocity Range Switch    0 - 1    (OFF,ON)            |
+-------------------------------------------------------------------------------+
|    00 41    0aaa aaaa   Reserved                 ---                          |
+-------------------------------------------------------------------------------+
|    00 42    0000 00aa   Stretch Tune Depth       0 - 3    (OFF,1 - 3)        |
|    00 43    0000 000a   Voice Priority           0 - 1    *2                  |
|    00 44    0000 aaaa   Structure Type 1, 2      0 - 9    (1 - 10)           |
|    00 45    0000 00aa   Booster 1, 2             0 - 3    *3                  |
|    00 46    0000 aaaa   Structure Type 3, 4      0 - 9    (1 - 10)           |
|    00 47    0000 00aa   Booster 3, 4             0 - 3    *3                  |
+-------------------------------------------------------------------------------+
| 00 48-00 49 0aaa aaaa   Reserved                 ---                          |
+-------------------------------------------------------------------------------+
| Total size              00 00 00 4A                                          |
+-------------------------------------------------------------------------------+
```

* 1:NORMAL, LEGATO
* 2:LAST, LOUDEST
* 3:0, +6, +12, +18

■1-3-2.Patch Tone

```
+-------------------------------------------------------------------------------+
| Offset                                                                        |
|   Address   Size        Description              Data (Value)                 |
+-------------------------------------------------------------------------------+
|    00 00    0000 000a   Tone Switch              0 - 1    (OFF,ON)            |
|    00 01    0000 0000   Wave Group Type          0                           |
|    00 02    0000 00aa   Wave Group ID            0 - 3    *1                  |
|#   00 03    0000 aaaa   Wave Number              0 - 253                      |
|             0000 bbbb                            (001 - 254)                  |
|    00 05    0000 00aa   Wave Gain                0 - 3    *2                  |
|    00 06    0000 000a   FXM Switch               0 - 1    (OFF,ON)            |
|    00 07    0000 00aa   FXM Color                0 - 3    (1 - 4)            |
|    00 08    0000 aaaa   FXM Depth                0 - 15   (1 - 16)           |
+-------------------------------------------------------------------------------+
| 00 09-00 0A 0aaa aaaa   Reserved                 ---                          |
+-------------------------------------------------------------------------------+
|    00 0B    0aaa aaaa   Velocity Cross Fade      0 - 127                      |
|    00 0C    0aaa aaaa   Velocity Range Lower     1 - 127  *3                  |
|    00 0D    0aaa aaaa   Velocity Range Upper     1 - 127  *4                  |
|    00 0E    0aaa aaaa   Keyboard Range Lower     0 - 127  *5                  |
|    00 0F    0aaa aaaa   Keyboard Range Upper     0 - 127  *6                  |
+-------------------------------------------------------------------------------+
| 00 10-00 14 0aaa aaaa   Reserved                 ---                          |
+-------------------------------------------------------------------------------+
|    00 15    000a aaaa   Modulation Destination 1 0 - 15   *7                  |
|    00 16    0aaa aaaa   Modulation Depth 1       0 - 126  (-63 - +63)        |
|    00 17    000a aaaa   Modulation Destination 2 0 - 15   *7                  |
|    00 18    0aaa aaaa   Modulation Depth 2       0 - 126  (-63 - +63)        |
|    00 19    000a aaaa   Modulation Destination 3 0 - 15   *7                  |
|    00 1A    0aaa aaaa   Modulation Depth 3       0 - 126  (-63 - +63)        |
|    00 1B    000a aaaa   Modulation Destination 4 0 - 15   *7                  |
|    00 1C    0aaa aaaa   Modulation Depth 4       0 - 126  (-63 - +63)        |
|    00 1D    000a aaaa   Pitch Bend Destination 1 0 - 15   *7                  |
|    00 1E    0aaa aaaa   Pitch Bend Depth 1       0 - 126  (-63 - +63)        |
|    00 1F    000a aaaa   Pitch Bend Destination 2 0 - 15   *7                  |
|    00 20    0aaa aaaa   Pitch Bend Depth 2       0 - 126  (-63 - +63)        |
|    00 21    000a aaaa   Pitch Bend Destination 3 0 - 15   *7                  |
|    00 22    0aaa aaaa   Pitch Bend Depth 3       0 - 126  (-63 - +63)        |
|    00 23    000a aaaa   Pitch Bend Destination 4 0 - 15   *7                  |
|    00 24    0aaa aaaa   Pitch Bend Depth 4       0 - 126  (-63 - +63)        |
|    00 25    000a aaaa   Aftertouch Destination 1 0 - 15   *7                  |
|    00 26    0aaa aaaa   Aftertouch Depth 1       0 - 126  (-63 - +63)        |
|    00 27    000a aaaa   Aftertouch Destination 2 0 - 15   *7                  |
|    00 28    0aaa aaaa   Aftertouch Depth 2       0 - 126  (-63 - +63)        |
|    00 29    000a aaaa   Aftertouch Destination 3 0 - 15   *7                  |
|    00 2A    0aaa aaaa   Aftertouch Depth 3       0 - 126  (-63 - +63)        |
|    00 2B    000a aaaa   Aftertouch Destination 4 0 - 15   *7                  |
|    00 2C    0aaa aaaa   Aftertouch Depth 4       0 - 126  (-63 - +63)        |
+-------------------------------------------------------------------------------+
|    00 2D    0000 0aaa   LFO1 Waveform            0 - 7    *8                  |
|    00 2E    0000 000a   LFO1 Key Sync            0 - 1    (OFF,ON)            |
|    00 2F    0aaa aaaa   LFO1 Rate                0 - 127                      |
|    00 30    0000 0aaa   LFO1 Offset              0 - 4    *9                  |
|    00 31    0aaa aaaa   LFO1 Delay Time          0 - 127                      |
|    00 32    0000 00aa   LFO1 Fade Mode           0 - 3    *10                 |
|    00 33    0aaa aaaa   LFO1 Fade Time           0 - 127                      |
|    00 34    0000 000a   LFO1 Tempo Sync          0 - 1    (OFF,ON)            |
|    00 35    0000 0aaa   LFO2 Waveform            0 - 7    *8                  |
|    00 36    0000 000a   LFO2 Key Sync            0 - 1    (OFF,ON)            |
|    00 37    0aaa aaaa   LFO2 Rate                0 - 127                      |
|    00 38    0000 0aaa   LFO2 Offset              0 - 4    *9                  |
|    00 39    0aaa aaaa   LFO2 Delay Time          0 - 127                      |
|    00 3A    0000 00aa   LFO2 Fade Mode           0 - 3    *10                 |
|    00 3B    0aaa aaaa   LFO2 Fade Time           0 - 127                      |
|    00 3C    0000 000a   LFO2 Tempo Sync          0 - 1    (OFF,ON)            |
+-------------------------------------------------------------------------------+
|    00 3D    0aaa aaaa   Coarse Tune              0 - 96   (-48 - +48)        |
|    00 3E    0aaa aaaa   Fine Tune                0 - 100  (-50 - +50)        |
|    00 3F    000a aaaa   Random Pitch Depth       0 - 30   *11                 |
|    00 40    0000 aaaa   Pitch Keyfollow          0 - 15   *12                 |
+-------------------------------------------------------------------------------+
```

```
+-------------------------------------------------------------------------------+
|    00 41    000a aaaa   Pitch Envelope Depth            0 - 24   (-12 - +12) |
|    00 42    0aaa aaaa   Pitch Envelope Velocity Sens    0 - 125  *13          |
|    00 43    0000 aaaa   Pitch Envelope Velocity Time1   0 - 14   *14          |
|    00 44    0000 aaaa   Pitch Envelope Velocity Time4   0 - 14   *14          |
|    00 45    0000 aaaa   Pitch Envelope Time Keyfollow   0 - 14   *14          |
|    00 46    0aaa aaaa   Pitch Envelope Time 1           0 - 127                |
|    00 47    0aaa aaaa   Pitch Envelope Time 2           0 - 127                |
|    00 48    0aaa aaaa   Pitch Envelope Time 3           0 - 127                |
|    00 49    0aaa aaaa   Pitch Envelope Time 4           0 - 127                |
|    00 4A    0aaa aaaa   Pitch Envelope Level 1          0 - 126  (-63 - +63)  |
|    00 4B    0aaa aaaa   Pitch Envelope Level 2          0 - 126  (-63 - +63)  |
|    00 4C    0aaa aaaa   Pitch Envelope Level 3          0 - 126  (-63 - +63)  |
|    00 4D    0aaa aaaa   Pitch Envelope Level 4          0 - 126  (-63 - +63)  |
|    00 4E    0aaa aaaa   Pitch LFO1 Depth                0 - 126  (-63 - +63)  |
|    00 4F    0aaa aaaa   Pitch LFO2 Depth                0 - 126  (-63 - +63)  |
+-------------------------------------------------------------------------------+
|    00 50    0000 0aaa   Filter Type                     0 - 4    *15          |
|    00 51    0aaa aaaa   Cutoff Frequency                0 - 127                |
|    00 52    0000 aaaa   Cutoff Keyfollow                0 - 15   *12          |
|    00 53    0aaa aaaa   Resonance                       0 - 127                |
|    00 54    0aaa aaaa   Resonance Velocity Sens         0 - 125  *13          |
|    00 55    0aaa aaaa   Filter Envelope Depth           0 - 126  (-63 - +63)  |
|    00 56    0000 0aaa   Filter Envelope Velocity Curve  0 - 6    (1 - 7)      |
|    00 57    0aaa aaaa   Filter Envelope Velocity Sens   0 - 125  *13          |
|    00 58    0000 aaaa   Filter Envelope Velocity Time1  0 - 14   *14          |
|    00 59    0000 aaaa   Filter Envelope Velocity Time4  0 - 14   *14          |
|    00 5A    0000 aaaa   Filter Envelope Time Keyfollow  0 - 14   *14          |
|    00 5B    0aaa aaaa   Filter Envelope Time 1          0 - 127                |
|    00 5C    0aaa aaaa   Filter Envelope Time 2          0 - 127                |
|    00 5D    0aaa aaaa   Filter Envelope Time 3          0 - 127                |
|    00 5E    0aaa aaaa   Filter Envelope Time 4          0 - 127                |
|    00 5F    0aaa aaaa   Filter Envelope Level 1         0 - 127                |
|    00 60    0aaa aaaa   Filter Envelope Level 2         0 - 127                |
|    00 61    0aaa aaaa   Filter Envelope Level 3         0 - 127                |
|    00 62    0aaa aaaa   Filter Envelope Level 4         0 - 127                |
|    00 63    0aaa aaaa   Filter LFO1 Depth               0 - 126  (-63 - +63)  |
|    00 64    0aaa aaaa   Filter LFO2 Depth               0 - 126  (-63 - +63)  |
+-------------------------------------------------------------------------------+
|    00 65    0aaa aaaa   Tone Level                      0 - 127                |
|    00 66    0000 00aa   Bias Direction                  0 - 3    *16          |
|    00 67    0aaa aaaa   Bias Point                      0 - 127  (C-1 - G9)   |
|    00 68    0000 aaaa   Bias Level                      0 - 14   *14          |
|    00 69    0000 0aaa   Amp Envelope Velocity Curve     0 - 6    (1 - 7)      |
|    00 6A    0aaa aaaa   Amp Envelope Velocity Sens      0 - 125  *13          |
|    00 6B    0000 aaaa   Amp Envelope Velocity Time1     0 - 14   *14          |
|    00 6C    0000 aaaa   Amp Envelope Velocity Time4     0 - 14   *14          |
|    00 6D    0000 aaaa   Amp Envelope Time Keyfollow     0 - 14   *14          |
|    00 6E    0aaa aaaa   Amp Envelope Time 1             0 - 127                |
|    00 6F    0aaa aaaa   Amp Envelope Time 2             0 - 127                |
|    00 70    0aaa aaaa   Amp Envelope Time 3             0 - 127                |
|    00 71    0aaa aaaa   Amp Envelope Time 4             0 - 127                |
|    00 72    0aaa aaaa   Amp Envelope Level 1            0 - 127                |
|    00 73    0aaa aaaa   Amp Envelope Level 2            0 - 127                |
|    00 74    0aaa aaaa   Amp Envelope Level 3            0 - 127                |
|    00 75    0aaa aaaa   Amp LFO1 Depth                  0 - 126  (-63 - +63)  |
|    00 76    0aaa aaaa   Amp LFO2 Depth                  0 - 126  (-63 - +63)  |
|    00 77    0aaa aaaa   Tone Pan                        0 - 127  (L64 - 63R)  |
|    00 78    0000 aaaa   Pan Key follow                  0 - 14   *14          |
|    00 79    00aa aaaa   Random Pan Switch               0,63     (OFF,ON)     |
|    00 7A    0aaa aaaa   Alternate Pan Depth             1 - 127  (L63 - 63R)  |
|    00 7B    0aaa aaaa   Pan LFO1 Depth                  0 - 126  (-63 - +63)  |
|    00 7C    0aaa aaaa   Pan LFO2 Depth                  0 - 126  (-63 - +63)  |
+-------------------------------------------------------------------------------+
| 00 7D-01 00 0aaa aaaa   Reserved                        ---                    |
+-------------------------------------------------------------------------------+
| Total size              00 00 01 01                                          |
+-------------------------------------------------------------------------------+
```

* 1: Correspondence between the "Waveform List" and "Wave Group Type, Wave Group ID, Wave Number"

Wave	Wave Group Type	Wave Group ID	Wave Number
A001-254	0	1	0 - 253
B001-251	0	2	0 - 250
C001-236	0	3	0 - 235

* 2:-6, 0, +6, +12
* 3:1 - Upper
* 4:Lower - 127
* 5:C-1 - Upper
* 6:Lower - G9
* 7:OFF, PCH, CUT, RES, LEV, PAN, L1P, L2P, L1F, L2F, L1A, L2A, PL1, PL2, L1R, L2R
* 8:TRI, SIN, SAW, SQR, TRP, S&H, RND, CHS
* 9:-100, -50, 0, +50, +100
* 10:ON-IN, ON-OUT, OFF-IN, OFF-OUT
* 11:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200
* 12:-100, -70, -50, -30, -10, 0, +10, +20, +30, +40, +50, +70, +100, +120, +150, +200
* 13:-100 - +150
* 14:-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100
* 15:OFF, LPF, BPF, HPF, PKG
* 16:LOWER, UPPER, LOW&UP, ALL

■1-4.Rhythm Setup

```
+----------------------------------------------------------+
| Offset                                                   |
|   Address   Description                                  |
+----------------------------------------------------------+
|    00 00    Rhythm Common                         1-4-1  |
|    23 00    Rhythm Note for Key# 35               1-4-2  |
|    24 00    Rhythm Note for Key# 36                      |
|       :                                                  |
|    62 00    Rhythm Note for Key# 98                      |
+----------------------------------------------------------+
```

■1-4-1.Rhythm Common

```
+-------------------------------------------------------------------------------+
| Offset                                                                        |
|   Address   Size        Description              Data (Value)                 |
+-------------------------------------------------------------------------------+
|    00 00    0aaa aaaa   Rhythm Name 1            32 - 125                      |
|    00 01    0aaa aaaa   Rhythm Name 2            32 - 125                      |
|    00 02    0aaa aaaa   Rhythm Name 3            32 - 125                      |
|    00 03    0aaa aaaa   Rhythm Name 4            32 - 125                      |
|    00 04    0aaa aaaa   Rhythm Name 5            32 - 125                      |
|    00 05    0aaa aaaa   Rhythm Name 6            32 - 125                      |
|    00 06    0aaa aaaa   Rhythm Name 7            32 - 125                      |
|    00 07    0aaa aaaa   Rhythm Name 8            32 - 125                      |
|    00 08    0aaa aaaa   Rhythm Name 9            32 - 125                      |
|    00 09    0aaa aaaa   Rhythm Name 10           32 - 125                      |
|    00 0A    0aaa aaaa   Rhythm Name 11           32 - 125                      |
|    00 0B    0aaa aaaa   Rhythm Name 12           32 - 125                      |
+-------------------------------------------------------------------------------+
| Total size              00 00 00 0C                                          |
+-------------------------------------------------------------------------------+
```

■1-4-2.Rhythm Note

```
Offset
   Address   Size        Description                     Data (Value)

    00 00   0000 000a    Tone Switch                     0 - 1  (OFF,ON)
    00 01   0000 0000    Wave Group Type                 0
    00 02   0000 00aa    Wave Group ID                   0 - 3    *1
#   00 03   0000 aaaa    Wave Number                     0 - 254
            0000 bbbb                                       (001 - 255)
    00 05   0000 00aa    Wave Gain                       0 - 3    *2
    00 06   0000 aaaa    Bend Range                      0 - 12
    00 07   000a aaaa    Mute Group                      0 - 31 (OFF,1 - 31)
    00 08   0000 000a    Envelope Mode                   0 - 1    *3

 00 09-00 0B   0aaa aaaa Reserved                        --

    00 0C   0aaa aaaa    Coarse Tune                     0 - 120 (-60 - +60)
    00 0D   0aaa aaaa    Fine Tune                       0 - 100 (-50 - +50)
    00 0E   0aaa aaaa    Random Pitch Depth              0 - 30   *4
    00 0F   000a aaaa    Pitch Envelope Depth            0 - 24   (-12 - +12)
    00 10   0aaa aaaa    Pitch Envelope Velocity Sens    0 - 125  *5
    00 11   0000 aaaa    Pitch Envelope Velocity Time    0 - 14   *6
    00 12   0aaa aaaa    Pitch Envelope Time 1           0 - 127
    00 13   0aaa aaaa    Pitch Envelope Time 2           0 - 127
    00 14   0aaa aaaa    Pitch Envelope Time 3           0 - 127
    00 15   0aaa aaaa    Pitch Envelope Time 4           0 - 127
    00 16   0aaa aaaa    Pitch Envelope Level 1          0 - 126 (-63 - +63)
    00 17   0aaa aaaa    Pitch Envelope Level 2          0 - 126 (-63 - +63)
    00 18   0aaa aaaa    Pitch Envelope Level 3          0 - 126 (-63 - +63)
    00 19   0aaa aaaa    Pitch Envelope Level 4          0 - 126 (-63 - +63)

    00 1A   0000 0aaa    Filter Type                     0 - 4    *7
    00 1B   0aaa aaaa    Cutoff Frequency                0 - 127
    00 1C   0aaa aaaa    Resonance                       0 - 127
    00 1D   0aaa aaaa    Resonance Velocity Sens         0 - 125  *5
    00 1E   0aaa aaaa    Filter Envelope Depth           0 - 126  (-63 - +63)
    00 1F   0aaa aaaa    Filter Envelope Velocity Sens   0 - 125  *5
    00 20   0000 aaaa    Filter Envelope Velocity Time   0 - 14   *6
    00 21   0aaa aaaa    Filter Envelope Time 1          0 - 127
    00 22   0aaa aaaa    Filter Envelope Time 2          0 - 127
    00 23   0aaa aaaa    Filter Envelope Time 3          0 - 127
    00 24   0aaa aaaa    Filter Envelope Time 4          0 - 127
    00 25   0aaa aaaa    Filter Envelope Level 1         0 - 127
    00 26   0aaa aaaa    Filter Envelope Level 2         0 - 127
    00 27   0aaa aaaa    Filter Envelope Level 3         0 - 127
    00 28   0aaa aaaa    Filter Envelope Level 4         0 - 127

    00 29   0aaa aaaa    Tone Level                      0 - 127
    00 2A   0aaa aaaa    Amp Envelope Velocity Sens      0 - 125  *5
    00 2B   0000 aaaa    Amp Envelope Velocity Time      0 - 14   *6
    00 2C   0aaa aaaa    Amp Envelope Time 1             0 - 127
    00 2D   0aaa aaaa    Amp Envelope Time 2             0 - 127
    00 2E   0aaa aaaa    Amp Envelope Time 3             0 - 127
    00 2F   0aaa aaaa    Amp Envelope Time 4             0 - 127
    00 30   0aaa aaaa    Amp Envelope Level 1            0 - 127
    00 31   0aaa aaaa    Amp Envelope Level 2            0 - 127
    00 32   0aaa aaaa    Amp Envelope Level 3            0 - 127
    00 33   0aaa aaaa    Tone Pan                        0 - 127 (L64 - 63R)
    00 34   00aa aaaa    Random Pan Switch               0,63    (OFF,ON)
    00 35   0aaa aaaa    Alternate Pan Depth             1 - 127 (L63 - 63R)

    00 36   0000 00aa    M-FX Switch                     0 - 3    *8

    00 37   0aaa aaaa    Reserved                        --

    00 38   0aaa aaaa    Delay Send Level                0 - 127
    00 39   0aaa aaaa    Reverb Send Level               0 - 127

 Total size   00 00 00 3A
```

* 1: Correspondence between the "Waveform List" and "Wave Group Type, Wave Group ID, Wave Number"

Wave	Wave Group Type	Wave Group ID	Wave Number
A001-254	0	1	0 - 253
B001-251	0	2	0 - 250
C001-236	0	3	0 - 235

* 2:-6, 0, +6, +12
* 3:NO-SUS, SUSTAIN
* 4:0, 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 20, 30, 40, 50, 60, 70, 80, 90, 100, 200, 300, 400, 500, 600, 700, 800, 900, 1000, 1100, 1200
* 5:-100 - +150
* 6:-100, -70, -50, -40, -30, -20, -10, 0, +10, +20, +30, +40, +50, +70, +100
* 7:OFF, LPF, BPF, HPF, PKG
* 8:OFF, ON, Reserved, Reserved

■1-5. Sequencer Temporary Pattern Setup

```
Offset
   Address   Size        Description                     Data (Value)

    00 00   0aaa aaaa    Temporary Pattern Setup         0 - 127
      :       :             :

 Total size   0F 7F 7F 7F
```

■1-6.Sequencer Temporary Pattern Body

```
Offset
   Address   Size        Description                     Data (Value)

    00 00   0aaa aaaa    Temporary Pattern Body          0 - 127
      :       :             :

 Total size   7F 7F 7F 7F
```

■2. GS (Model ID=42H)

```
Start
   address   Description

   40 11 00  Scale Tune Part1                            2-1
   40 12 00     :      Part2
   40 13 00     :      Part3
   40 14 00     :      Part4
   40 15 00     :      Part5
   40 16 00     :      Part6
   40 17 00     :      Part7
```

■2-1. Scale Tune

```
Offset
   Address   Size        Description                     Data (Value)

    40      0aaa aaaa    Scale Tune for C                0 - 127 (-64 - +63)
    41      0aaa aaaa    Scale Tune for C#               0 - 127 (-64 - +63)
    42      0aaa aaaa    Scale Tune for D                0 - 127 (-64 - +63)
    43      0aaa aaaa    Scale Tune for D#               0 - 127 (-64 - +63)
    44      0aaa aaaa    Scale Tune for E                0 - 127 (-64 - +63)
    45      0aaa aaaa    Scale Tune for F                0 - 127 (-64 - +63)
    46      0aaa aaaa    Scale Tune for F#               0 - 127 (-64 - +63)
    47      0aaa aaaa    Scale Tune for G                0 - 127 (-64 - +63)
    48      0aaa aaaa    Scale Tune for G#               0 - 127 (-64 - +63)
    49      0aaa aaaa    Scale Tune for A                0 - 127 (-64 - +63)
    4A      0aaa aaaa    Scale Tune for A#               0 - 127 (-64 - +63)
    4B      0aaa aaaa    Scale Tune for B                0 - 127 (-64 - +63)

 Total size   00 00 0C
```

Note) In order for GS exclusive messages to be received correctly by the MC-307, the starting address of the message must be the starting address of each part (the address of Scale Tune C; i.e., offset 40).

■3. Quick SysEx (Model ID=3AH)

```
Start
   address   Description

   30 00     Quick SysEx Part1                           3-1
   31 00       :       Part2
     :         :
   36 00       :       Part7

   39 00       :       PartR                             3-2

   70 00       :       Sequencer                         3-3
```

■3-1. Quick SysEx Part

```
Offset
   Address  DataL     DataE       Description            Data (Value L)

    0F    0000 aaaa 0000 0000     LFO1 Wave Form         0 - 7    *1
    14    0aaa aaaa 0000 0000     LFO1 Fade Time         0 - 127
    15    0aaa aaaa 0000 0000     Coarse Tune            16 - 112 (-48 - +48)
    19    0aaa aaaa 0000 0000     Pitch Env Depth        52 - 76  (-12 - +12)
    1A    0aaa aaaa 0000 0000     Pitch Env Attack       0 - 127
    1B    0aaa aaaa 0000 0000     Pitch Env Decay        0 - 127
    1C    0aaa aaaa 0000 0000     Filter Env Sustain     1 - 127 (-63 - +63)
    1D    0aaa aaaa 0000 0000     Filter Env Release     0 - 127
    1F    0aaa aaaa 0000 0000     Amp Env Sustain        0 - 127
    22    0000 0aaa 0000 0000     Filter Type            0 - 4    *2
    23    0aaa aaaa 0000 0000     Tone Pan               0 - 127 (-64 - +63)
    24    0aaa aaaa 0000 0000     Tone Level             0 - 127
    25    00aa aaaa 0000 0000     Random Pan Switch      0,63    (OFF,ON)
    27    0aaa aaaa 0000 0000     Pitch Env Sustain      1 - 127 (-63 - +63)
    28    0aaa aaaa 0000 0000     Pitch Env Release      0 - 127
    55    0aaa aaaa 0000 0000     Part Key Shift         16 - 112 (-48 - +48)
    56    0000 00aa 0000 0000     Part M-FX Switch       0 - 3    *3
```

* 1:TRI, SIN, SAW, SQR, TRP, S&H, RND, CHS
* 2:OFF, LPF, BPF, HPF, PKG
* 3:OFF, ON, Reserved, Reserved

Note) In order for quick exclusive messages to be received correctly by the MC-307, the starting address of the message must be the starting address of each part.

■3-2. Quick SysEx Rhythm

```
Offset
   Address  DataL     DataE *1    Description            Data (Value L)

    15    0aaa aaaa 0000 aaaa     Coarse Tune            0 - 120(-60 - +60)
    19    0aaa aaaa 0000 aaaa     Pitch Env Depth        52 - 76 (-12 - +12)
    1A    0aaa aaaa 0000 aaaa     Pitch Env Attack       0 - 127
    1B    0aaa aaaa 0000 aaaa     Pitch Env Decay        0 - 127
    1C    0aaa aaaa 0000 aaaa     Filter Env Sustain     0 - 127
    1D    0aaa aaaa 0000 aaaa     Filter Env Release     0 - 127
    1F    0aaa aaaa 0000 aaaa     Amp Env Sustain        0 - 127
    22    0000 0aaa 0000 aaaa     Filter Type            0 - 4    *2
    23    0aaa aaaa 0000 aaaa     Tone Pan               0 - 126 (-63 - +63)
    24    0aaa aaaa 0000 aaaa     Tone Level             0 - 127
    25    00aa aaaa 0000 aaaa     Random Pan Switch      0,63    (OFF,ON)
    27    0aaa aaaa 0000 aaaa     Pitch Env Sustain      0 - 127
    28    0aaa aaaa 0000 aaaa     Pitch Env Release      0 - 127
    47    0aaa aaaa 0000 aaaa     Resonance              0 - 127
    48    0aaa aaaa 0000 aaaa     Amp Env Release Time   0 - 127
    49    0aaa aaaa 0000 aaaa     Amp Env Attack Time    0 - 127
    4A    0aaa aaaa 0000 aaaa     Cutoff Frequency       0 - 127
    4B    0aaa aaaa 0000 aaaa     Amp Env Decay          0 - 127
    4D    0aaa aaaa 0000 aaaa     Fine Tune              14 - 114 (-50 - +50)
    51    0aaa aaaa 0000 aaaa     Filter Env Depth       1 - 127 (-63 - +63)
    52    0aaa aaaa 0000 aaaa     Filter Env Attack      0 - 127
    53    0aaa aaaa 0000 aaaa     Filter Env Decay       0 - 127
    55    0aaa aaaa 0000 0000     Part Key Shift         16 - 112 (-48 - +48)
    56    0000 00aa 0000 0000     Part M-FX Switch       0 - 4    *3
```

* 1:Use when transmitting to and from each Rhythm group in Part R.

Rhythm group	DataE	Rhythm group	DataE
BD	0	CYM	4
SD	1	TOM/PERC	5
HH	2	HIT	6
CLP	3	OTHERS	7
CYM	4	ALL	9

* 2:OFF, LPF, BPF, HPF, PKG
* 3:OFF, ON, <Reserved, Reserved>, RHY

Note) In order for quick exclusive messages to be received correctly by the MC-307, the starting address of the message must be the starting address of each part.

■3-3. Quick SysEx Sequencer

```
Offset
   Address  DataL     DataE       Description            Data(Value L/E)

    01    0000 aaaa 0000 000a     Part Mute              0-6,9 / 0,1
    02    0000 aaaa 0000 000a     Drum Mute              0-7*1 / 0,1
    03    0aaa aaaa 0aaa aaaa     Tempo                  7-93 / 0-127
```

* 1:BD,SD,HH,CLP,CYM,TOM/PEC,HIT,OTHERS

■Address block map

The following is an outline of the address map for Exclusive messages

```
Address(H)              Block                    Sub Block           Reference
==========  =====================     ==========================    ========
00 00 00 00 +...........................+.............................+.......+
            | System common            |...........................|  1-1-1 |
            +...........................+.............................+.......+
            | Scale tune               |     | Part 1               |  1-1-2 |
            :                          : .   |   :                  :
            :                          :  .  | Part 7               |
01 00 00 00 +...........................+.............................+.......+
            | Part Info                |     | Common               |  1-2-1 |
            :                          : .   +...........................+.......+
            :                          : .   | Part 1               |  1-2-2 |
            :                          : .   |   :                  :
            :                          : .   | Part 7               |
            :                          : .   | Part R               |
02 00 00 00 +...........................+     | Part 1     | Common  |  1-3-1 |
            | Temporary Patch          |     |   :        +...........+.......+
            :                          : .   | Part 7     | Tone 1   |  1-3-2 |
            :                          :  .  |            |   :      :
            :                          :     |            | Tone 4   |
02 09 00 00 +...........................+.....+.............+...........+.......+
            | Temporary                |     | Common               |  1-4-1 |
            | Rhythm Setup             |     +...........................+.......+
            :                          : .   | Note# 35             |  1-4-2 |
            :                          : .   |   :                  :
            :                          :  .  | Note# 98             |
30 00 00 00 +...........................+.............................+.......+
            | Temporary                |...........................|  1-5   |
            | Pattern Setup            |                           |
            | Sequencer                |...........................|
            :         :                +.............................+.......+
            :         :
            :         :
            :         :
40 00 00 00 +...........................+.............................+.......+
            | Temporary                |...........................|  1-6   |
            | Pattern Body             |...........................|
            +...........................+
            :         :
            :         :
            :         :
```

2. Supplementary material

■Decimal/Hexadecimal table

MIDI uses 7-bit hexadecimal values to indicate data values and the address and size of exclusive messages. The following table shows the correspondence between decimal and hexadecimal numbers.

* Hexadecimal values are indicated by a following 'H.'

D	H	D	H	D	H	D	H
0	00H	32	20H	64	40H	96	60H
1	01H	33	21H	65	41H	97	61H
2	02H	34	22H	66	42H	98	62H
3	03H	35	23H	67	43H	99	63H
4	04H	36	24H	68	44H	100	64H
5	05H	37	25H	69	45H	101	65H
6	06H	38	26H	70	46H	102	66H
7	07H	39	27H	71	47H	103	67H
8	08H	40	28H	72	48H	104	68H
9	09H	41	29H	73	49H	105	69H
10	0AH	42	2AH	74	4AH	106	6AH
11	0BH	43	2BH	75	4BH	107	6BH
12	0CH	44	2CH	76	4CH	108	6CH
13	0DH	45	2DH	77	4DH	109	6DH
14	0EH	46	2EH	78	4EH	110	6EH
15	0FH	47	2FH	79	4FH	111	6FH
16	10H	48	30H	80	50H	112	70H
17	11H	49	31H	81	51H	113	71H
18	12H	50	32H	82	52H	114	72H
19	13H	51	33H	83	53H	115	73H
20	14H	52	34H	84	54H	116	74H
21	15H	53	35H	85	55H	117	75H
22	16H	54	36H	86	56H	118	76H
23	17H	55	37H	87	57H	119	77H
24	18H	56	38H	88	58H	120	78H
25	19H	57	39H	89	59H	121	79H
26	1AH	58	3AH	90	5AH	122	7AH
27	1BH	59	3BH	91	5BH	123	7BH
28	1CH	60	3CH	92	5CH	124	7CH
29	1DH	61	3DH	93	5DH	125	7DH
30	1EH	62	3EH	94	5EH	126	7EH
31	1FH	63	3FH	95	5FH	127	7FH

D: decimal
H: hexadecimal

* Decimal expressions such as used for MIDI channel, Bank Select, and Program Change will be the value 1 greater than the decimal value given in the above table.
* Since each MIDI byte carries 7 significant data bits, each byte can express a maximum of 128 different values. Data for which higher resolution is required must be transmitted using two or more bytes. For example a value indicated as a two-byte value of aa bbH would have a value of aa x 128 + bb.
* For a signed number (+/-), 00H = -64, 40H = +/-0, and 7FH = +63. I.e., the decimal equivalent will be 64 less than the decimal value given in the above table. For a two-byte signed number, 00 00H = -8192, 40 00H = +/-0, and 7F 7FH = +8191. For example the decimal expression of aa bbH would be aa bbH - 40 00H = (aa x 128 + bb - 64 x 128.
* Hexadecimal notation in two 4-bit units is used for data indicated as "nibbled". The nibbled two-byte value of 0a 0b H would be a x 16 + b.

<Example 1> What is the decimal equivalent of 5AH?
From the above table, 5AH = 90.

<Example 2> What is the decimal equivalent of the 7-bit hexadecimal values 12 34H?
From the above table, 12H = 18 and 34H = 52
Thus, 18 x 128 + 52 = 2356

<Example 3> What is the decimal equivalent of the nibbled expression 0A 03 09 0DH?
From the above table, 0AH = 10, 03H = 3, 09H = 9, 0DH = 13
Thus, the result is ((10 x 16 + 3) x 16 + 9) x 16 + 13 = 41885

<Example 4> What is the nibbled equivalent of the decimal number 1258?

```
16 ) 1258
16 ) 78          ...10
16 )  4          ...14
      0          ... 4
```

From the above table, 0=00H, 4=04H, 14=0EH, 10=0AH
Thus the result is 00 04 0E 0AH

MIDI Implementation

■ASCII code table

D	H	Char	D	H	Char	D	H	Char
32	20H	SP	64	40H	@	96	60H	`
33	21H	!	65	41H	A	97	61H	a
34	22H	"	66	42H	B	98	62H	b
35	23H	#	67	43H	C	99	63H	c
36	24H	$	68	44H	D	100	64H	d
37	25H	%	69	45H	E	101	65H	e
38	26H	&	70	46H	F	102	66H	f
39	27H	'	71	47H	G	103	67H	g
40	28H	(	72	48H	H	104	68H	h
41	29H	)	73	49H	I	105	69H	i
42	2AH	*	74	4AH	J	106	6AH	j
43	2BH	+	75	4BH	K	107	6BH	k
44	2CH	,	76	4CH	L	108	6CH	l
45	2DH	–	77	4DH	M	109	6DH	m
46	2EH	.	78	4EH	N	110	6EH	n
47	2FH	/	79	4FH	O	111	6FH	o
48	30H	0	80	50H	P	112	70H	p
49	31H	1	81	51H	Q	113	71H	q
50	32H	2	82	52H	R	114	72H	r
51	33H	3	83	53H	S	115	73H	s
52	34H	4	84	54H	T	116	74H	t
53	35H	5	85	55H	U	117	75H	u
54	36H	6	86	56H	V	118	76H	v
55	37H	7	87	57H	W	119	77H	w
56	38H	8	88	58H	X	120	78H	x
57	39H	9	89	59H	Y	121	79H	y
58	3AH	:	90	5AH	Z	122	7AH	z
59	3BH	;	91	5BH	[	123	7BH	{
60	3CH	<	92	5CH	¥	124	7CH		
61	3DH	=	93	5DH	]	125	7DH	}
62	3EH	>	94	5EH	^			
63	3FH	?	95	5FH	_			

D: decimal
H: hexadecimal

Note) SP indicates "space."

■Examples of actual MIDI messages

<Example 1> 92 3E 5F
9n is the Note On status and 'n' is the MIDI channel number. Since 2H = 2, 3EH = 62, and 5FH = 95, this is a Note On message of MIDI CH = 3, note number 62 (note name D4) and velocity 95.

<Example 2> C9 49
CnH is the Program Change status and 'n' is the MIDI channel number. Since 9H = 9, and 49H = 73, this is a Program Change message of MIDI CH = 10, Program number 74.

<Example 3> EA 00 28
EnH is the Pitch Bend Change status and 'n' is the MIDI channel number. The 2nd byte (00H=0) is the LSB of the Pitch Bend value, and the 3rd byte (28H=40) is the MSB. However since the Pitch Bend is a signed number with 0 at 40 00H (= 64 x 128 + 0 = 8192), the Pitch Bend value in this case is

28 00H - 40 00H = 40 x 128 + 0 - (64 x 128 + 0) = 5120 - 8192 = -3072

If we assume that the Pitch Bend Sensitivity is set to two semitones, the pitch will change only -200 cents for a Pitch Bend value of -8192 (00 00H). Thus, this message is specifying a Pitch Bend of -200 x (-3072) ÷ (-8192) = -75 cents on MIDI CH = 7.

<Example 4> B3 64 00 65 00 06 0C 26 00 64 7F 65 7F
BnH is the Control Change status, and 'n' is the MIDI channel number. In Control Change messages, the 2nd byte is the controller number, and the 3rd byte is the parameter value. MIDI allows what is known as "running status," when if messages of the the same status follow each other, it is permitted to omit the second and following status bytes. In the message above, running status is being used, meaning that the message has the following content.

B3 64 00	MIDI CH = 4, RPN parameter number LSB: 00H
(B3) 65 00	MIDI CH = 4, RPN parameter number MSB: 00H
(B3) 06 0C	MIDI CH = 4, parameter value MSB: 0CH
(B3) 26 00	MIDI CH = 4, parameter value LSB: 00H
(B3) 64 7F	MIDI CH = 4, RPN parameter number LSB: 7FH
(B3) 65 7F	MIDI CH = 4, RPN parameter number MSB: 7FH

Thus, this message transmits a parameter value of 0C 00H to RPN parameter number 00 00H on MIDI CH = 4, and then sets the RPN parameter number to 7F 7FH.

The function assigned to RPN parameter number 00 00H is Pitch Bend Sensitivity, and the MSB of the parameter value indicates semitone steps. Since the MSB of this parameter value is 0CH = 12, the maximum width of pitch bend is being set to ±12 semitones (1 octave).

Once the parameter number has been set for RPN or NRPN, all subsequent Data Entry messages on that channel will be effective. Thus, it is recommended that after you have made the change you want, you set the parameter number to 7F 7FH (an "unset" or "null"

setting). The final (B3) 64 7F (B3) 65 7F is for this purpose.

It is not a good idea to store many events within the data of a song (e.g., a Standard MIDI File song) using running status as shown in <Example 4>. When the song is paused, fast-forwarded or rewound, the sequencer may not be able to transmit the proper status, causing the sound source to misinterpret the data. It is best to attach the proper status byte to all events.

It is also important to transmit RPN or NRPN parameter number settings and parameter values in the correct order. In some sequencers, data events recorded in the same clock (or a nearby clock) can sometimes be transmitted in an order other than the order in which they were recorded. It is best to record such events at an appropriate interval (1 tick at TPQN=96, or 5 ticks at TPQN=480).

* TPQN : Ticks Per Quarter Note (i.e., the time resolution of the sequencer)

■Examples of system exclusive messages and calculating the checksum
Roland exclusive messages (RQ1, DT1) are transmitted with a checksum at the end of the data (before F7) to check that the data was received correctly. The value of the checksum is determined by the address and data (or size) of the exclusive message.

●How to calculate the checksum
The checksum consists of a value whose lower 7 bits are 0 when the address, size and checksum itself are added.
The following formula shows how to calculate the checksum when the exclusive message to be transmitted has an address of aa bb cc ddH, and data or size of ee ffH.

aa + bb + cc + dd + ee + ff = total
total ÷ 128 = quotient ... remainder
128 - remainder = checksum

<Example 1> Setting the REVERB TYPE to HALL2 (DT1)
Referring to "3. Parameter address map," the starting address for Part Information is 01 00 00 00H, and offset address of Part Information Common is 00 00H, and the REVERB TYPE address is 00 28H. Therefore, the address will be

```
   01 00 00 00H
         00 00H
+)       00 28H
   01 00 00 28H
```

Since HALL2 is parameter value 05H,

F0	41	10	00H	0BH	12	01 00 00 28	05	??	F7
(1)	(2)	(3)	(4)	(5)	(6)	address	data	checksum	(7)

(1) Exclusive status (2) ID number (Roland)(3) device ID (17)
(4), (5) model ID (MC-307)(6)command ID (DT1)(7) EOX

Next we calculate the checksum.

01H + 00H + 00H + 28H + 05H = 1 + 0 + 0 + 40 + 5 = 46(sum)
46 (total) ÷ 128 = 0 (quotient)...46 (remainder)
checksum = 128 - 46 (quotient) = 82 = 52H

This means that the message transmitted will be F0 41 10 00 0B 12 01 00 00 28 05 52 F7.

<Example 2> Obtaining part information data (RQ1)
Referring to "3. Parameter address map," the starting addresses for Part Information are assigned as follows.

01 00 00 00H	Part Info Common
01 00 10 00H	Part Info Part 1
01 00 11 00H	Part Info Part 2
01 00 16 00H	Part Info Part 7
01 00 19 00H	Part Info Part R

Since the size of Part Information Part is 00 00 00 1AH, this size is added to the starting address of Part Information Part R, to obtain

```
   01 00 19 00H
+) 00 00 00 1AH
   01 00 19 1AH
```

Therefore, the size of the data to be obtained is

01 00 19 1AH

-) 01 00 00 00H
  00 00 19 1AH

F0	41	10	00	0B	11	01 00 00 00	00 00 19 1A	??	F7
(1)	(2)	(3)	(4)	(5)	(6)	address	data	checksum	(7)

(1) Exclusive status (2) ID number (Roland)(3) Device ID (17)
(4), (5) Model ID (MC-307)(6) Command ID (RQ1)(7) EOX

When the checksum is calculated in the same way as in <Example 2>, we have the following message to be transmitted: F0 41 10 00 0B 11 01 00 00 00 00 00 19 1A 4C F7.

●Scale Tune function (Model ID : 42H (GS), address: 40 1x 40H)

Scale Tune is a function that makes fine adjustments to the pitch of each note C-B. Settings are made for one octave, and applied to the notes of all octaves. By making Scale Tune settings you can use tunings and temperaments other than the standard Equal Temperament. Here we give three types of settings as examples.

○Equal temperament

This temperament divides the octave into 12 equal steps, and is the temperament most frequently used today, especially in western music. Initially, the Scale Tune function of this instrument is set to Equal Temperament.

○Just intonation (tonic of C)

The primary triads sound more beautiful in just intonation than in equal temperament. However, this applies only in one key, and chords will be discordant if you play in a different key. The settings here are for a tonic of C.

○Arabian-type scale

The Scale Tune function allow you to use various tunings of ethnic music. Here is one of the Arabian scales.

Setting examples

Note	Equal Temp.	Just (in C)	Arabian-type scale
C	0	0	-6
C#	0	-8	+45
D	0	+4	-2
Eb	0	+16	-12
E	0	-14	-51
F	0	-2	-8
F#	0	-10	+43
G	0	+2	-4
G#	0	+14	+47
A	0	-16	0
Bb	0	+14	-10
B	0	-12	-49

The values in the above table are in units of 1 cent. Convert these values to hexadecimal, and transmit them as exclusive data. For example to set the Scale Tune of Part 1 to an Arabian-type scale, transmit the following data.
F0 41 10 42 12 40 11 40 3A 6D 3E 34 0D 38 6B 3C 6F 40 36 0F 76 F7

groovebox
Model MC-307
Sound Generator section

MIDI Implementation Chart

Date : Oct. 27, 1999
Version : 1.00

		Transmitted	Recognized	Remarks
Basic Channel	Default	X	1—7, 10	
	Changed	X	1—7, 10	
Mode	Default	X	Mode 3	
	Messages	X	Mode 3, 4 (M=1)	* 2
	Altered	***************		
Note Number :		0—127	0—127	
	True Voice	***************	0—127	
Velocity	Note ON	O	O	
	Note OFF	O	O	
After Touch	Key s	X	O * 1	
	Ch s	O	O * 1	
Pitch Bend		O	O * 1	
Control Change	0, 32	O * 1	O * 1	Bank Select
	1	O	O * 1	Modulation
	5	O	O * 1	Portamento time
	6, 38	O	O * 1	Data entry
	7	O	O * 1	Volume
	10	O	O * 1	Panpot
	11	O	O * 1	Expression
	16, 18, 19	O	O * 1	General purpose Controller1, 3, 4
	64	O	O * 1	Hold 1
	65	O	O * 1	Portamento
	66	O	O * 1	Sostenuto
	67	O	O * 1	Soft
	69	O	O * 1	Hold 2
	71-75, 77	O	O * 1	Sound controller2-6, 8
	80-83	O	O * 1	General purpose Controller5-8
	84	O	O * 1	Portamento Control
	91, 94	O	O * 1	General purpose effect1, 4
	98, 99	X	X	NRPN LSB, MSB
	100, 101	O	O * 1	RPN LSB, MSB
Prog Change		O * 1	O * 1	
	: True #	***************	0—127	Program Number 1—128
System Exclusive		O	O * 1	
System Common	: Song Pos	X	X	
	: Song Sel	X	X	
	: Tune	X	X	
System Real Time	: Clock	X	O * 1	
	: Commands	X	X	
Aux Message	: All sound off	X	O (120, 126, 127)	
	: Reset all controllers	X	O	
	: Local ON/OFF	X	X	
	: All Notes OFF	X	O (123—127)	
	: Active Sensing	O * 1	O	
	: System Reset	X	X	
Notes		* 1 O X is selectable		
		* 2 Recognized as M=1 even if M›1		

Mode 1 : OMNI ON, POLY   Mode 2 : OMNI ON, MONO   O : Yes
Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF, MONO   X : No

MIDI Implementation Chart

Date : Oct. 27, 1999

Version : 1.00

Function…		Transmitted	Recognized	Remarks
Basic Channel	Default	1—7, 10	1—7, 10	There is no basic channel.
	Changed	X	X	
Mode	Default	Mode 3	X	
	Messages	OMNI OFF, POLY * 1	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	
	Ch s	O	O	
Pitch Bend		O	O	
Control Change	0–119	O	O	
Prog Change	: True #	O	O	
		***************	0—127	
System Exclusive		O	O	
System Common	: Song Pos	O	O * 2	
	: Song Sel	X	X	
	: Tune	X	X	
System Real Time	: Clock	O	O * 3	
	: Commands	O	O * 2	
Aux Message	: All sound off	O	O	
	: Reset all controllers	O	O	
	: Local ON/OFF	X * 4	X	
	: All Notes OFF	O * 5	O (123—127) * 5	
	: Active Sensing	X * 6	O * 6	
	: Reset	X	X	
Notes		* 1 Omni Off, Poly is transmitted to all channels at start-up. * 2 When Sync Mode is SLAVE or REMOTE * 3 When Sync Mode is SLAVE * 4 Not stored/transmitted even if received, but can be created in the Microscope and transmitted. * 5 Mode messages (123-127) are stored/transmitted after All Note Off processing is performed. The All Note Off message itself is not stored/transmitted, but can be created in the Microscope and transmitted. * 6 Transmitted/received by the sound source section. The sequencer section will perform the action taken reception is interrupted.		

Mode 1 : OMNI ON, POLY   Mode 2 : OMNI ON, MONO   O : Yes

Mode 3 : OMNI OFF, POLY   Mode 4 : OMNI OFF, MONO   X : No

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