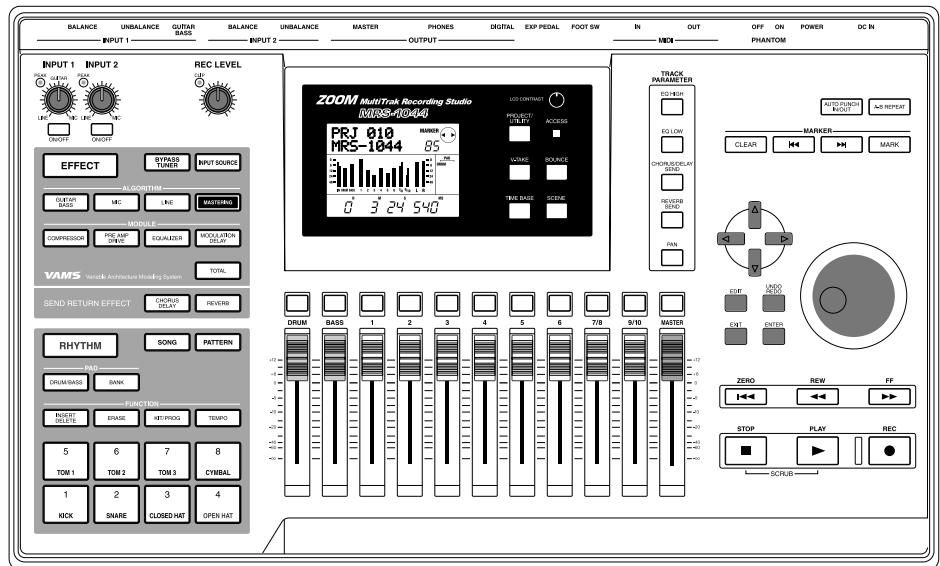


MRS-1044

ZOOM MultiTrak Recording Studio



Operation Manual

USAGE AND SAFETY PRECAUTIONS

SAFETY PRECAUTIONS

In this manual, symbols are used to highlight warnings and cautions for you to read so that accidents can be prevented. The meanings of these symbols are as follows:



This symbol indicates explanations about extremely dangerous matters. If users ignore this symbol and handle the device the wrong way, serious injury or death could result.



This symbol indicates explanations about dangerous matters. If users ignore this symbol and handle the device the wrong way, bodily injury and damage to the equipment could result.

Please observe the following safety tips and precautions to ensure hazard-free use of the MRS-1044

• Power requirements



The MRS-1044 is powered by the supplied AC adapter. To prevent malfunction and safety hazards, do not use any other kind of AC adapter.

When using the MRS-1044 in an area with a different line voltage, please consult your local ZOOM distributor about acquiring a proper AC adapter.

• Environment



Avoid using your MRS-1044 in environments where it will be exposed to:

- Extreme temperature
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock

• Handling



The MRS-1044 is a precision instrument. Do not exert undue pressure on the keys and other controls. Also take care not to drop the unit, and do not subject it to shock or excessive pressure.

• Alterations



Never open the case of the MRS-1044 or attempt to modify the product in any way since this can result in damage to the unit.

• Connecting cables and input and output jacks



You should always turn off the power to the MRS-1044 and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all cables and the AC adapter before moving the MRS-1044

Usage Precautions

• Electrical interference

For safety considerations, the MRS-1044 has been designed to provide maximum protection against the emission of electromagnetic radiation from inside the device, and protection from external interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves should not be placed near the MRS-1044, as the possibility of interference cannot be ruled out entirely.

With any type of digital control device, the MRS-1044 included, electromagnetic interference can cause malfunctioning and can corrupt or destroy data. Care should be taken to minimize the risk of damage.

• Cleaning

Use a soft, dry cloth to clean the MRS-1044. If necessary, slightly moisten the cloth. Do not use abrasive cleanser, wax, or solvents (such as paint thinner or cleaning alcohol), since these may dull the finish or damage the surface.

Please keep this manual in a convenient place for future reference.

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• MIDI is a registered trademark of the AMEI.

Overview

Thank you for purchasing the *ZOOM MRS-1044 multitrack recording studio* (subsequently referred to as "*the MRS-1044*"). The MRS-1044 is a digital audio workstation with the following features:

■ Brings together all the functionality you need for complete music production

All the functionality you need for music production – hard disk recorder, drum/bass machine, mixer, effects, and more – is provided by the MRS-1044. From creating the rhythm tracks to the processes of multitrack recording and mixdown, the MRS-1044 lets you do it all.

■ 10-track x 10-take recorder

The recorder section provides six mono tracks and two stereo tracks, for a total of ten tracks. Two tracks can be recorded simultaneously, and up to ten tracks can be played back at a time. Each track has ten virtual tracks (V-takes). For important parts such as vocals or guitar solos, you can switch between virtual tracks to record multiple takes. A full range of editing functions is also provided, allowing you to copy or move audio data.

■ Bounce function that allows ping-pong recording of ten tracks simultaneously

The bounce function makes it easy to consolidate multiple tracks into one or two tracks with just a few keystrokes. Even when there are no vacant tracks available, you can play back ten tracks simultaneously and bounce them down to two tracks.

■ Rhythm section that can be used to provide guide rhythm or accompaniment

The rhythm section provides 255 types of accompaniment patterns that use the internal drum + bass sound generator. This can run in synchronization with the recorder, or be used as an independent guide rhythm. You can also program chords or pattern playback order to create the rhythm accompaniment for an entire song without using up any of the audio tracks.

■ Full-featured mixer section

The internal digital mixer has thirteen channels: 2 drums, 1 bass, and 10 tracks. The level, pan, and EQ settings of each channel can be saved as separate "scenes." A saved scene can be recalled manually at any time, or can be switched automatically at a desired point in a song.

■ Versatile effects

In terms of internal effects, the MRS-1044 provides an "insert effect" that can be inserted into a specified signal route, and a "send/return effect" that is used via the mixer send/return. The effects can be used in a variety of ways, from modifying the tone while recording a track, to spatial processing or mastering during mixdown.

■ Excellent expandability

An optional USB board and SCSI board are planned for release, allowing data to be transferred between the MRS-1044 and a personal computer or external storage device. This will make it easy to backup/restore data, to manage audio data and rhythm data, and to update the system.

In order to take full advantage of the MRS-1044's versatile functionality and to ensure trouble-free enjoyment, please read this manual carefully. Keep this manual in a safe place together with the warranty card.

Introducing the MRS-1044

The MRS-1044 is internally divided into the following four sections.

- **Recorder section**

This records and plays back audio.

- **Rhythm section**

This uses the internal drum/bass sound generator to play rhythms.

- **Mixer section**

This mixes the signals from the recorder section and rhythm section, and outputs them from the stereo output jacks.

- **Effect section**

This processes input signals or signals of the mixer section. The MRS-1044 lets you use two effects: an insert effect and a send/return effect.

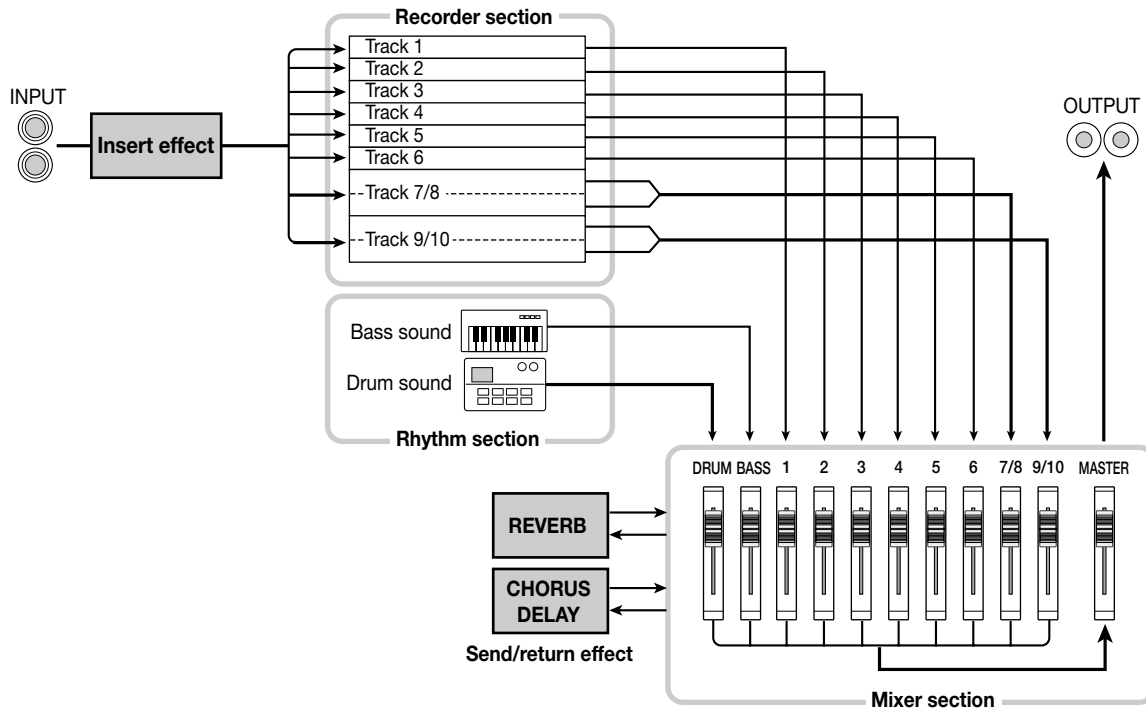
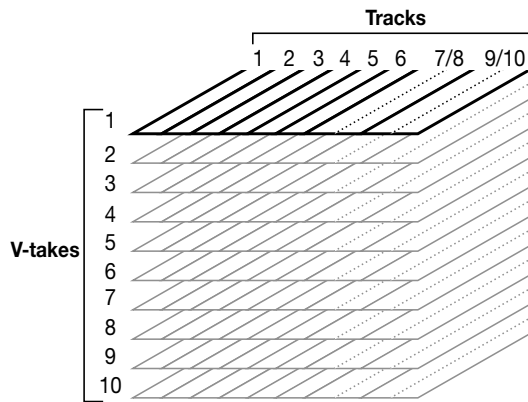
The following diagram shows the relationship and signal flow between each section.

Now let's take a closer look at each section.

Recorder section

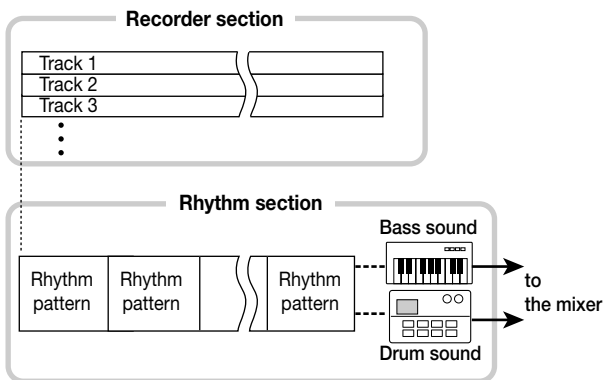
The recorder section of the MRS-1044 has ten tracks: six mono tracks (tracks 1 – 6) and two stereo tracks (tracks 7/8 and 9/10). Up to ten tracks can be played back simultaneously, and two tracks can be recorded simultaneously.

Each track 1 – 10 has ten virtual tracks (referred to as "V-takes"), and for each track, you can select one take for recording/playback (Using V-takes → p.35). For example, you can record guitar solos onto multiple V-takes, and then compare them later to select the best take.



Rhythm section

The rhythm section of the MRS-1044 has 255 accompaniment patterns (several measures long) that use the internal drum/bass sound generator. (These are called "rhythm patterns.") Rhythm patterns can be played independently, or in synchronization with the recorder.



HINT

You can also create original patterns by using either the eight pads located on the front panel or through the use of MIDI.

You can arrange rhythm patterns in the desired order of playback, and program chords and tempo to create the rhythm accompaniment for an entire song. (This is called a "rhythm song.") This lets you construct the rhythm accompaniment for a song without using up any audio tracks.

Mixer section

The output of recorder tracks 1 – 6, 7/8 and 9/10, and the drum + bass sound output of the rhythm section are assigned to mixer section channels 1 – 6, channels 7/8, channels 9/10, DRUM channel, and BASS channel respectively. For each channel, the following parameters can be controlled independently.

- Volume
- Pan
- 2-band EQ
- Send level to the send/return effect
- Mute on/off

Effect section

The MRS-1044 provides two types of effect: an "insert effect" and a "send/return effect." These two can be used simultaneously. These two effects have differing characteristics, as described below.

■ Insert effect

This effect is used by inserting it into a specific signal route. You can choose one of the following three locations in which to place the insert effect.

- (1) Immediately after the input jack (default setting)
- (2) The desired channel of the mixer
- (3) Immediately before the MASTER fader

By default, the insert effect is inserted immediately after the input jack (1) as shown in the diagram on p.6, allowing it to directly modify the signal that will be recorded on the track. By changing its location to (2) or (3), you can process a specific track or the entire song during mixdown.

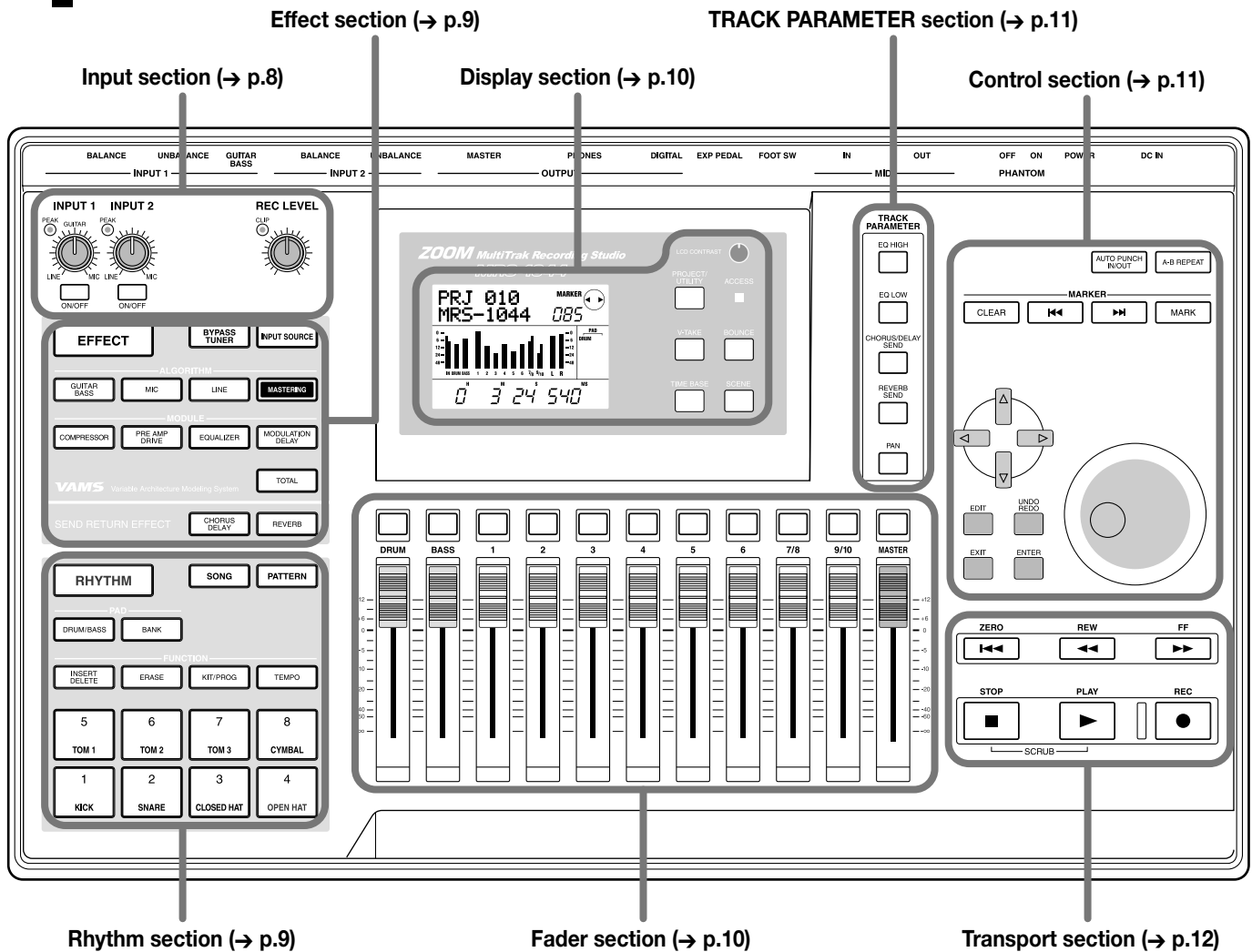
■ Send/return effect

This effect is internally connected to the send/return of the mixer section. There are two types of effect, reverb and chorus/delay, and they can be used simultaneously. The depth of the send/return effect is adjusted by the send level of each mixer channel. Raising the send level will produce a deeper reverb or chorus/delay effect for that channel.

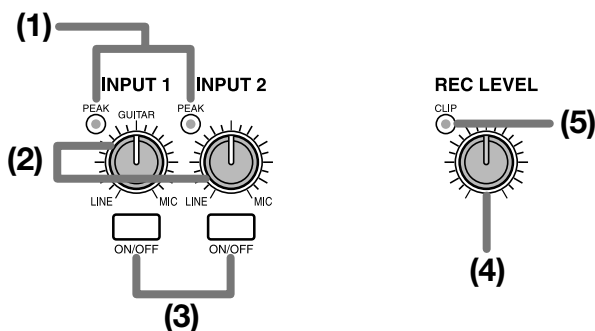
Parts of the MRS-1044 and what they do

Front panel

Parts of the MRS-1044 and what they do



Input section



(1) [PEAK] indicators

These show whether the input signal (input source) from the [INPUT 1] and [INPUT 2] jacks is distorting. The indicators will light -6 dB below the level at which the sound begins to distort.

(2) [INPUT 1]/[INPUT 2] controls

These controls adjust the sensitivity of the input signal from the [INPUT 1] and [INPUT 2] jacks.

(3) [ON/OFF] keys

These keys enable/disable [INPUT 1] and [INPUT 2]. When enabled (on), the key will light.

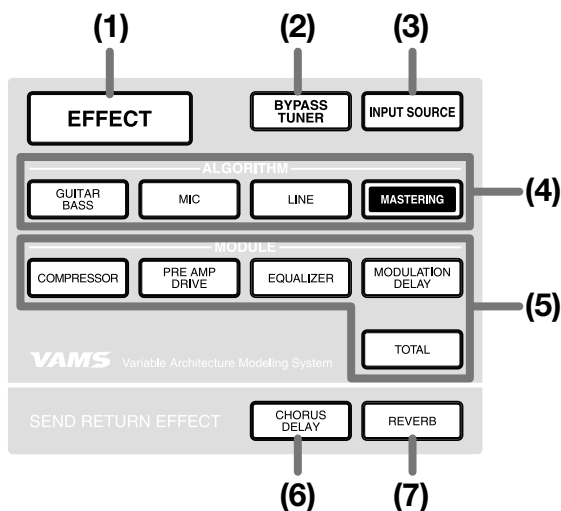
(4) [REC LEVEL] control

This control adjusts the volume of the input signal from the [INPUT 1] and [INPUT 2] jacks.

(5) [CLIP] indicator

This indicator will light if the signal that has passed through the [REC LEVEL] control is clipping.

Effect section



(1) [EFFECT] key

This key accesses a screen where you can select a patch (stored effect settings) or view the patch that is already selected for the internal effect.

(2) [BYPASS/TUNER] key

This key bypasses the insert effect or accesses the Tuner function. The key will light when the insert effect is bypassed. The key will blink when the Tuner function is being used.

(3) [INPUT SOURCE] key

This key is used in conjunction with the [ON/OFF] key or status keys to select the location at which the insert effect will be placed.

(4) ALGORITHM keys

Use the following four keys to select the insert effect algorithm (the combination of effect modules). The key of the selected algorithm will light.

- [GUITAR/BASS] key
- [MIC] key
- [LINE] key
- [MASTERING] key

(5) MODULE keys

Use the following five keys to switch each effect module within the algorithm on/off, or to select an effect module. With the exception of the [TOTAL] key, the key of a module that is in use will light.

- [COMPRESSOR] key
- [PRE AMP/DRIVE] key
- [EQUALIZER] key
- [MODULATION/DELAY] key
- [TOTAL] key

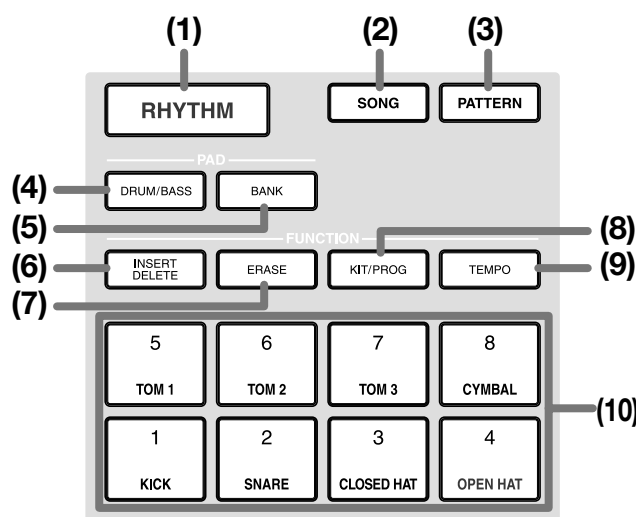
(6) [CHORUS/DELAY] key

This is the chorus/delay of the send/return effect. Pressing this key accesses a screen where you can select a patch or view the current patch. This key will be dark if the chorus/delay is off.

(7) [REVERB] key

This is the reverb of the send/return effect. Pressing this key accesses a screen where you can select a patch or view the current patch. This key will be dark if the reverb is off.

Rhythm section



(1) [RHYTHM] key

Use this to record a rhythm pattern or create a rhythm song. When you press this key, the rhythm section will be disconnected from the recorder section, allowing the rhythm section to operate independently.

(2) [SONG] key

(3) [PATTERN] key

These keys switch the rhythm section between "Rhythm Song mode" and "Rhythm Pattern mode." The [SONG] key will light when Rhythm Song mode is selected, and the [PATTERN] key will light when Rhythm Pattern mode is selected.

(4) [DRUM/BASS] key

This key accesses a screen where you can select the tracks (drum track / bass track) that will be assigned to pads 1 – 8.

(5) [BANK] key

This key accesses a screen where you can select the combination of sounds (the "pad bank") that will be assigned to pads 1 – 8 (10).

(6) [INSERT/DELETE] key

(7) [ERASE] key

These keys are used to edit a rhythm song or rhythm pattern.

(8) [KIT/PROG] key

This key accesses a screen where you can change the drum sounds or bass sound used by the rhythm section.

(9) [TEMPO] key

This key accesses a screen where you can view or change the tempo of the rhythm pattern or rhythm song.

(10) Pads 1 – 8

These pads play the drum sounds or bass sound used by the rhythm section.

(3) [PROJECT/UTILITY] key

This key is used to access a variety of functions and settings, such as loading or saving a project, or track editing functions.

(4) [ACCESS] indicator

This indicator will light when the internal hard disk is being read or written to.

(5) [V-TAKE] key

This key accesses a screen where you can switch the virtual track (V-take) of each recorder track (1 – 10).

(6) [BOUNCE] key

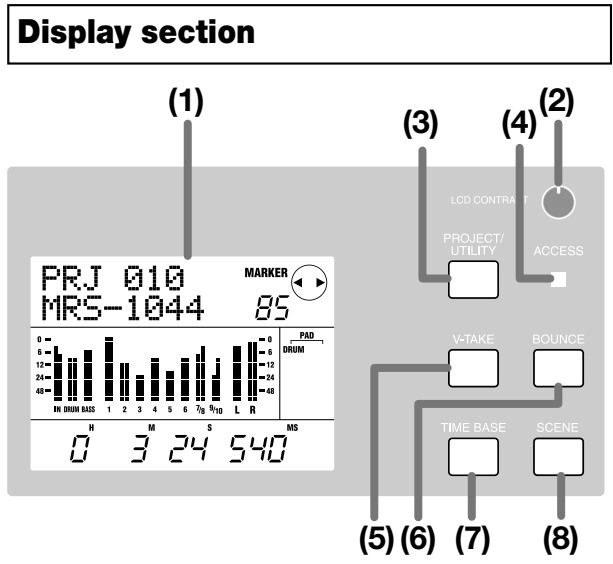
This key is the on/off switch for the Bounce function used to combine multiple tracks.

(7) [TIME BASE] key

This key switches the display counter between time display and measure display.

(8) [SCENE] key

This key is used to save the current mixer settings as a "scene," or to recall a previously saved scene (Scene function).



(1) Display

This shows the current location within the song, the signal level of the various mixer channels, the values of internal settings, and other data necessary for operation. The contents of the display will change according to the operating state.

(2) [LCD CONTRAST] control

This adjusts the contrast of the display.

Fader section

(1) DRUM/BASS status keys

These keys are used mainly to switch muting on (key dark) or off (key lit green) for the drum channel and bass channel.

(2) Status keys 1 – 6, 7/8, 9/10

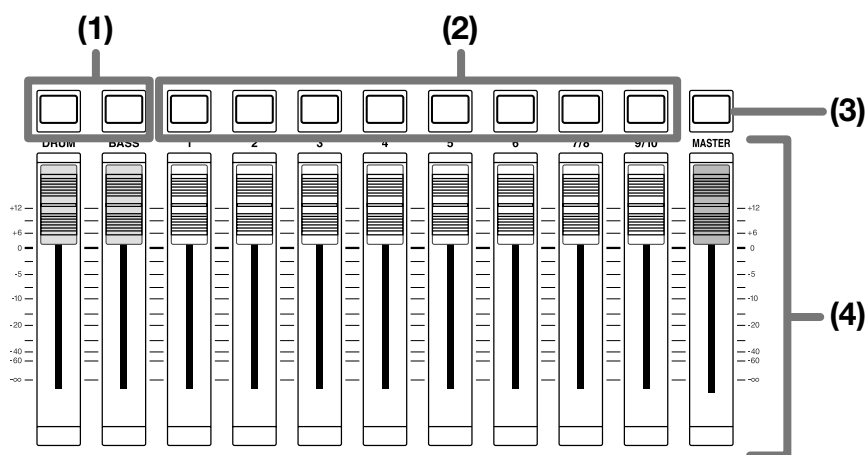
These keys are used mainly to switch muting on/off for channels 1 – 6, 7/8, and 9/10, and to select the recording track. Each time you press a status key, the key will cycle between lit green (channel = mute off) → dark (channel = mute on) → lit red (selected as recording track).

(3) MASTER status key

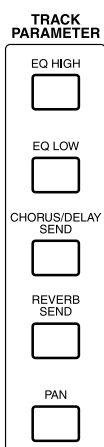
This key is used to select the MASTER fader for internal settings.

(4) Faders (DRUM, BASS, 1 – 6, 7/8, 9/10, MASTER)

The DRUM/BASS faders adjust the volume of the drum/bass channels, and faders 1 – 6, 7/8, 9/10 adjust the volume of channels 1 – 6, 7/8, 9/10. The MASTER fader adjusts the overall volume that is sent from the [OUTPUT] jacks.



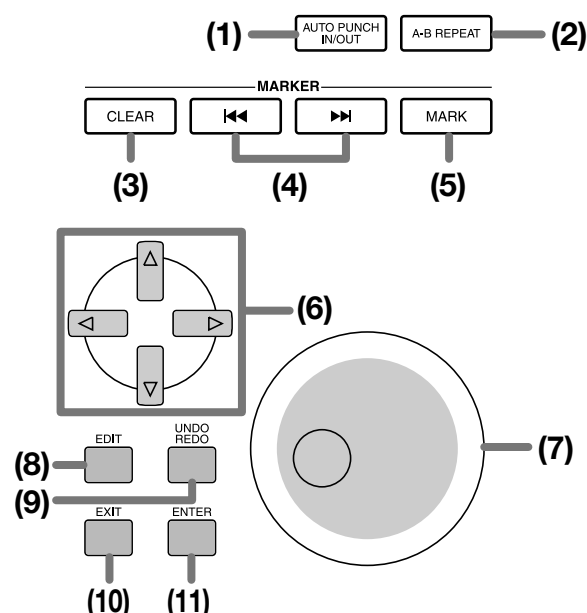
TRACK PARAMETER section



The following five keys are used to access screens where you can adjust settings such as pan, EQ, and send/return effect depth for each channel of the mixer.

- [EQ HIGH] key
- [EQ LOW] key
- [CHORUS/DELAY SEND] key
- [REVERB SEND] key
- [PAN] key

Control section



(1) [AUTO PUNCH IN/OUT] key

This key is used to make settings for the "Auto Punch-in/out function" which lets you re-record a specific region of a track. The key will light when the Auto Punch-in/out function is on.

(2) [A-B REPEAT] key

This key is used to make settings for the "A-B Repeat function" which causes a specified region to play back repeatedly. The key will light when the A-B Repeat function is on.

(3) [CLEAR] key

This key erases the mark that is set for the current location.

(4) MARKER [◀◀]/[▶▶] keys

These keys move to the mark that precedes or follows the current location.

(5) [MARK] key

This key sets a mark at the current location. By pressing the [MARK] key at a previously marked location, you can access a screen that lets you assign a scene to that mark.

(6) Cursor [▲]/[▼]/[◀]/[▶] keys

These keys are used to switch between display screens, or to move the blinking area within the display.

(7) Dial

This is used mainly to adjust the value of a setting.

(8) [EDIT] key

Use this key when you want to edit the settings of the internal effects, or to edit a rhythm song / rhythm pattern.

(9) [UNDO/REDO] key

This key is used to capture recorded data from a track, or to exchange (swap) the captured data with the contents of the current track.

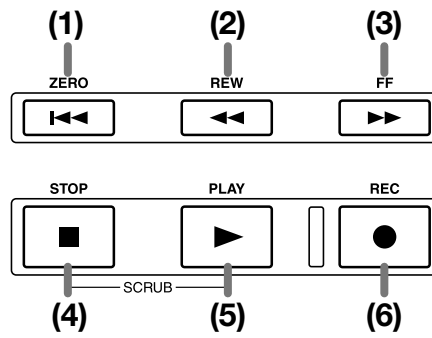
(10) [EXIT] key

This key is used to cancel execution of a function, or to return to the previous setting screen.

(11) [ENTER] key

This key is used to confirm a selection or to execute a function.

Transport section



(1) ZERO [◀◀] key

This key returns to the starting location of the song (the zero position of the counter).

(2) REW [◀◀] key

This key moves the current location backward in steps of one second (or in steps of one beat). Press and hold the key to rewind quickly.

(3) FF [▶▶] key

This key moves the current location forward in steps of one second (or in steps of one beat). Press and hold the key to fast-forward quickly.

(4) STOP [■] key

This key stops the song. To turn the Scrub function on, hold down this key and press the PLAY [▶] key.

(5) PLAY [▶] key

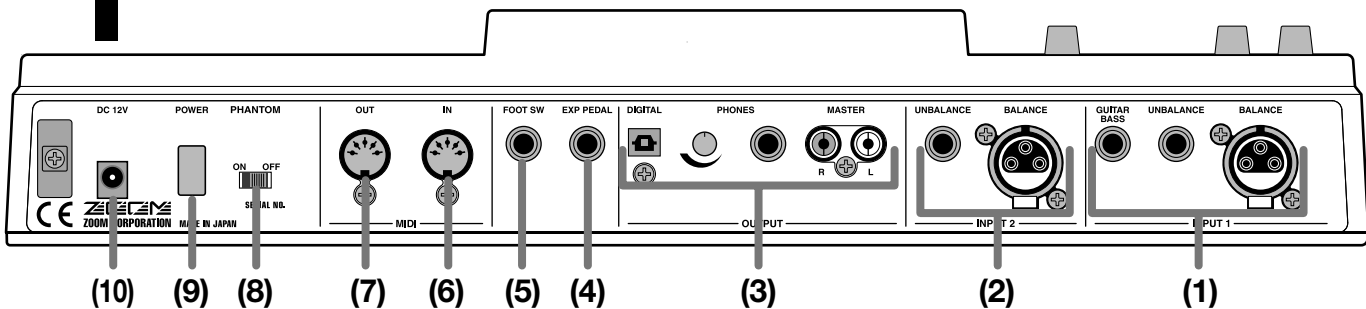
This key plays the song from the current location.

(6) REC [●] key

Use this key to record on the recorder, to record a rhythm pattern, or to begin creating a rhythm song.

Parts of the MRS-1044 and what they do

Rear panel



(1) [INPUT 1] jacks

These are the input jacks for INPUT 1. Select and use one of the following three jacks.

- BALANCE: This is an XLR balanced jack to which a mic or line-level device can be connected.
- UNBALANCE: This is an unbalanced phone jack to

which a mic or line-level device can be connected.

- **GUITAR/BASS:** This is a phone jack to which a passive-type electric guitar or bass can be connected directly.

● **NOTE** ●

These jacks are given priority in the order of GUITAR/BASS → UNBALANCE → BALANCE. For example, if all three are connected, the GUITAR/BASS jack will be selected.

(2) [INPUT 2] jacks

These are the input jacks for INPUT 2. When connecting a stereo output device, use these jacks in conjunction with the [INPUT 1] jacks. Select and use one of the following two jacks.

- **BALANCE:** This is an XLR balanced jack to which a mic or line-level device can be connected.
- **UNBALANCE:** This is an unbalanced phone jack to which a mic or line-level device can be connected.

● **NOTE** ●

If both jacks are connected, the UNBALANCE jack will be selected.

(3) [OUTPUT] jacks

These jacks output the signal that has passed through the MASTER fader. The following three jacks can be used simultaneously.

- **MASTER:** These are RCA phono analog output jacks.
- **PHONES:** A pair of stereo headphones can be connected to this jack. Use the knob beside this jack to adjust the headphone volume.
- **DIGITAL:** This is an optical-type digital output jack.

(4) [EXP PEDAL] jack

A separately sold expression pedal (ZOOM FP01, FP02) can be connected to this jack.

(5) [FOOT SW] jack

A separately sold foot switch (ZOOM FS01) can be connected to this jack.

(6) [MIDI IN] connector

MIDI messages can be input from this connector.

(7) [MIDI OUT] connector

MIDI messages can be output from this connector.

(8) [PHANTOM ON/OFF] switch

When this switch is on, +48V phantom power will be supplied to the two [INPUT 1/2] BALANCE jacks.

● **NOTE** ●

If devices that do not require phantom power are connected to the [INPUT 1/2] BALANCE jacks, you must turn this switch off.

(9) [POWER] switch

This switch turns the power of the MRS-1044 on/off.

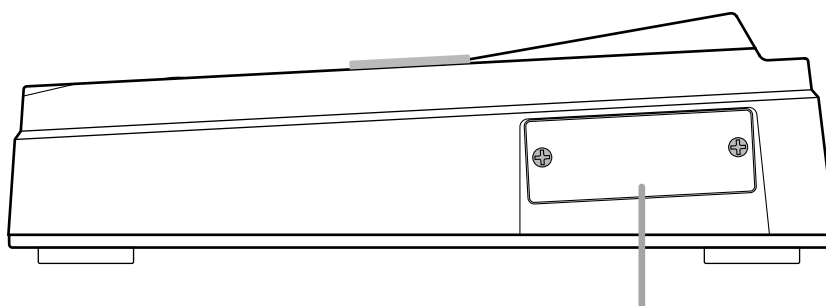
● **NOTE** ●

When turning off the power of the MRS-1044, you must use the [POWER] switch. If you turn the power off by simply disconnecting the AC adaptor plug, the previously recorded content or changes will be lost.

(10) [DC 12V] jack

Connect the included AC adaptor to this jack.

Side panel



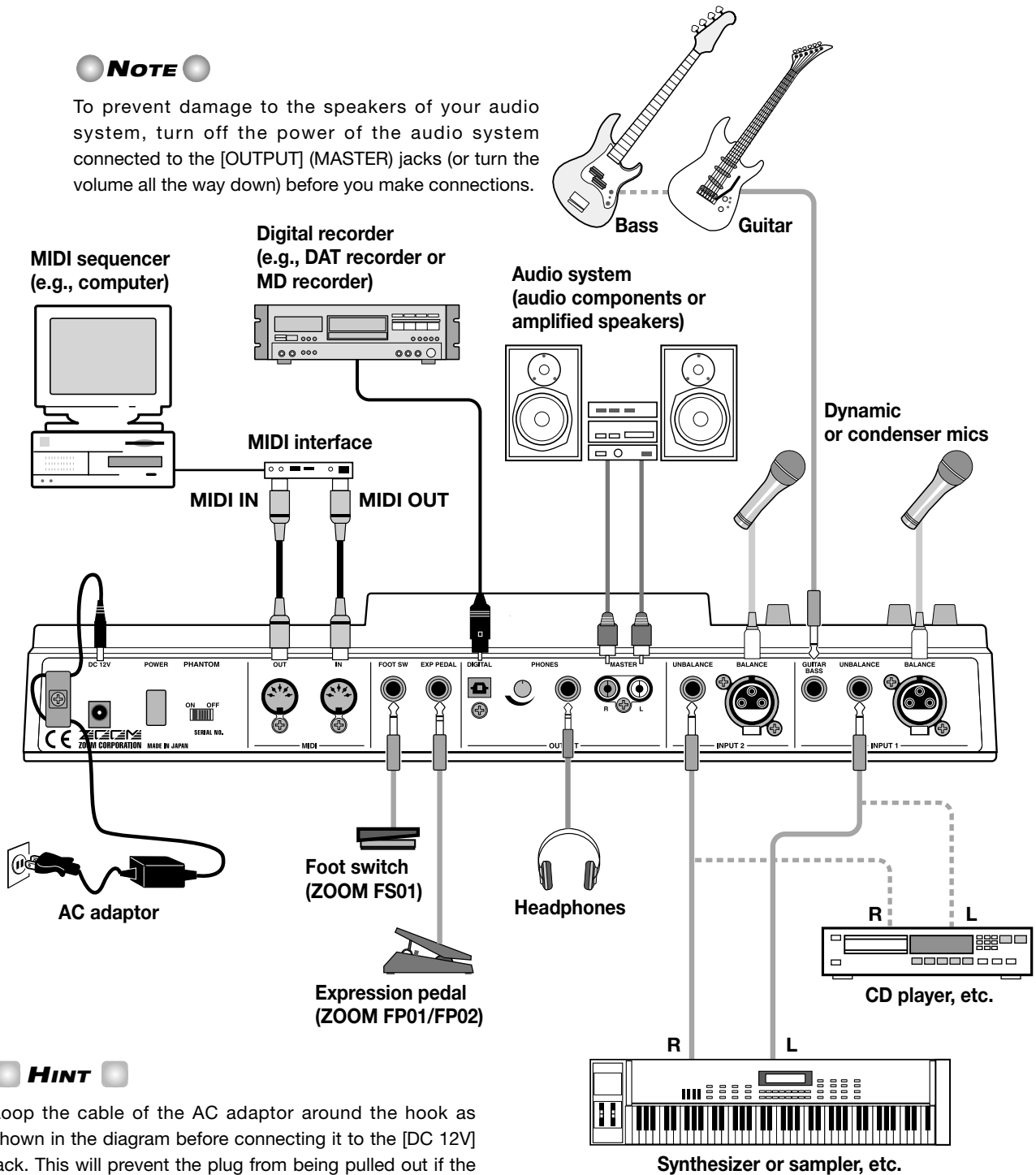
This slot is for installation of a separately sold SCSI board or USB board (planned for release).

Connections

Connect your instruments, audio devices, and MIDI devices as shown in the following diagram.

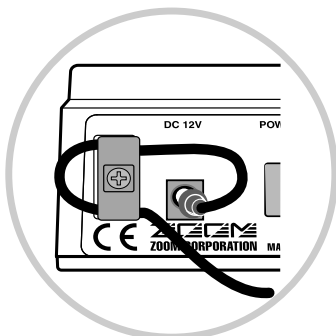
NOTE

To prevent damage to the speakers of your audio system, turn off the power of the audio system connected to the [OUTPUT] (MASTER) jacks (or turn the volume all the way down) before you make connections.



HINT

Loop the cable of the AC adaptor around the hook as shown in the diagram before connecting it to the [DC 12V] jack. This will prevent the plug from being pulled out if the AC adaptor cable is accidentally pulled.



HINT

When connecting stereo output devices such as a synthesizer or CD player, connect the L output of the external device to the [INPUT 1] jack, and the R output to the [INPUT 2] jack.

Listening to the demo songs

When shipped from the factory, the internal hard disk of the MRS-1044 contains several demo songs. After you have finished making connections, turn on the power and listen to the demo songs.

Turn on the power

Here's how to turn on the power of the MRS-1044 and your other equipment.

1. Make sure that the AC adaptor, instruments, and audio system (or stereo headphones) are connected appropriately to the MRS-1044. (For details on connections, refer to → p.14.)

2. Press the rear panel [POWER] switch to turn on the power of the MRS-1044.

POWER



HINT

If electronic instruments are connected to the [INPUT 1]/[INPUT 2] jacks, turn on the power in the order of the electronic instruments → MRS-1044.

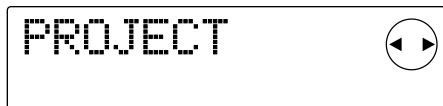
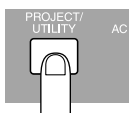
3. Turn on the power of the audio system connected to the [MASTER] jacks.

Select a demo song

The internal hard disk of the MRS-1044 contains several demo songs. Here's how to load a demo song from the hard disk.

1. Press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."



HINT

On the MRS-1044, data for a song (including the demo songs) is managed in units called "projects." When you load a project, the complete state in which that song was saved will be reproduced.

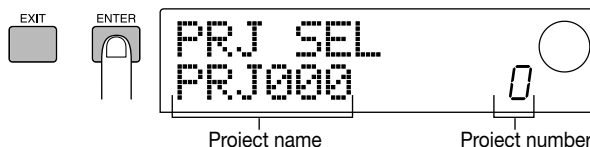
2. Press the [ENTER] key.

The display will indicate "PROJECT SELECT."



3. Press the [ENTER] key once again.

Now you can select from the projects that are saved on the internal hard disk.



4. Turn the dial to select a demo song project.

NOTE

Project numbers 992 and following are not demo songs; they are projects that contain material for use with the "Introductory tour" that starts on page 17, or projects from which you can import rhythm patterns.

5. Press the [ENTER] key.

The selected project will be loaded.

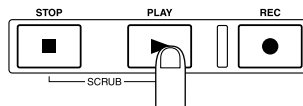
Play back the demo song

After the demo song has finished loading, here's how to play it back.

1. Turn down the volume of your audio system.

If you are listening through headphones connected to the [OUTPUT] (PHONES) jack, turn down the knob located beside the jack.

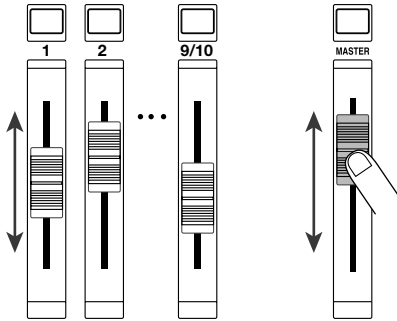
2. Press the transport section PLAY [▶] key.



The demo song will begin playing.

3. Raise the volume of your audio system (or the knob for the [OUTPUT] (PHONES) jack) to a comfortable volume.

4. If you want to adjust the volume of the individual tracks, use faders 1 – 6, 7/8, and 9/10. If you want to adjust the volume of the entire song, use the MASTER fader.

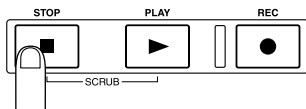


Immediately after the demo song (project) has been loaded, the volume of each track and the overall volume of the entire song will be set automatically, without regard to the current physical positions of the faders. When you operate a fader, the volume will immediately be set to the new position of the fader.

HINT

For a project that uses the rhythm section, use the DRUM fader to adjust the volume of the drum sound, and the BASS fader to adjust the volume of the bass sound.

5. To stop the demo song, press the STOP [■]key.



HINT

While stopped, you can press the ZERO [◀◀] key to move to the beginning of the song. Or you can press the REW [◀◀] key / FF [▶▶] key to rewind/fast-forward in steps of one second.

Turn off the power

When turning off the power of the MRS-1044 and your peripheral equipment, do so in the opposite order from which you turned the power on.

1. Turn off the power of your audio system (or turn the volume all the way down).

2. Press the rear panel [POWER] switch.

Normally, the project will automatically be saved on the

internal hard disk, and then the power will turn off. The next time the power is turned on, the project that you were last operating will be loaded automatically.

HINT

The demo songs have a protect setting that prevents the data from being overwritten. For this reason, the project will not be saved when you turn off the power after loading a demo song.

◆ Caution! ◆

- You must use this method to turn off the power of the MRS-1044. If you turn off the power by disconnecting the AC adaptor plug from the [DC 12V] jack, or by unplugging the AC adaptor from the AC power outlet, the project will not be saved, and any previous recordings or changes will be lost.
- In particular, you must never turn the power off by unplugging the AC adaptor while the access indicator of the display section is lit. Doing so may damage the internal hard disk, causing all data to be lost permanently.

Introductory tour

This section explains the process of recording instruments on tracks while monitoring the accompaniment produced by the rhythm section. It also explains how to complete a two-channel mix.

This introductory tour is divided into the following steps 1 – 4. By following through these steps in order, you can experience the entire process from recording the first tracks to completing your song.

- **Step 1: Preparations before recording**

Make recording preparations for the introductory tour.

- **Step 2: Recording the first track**

Record the first track while listening to the accompaniment of the rhythm section.

- **Step 3: Overdubbing**

Record (overdub) the second and subsequent tracks while listening to the previously recorded tracks and the backing of the rhythm section.

- **Step 4: Mixdown**

Mix the rhythm section and the tracks that you recorded on the recorder down to a two-channel stereo mix, creating the finished song.

Step 1: Preparations before recording

In this step, we will load a project in which a rhythm section accompaniment has already been programmed, adjust the volume of the rhythm section, and make preparations for recording.

◆ Preparations ◆

As described on page 14, connect your audio system to the [OUTPUT] (MASTER) jacks. If you are using headphones, connect them to the [OUTPUT] (PHONES) jack.

1-1: Load a project

On the MRS-1044, all data needed to reproduce a song you created (e.g., the recorded contents of the tracks and the settings of the mixer section) is managed in terms of a "project."

Each project contains the following data.

- All recorded data of the recorder section
- Settings of the mixer section
- Settings of the rhythm section
- Settings of the internal effects
- Other settings such as scenes, marks, and MIDI-related settings

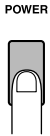
HINT

Multiple projects can be saved on the internal hard disk. By loading a project that you created earlier, you can recall the same state in which that project was last saved.

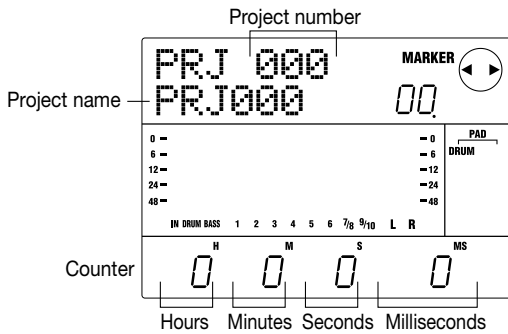
When you want to record on the MRS-1044, you must start by either loading a previously-created project, or creating a new project.

When the MRS-1044 is shipped from the factory, its hard disk contains a sample project in which a rhythm section accompaniment for this introductory tour has already been programmed. Use the following procedure to load this sample project.

- 1** Turn on the power in the order of first the MRS-1044, and then your audio system.



When the power of the MRS-1044 is turned on, the project that you used last will be loaded automatically. The following screen will appear in the display.



The screen that appears first when the power is turned on is called the "main screen." The main screen is the starting point for all operations.

HINT

If you have pressed one or more keys to switch screens, you can press the [EXIT] key several times to return to the main screen.

2 In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."



3 Press the [ENTER] key.

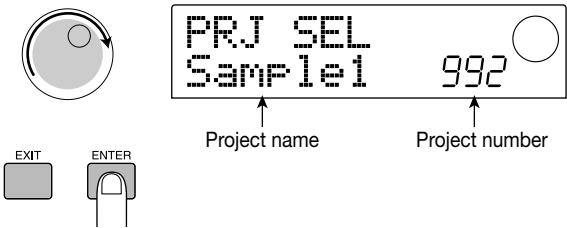
The project menu will appear. Here you can select various items for working with projects, such as loading or saving a project.



4 Make sure that the display indicates "PROJECT SELECT," and press the [ENTER] key once again.

Now you can select from the projects on the hard disk.

5 Turn the dial to select the project named "Sample 1" (number 992), and press the [ENTER] key.



The display will indicate "LOADING" for a time, and then the main screen will reappear. The display will indicate the number and name of the project that was loaded.

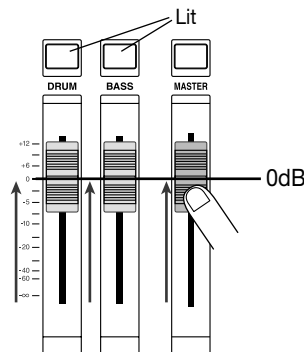
1-2: Play the rhythm section accompaniment

The rhythm section of the MRS-1044 contains a drum sound generator and a bass sound generator that can be used to provide an accompaniment. A newly created project contains 255 different accompaniment patterns (called "rhythm patterns") that use these drum and bass sounds, each consisting of several measures. These rhythm patterns can be played in synchronization with the recorder, and used as guide rhythms as you record on a track.

In addition, you can arrange desired rhythm patterns in a specified order of playback, and program chord and tempo change data to create the accompaniment for an entire song. (This is referred to as a "rhythm song.")

In the project you loaded in step 1-1, a simple rhythm song has already been programmed. Here's how to listen to it.

1 Make sure that the DRUM/BASS status keys are lit, and raise the DRUM, BASS, and MASTER faders to the 0 (dB) position.

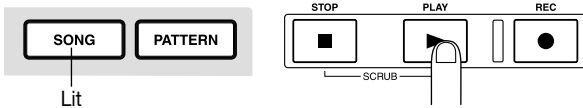


The drum sound and bass sound of the rhythm section are sent respectively to the DRUM channel and BASS channel of the mixer. The DRUM/BASS status keys switch channel-

muting on/off, and the DRUM/BASS faders adjust the volume of each channel.

If the DRUM/BASS status keys are dark, muting is turned on. Press the keys to make them light (mute off).

2 Make sure that the [SONG] key is lit, and press the PLAY[▶] key.



When the [SONG] key is lit, "Rhythm Song mode" is selected, allowing you to create or play a rhythm song. When you press the PLAY [▶] key, the rhythm song will begin playing.

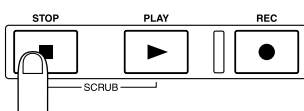
HINT

At this time, the recorder will also begin running. However, since no tracks have been recorded yet, you will not hear any sound.

3 If necessary, operate the DRUM/BASS faders to adjust the volume balance.

This rhythm song will be used as the accompaniment for the tracks that you will record in step 2. Adjust the volume balance for comfortable listening.

4 To stop the playback, press the STOP [■] key.



HINT

- For details on programming your own rhythm song to create an original accompaniment, refer to p.58.
- Tempo data has been input at the beginning of the rhythm song for this project. For details on how to change this tempo data, refer to p.62.

1-3: Save the project

Before you begin recording tracks, let's save the project you loaded in step 1 – 2 (Sample 1) on the hard disk in its current state.

HINT

The current project will be saved automatically when you load another project, create a new project, or press the [POWER] switch to turn off the power.

NOTE

If the AC adaptor is pulled out of the outlet and power to the MRS-1044 is lost, all changes that occurred since the last save will be lost. This is also true of any other miscellaneous power failure. To prevent data loss from such causes, we encourage you to execute the Save operation periodically.

1 In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

2 Press the [ENTER] key.

The project menu will appear.

3 Use the cursor [◀]/[▶] keys to make the display indicate "PROJECT STORE."



HINT

The arrow(s) that appear in the upper right of the display indicate which cursor keys are valid in the currently-displayed screen.

4 Press the [ENTER] key.

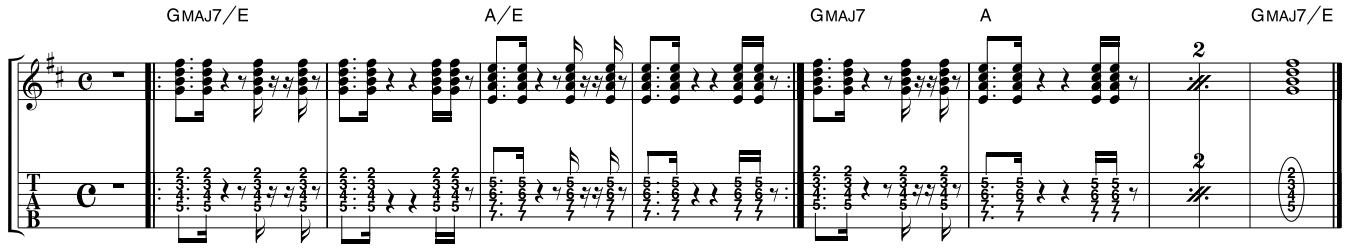
The "PRJ STR SURE?" screen will appear, asking you whether you are sure that you want to store the project.



5 Press the [ENTER] key once again.

When saving has been completed, you will return to the main screen.

[Example staff: Rhythm guitar 1]



Step 2: Record the first track

In this step, you will record the rhythm guitar backing shown in the staff (above) on track 1, while listening to the accompaniment played by the rhythm song.

◆ Preparations ◆

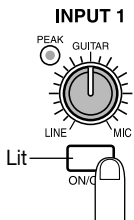
- Connect your electric guitar to the [INPUT 1] (GUITAR/BASS) jack.
- Load the project you saved in step 1-3 (project name "Sample 1," project number 992). For details on how to load a project, refer to p.17.

2-1: Adjust the input sensitivity and recording level

Here's how to adjust the input sensitivity appropriately for the instrument connected to the [INPUT] jack, and how to adjust the volume of the input signal (recording level).

1 Press the INPUT 1 [ON/OFF] key to make the key light.

The [ON/OFF] key switches the jack on or off. When the key is lit, the corresponding jack is on.



HINT

When recording from a mono source, make sure the [ON/OFF] key lights only for the jack to which the source is connected. When recording from a stereo source (such as a synthesizer), connect the L/R outputs of the instrument to the [INPUT 1/2] jacks, and turn on the [ON/OFF] keys of

both INPUT 1 and 2.

NOTE

It is not possible to simultaneously input three or more channels of signals.

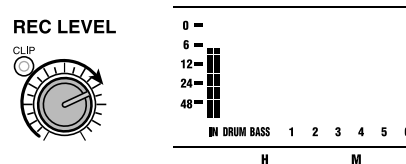
2 While playing your instrument, turn the [INPUT 1] control to adjust the input sensitivity.

Adjust the [INPUT 1] control so that the [PEAK] indicator lights when you play your instrument most strongly.



3 While playing your instrument, turn the [REC LEVEL] control to adjust the recording level.

Set the [REC LEVEL] control as high as possible without making the [CLIP] indicator light. The current signal level is shown by the level meter (IN) located in the center of the display.



HINT

If a recording track has not been specified, the input signal will be sent directly to the MASTER fader.

2-2: Set the insert effect

The MRS-1044 contains two types of effects: an "insert effect" that can be inserted into a specific signal route, and two "send/return effects" that can be applied to the entire song by using the send/return of the mixer.

In this example, we will record with the insert effect applied to the guitar connected to the [INPUT 1] jack.

HINT

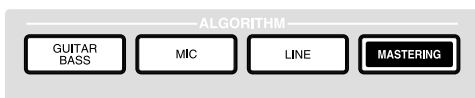
For details on using the send/return effects, refer to p.26

1 Press the [EFFECT] key.



The [EFFECT] key will light, and a screen will appear, allowing you to select a patch for the internal effects. A "patch" is a set of previously saved settings for an internal effect. A newly created project contains patches for the insert effect, and you can instantly change effect settings simply by selecting one of these patches.

2 Use the ALGORITHM keys to select an algorithm for the insert effect.



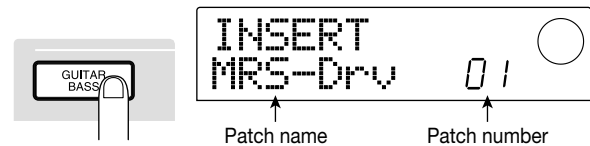
An "algorithm" is a combination of effect modules (individual effects) that the insert effect lets you use simultaneously. Insert effect patches are organized according to their algorithm. This means that when selecting an insert effect patch, you start by selecting the algorithm that is appropriate for the instrument you will be recording, or for the desired purpose.

There are four algorithms, as follows.

- GUITAR/BASS : An algorithm suitable for recording guitar/bass.
- MIC : An algorithm suitable for vocals or mic recording.
- LINE : An algorithm suitable mainly for recording stereo-output instruments such as synthesizer or electric piano.

- MASTERING : An algorithm suitable for processing a stereo mix signal, such as during mixdown.

For this example, press the [GUITAR/BASS] key to select the GUITAR/BASS algorithm. The [GUITAR/BASS] key will light, and you can now select patches that use the GUITAR/BASS algorithm.



HINT

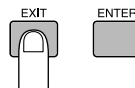
For details on the algorithms, refer to p.75.

3 Turn the dial to select the desired patch.

For this example, select the patch named "StrmBeat" (number 34).



4 Press the [EXIT] key.



You will return to the main screen.

HINT

If you want to record without sending the sound through the insert effect, press the [BYPASS/TUNER] key in the main screen. This will bypass the insert effect. When you press the [BYPASS/TUNER] key once again it will go dark, and bypass will be disabled.

2-3: Select a track and record

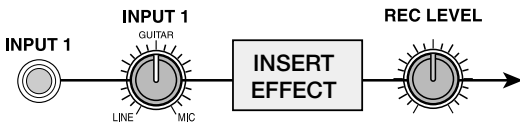
Now we will set the recording level, and record the sound of the guitar (with the insert effect applied) on track 1.

1 While playing your instrument, turn the [REC LEVEL] control to adjust the recording level.

By default, the insert effect is inserted before the [REC LEVEL] control. For this reason, the recording level may change if you change the insert effect patch. Re-adjust the

Step 2: Record the first track

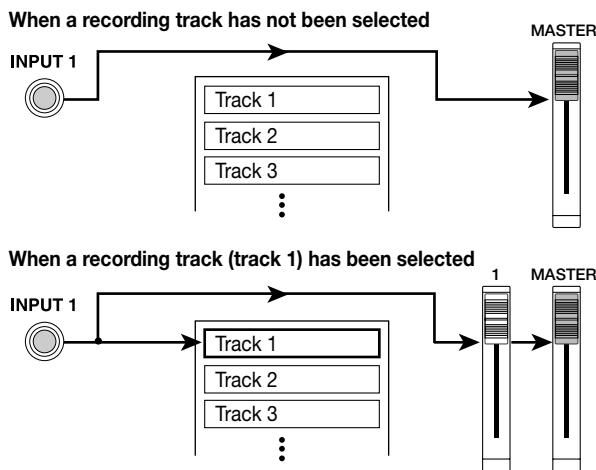
recording level after selecting the insert effect patch.



2 With the recorder stopped, repeatedly press status key 1 to make the key light red.

Status keys 1 – 6, 7/8, and 9/10 are used to switch channel-muting on/off and to select the recording track. Each time you press a status key, the key will cycle through the following states: lit green (channel= mute off) → dark (channel= mute on) → lit red (selected as the recording track).

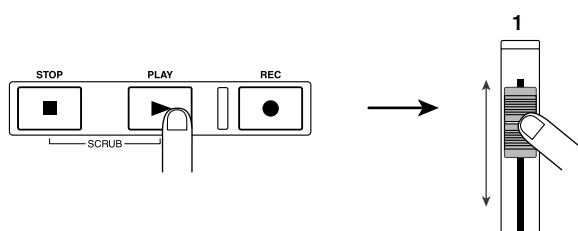
When track 1 is selected as the recording track (the status key 1 will change from green to red), the input signal routing will change as follows.



HINT

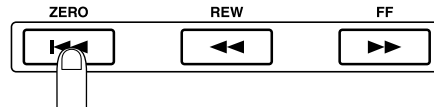
The number of tracks that can be recorded simultaneously is limited to either two mono tracks or one stereo track. If you want to record in stereo on tracks 1 – 6, select the recording tracks by simultaneously pressing status keys in a combination of 1/2, 3/4, or 5/6.

3 Press the PLAY [▶] key, and while listening to the rhythm song, operate fader 1 to adjust the monitor level of the guitar.

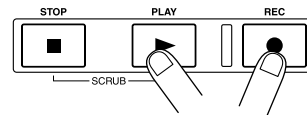


Operating fader 1 simply changes the level at which the recording source is being monitored, and will not affect the recording level. If necessary, you can operate the DRUM/BASS faders to adjust the volume balance with the rhythm song. When you are finished adjusting the monitor level, press the STOP [■] key to stop the rhythm song.

4 Press the ZERO [◀◀] key to return to the beginning of the song.



5 To begin recording, hold down the REC [●] key and press the PLAY [▶] key.



The REC [●] key and PLAY [▶] key will light, and recording on track 1 will begin. Record your guitar playing while listening to the rhythm song.

6 When you have finished recording the guitar, press the STOP [■] key.

The REC [●] key and PLAY [▶] key will go dark, and recording will stop.

7 To listen to the recorded content, press the ZERO [◀◀] key to return to the beginning of the song, and press the PLAY [▶] key.

Track 1 will be played back together with the rhythm song. If you want to re-do the recording, repeat steps 2 – 6.

8 If you are satisfied with the recorded content, save the current project.

For details on saving the project, refer to p.19.

HINT

- When the recorder is stopped, you can use the REW [◀◀] / FF [▶▶] keys to move the current location backward or forward in steps of one second (if the counter is displaying the time) or in steps of one beat (if the counter is displaying the measure). After moving in this way, you can press the PLAY [▶] key to begin playback from that location.
- You can also use the REW [◀◀] / FF [▶▶] keys to move the current location, and then re-record from that location. If

you want to re-record repeatedly over the same region, it is convenient to use the auto punch-in/out function (→ p.33).

- By using V-takes (→ p.35) you can record a new take while preserving the current take.

[Example staff: Rhythm guitar 2]

Step 3: Overdubbing

In this step you will record a rhythm guitar part (like the example staff shown above) on track 2, while listening to the rhythm guitar you recorded on track 1 in step 2 (as well as the rhythm song). Recording additional parts in this way is called "overdubbing."

◆ Preparations ◆

Load the project that you saved as the last operation in Step 2-3. Alternatively, you can load the project "Sample 2" (number 993), in which track 1 already contains a rhythm guitar part recorded on track 1. (For details on loading a project, refer to p.17.)

3-1: Select an insert effect patch

We will also apply an insert effect also to track 2 while recording it.

- 1 Press the [EFFECT] key, and use the ALGORITHM keys to select the desired insert effect algorithm.

As in step 2-2, press the [GUITAR/BASS] key to select the GUITAR/BASS algorithm.

- 2 Turn the dial to select the desired patch.

For this example, select the patch named "Phaser" (number 7).



- 3 Press the [EXIT] key.

You will return to the main screen.

3-2: Select a track, and record

Next we will set the recording level, and record the rhythm guitar on track 2.

- 1 While playing your instrument, turn the [REC LEVEL] control to adjust the recording level.

- 2 With the recorder stopped, press status key 2 repeatedly to make the key light red.

Track 2 will be selected as the recording track.

- 3 Press the PLAY [▶] key, and while listening to the rhythm song, use fader 2 to adjust the monitor level.

As necessary, use the DRUM/BASS faders and fader 1 to adjust the volume balance of the rhythm song and track 1.

When you are finished adjusting the monitor levels, press the STOP [■] key to stop the song.

- 4 Press the ZERO [◀◀] key to return to the beginning of the song.

5 To start recording, hold down the REC [●] key and press the PLAY [▶] key.

The REC [●] key and PLAY [▶] key will light, and recording on track 2 will begin. Record your guitar playing while listening to the rhythm song and track 1 play back.

6 When you have finished recording your guitar performance, press the STOP [■] key.

The REC [●] key and PLAY [▶] key will go dark, and recording will end.

7 To hear the recorded content, press the ZERO [◀◀] key to return to the beginning of the song, and press the PLAY [▶] key.

Tracks 1/2 will be played back together with the rhythm song. If you want to re-do the recording, repeat steps 2 – 6.

When you are finished recording track 2, use the same procedure to record other instruments on the remaining tracks. When you are finished with all recording, save the project.

Step 4: Mixdown

When you are finished recording all tracks, you can adjust the volume balance etc. of the rhythm section and recorder section, and create a finished song.

◆ Preparations ◆

- Connect a master recorder such as an MD or DAT recorder to the [OUTPUT] (DIGITAL or MASTER) jacks.
- Load the project that you saved at the end of step 3-2. Alternatively, you can load the project "Sample 3" (number 994) from the hard disk. When the MRS-1044 is shipped from the factory, this project contains pre-recorded performances on all tracks. (For details on loading a project, refer to p.17.) The track structure of "Sample 3" is shown below.

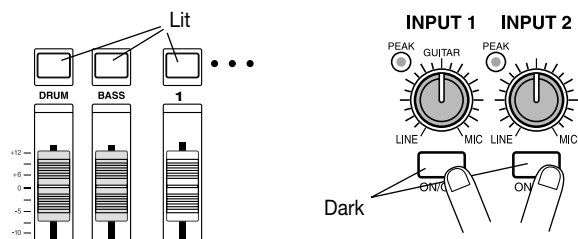
Track 1	Rhythm guitar 1
Track 2	Rhythm guitar 2
Track 3	Lead guitar
Track 4	Electric piano
Track 5	Organ
Track 6	Synthesizer
Track 7/8	Percussion (L/R)
Track 9/10	Synth pad (L/R)

4-1: Adjust the volume, pan, and EQ

Here's how to adjust the volume, pan (stereo left/right position), and EQ for each channel of the mixer section.

Adjust the volume

1 Make sure that all status keys (DRUM, BASS, 1 – 6, 7/8, 9/10) are lit green. In addition, press the INPUT 1/2 [ON/OFF] keys to make them go dark.



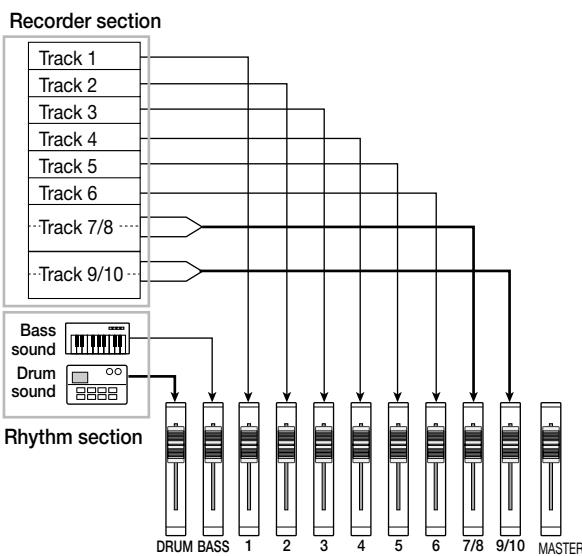
HINT

If the INPUT 1/2 [ON/OFF] keys are turned on, any instruments connected to the [INPUT 1/2] jacks can also be mixed.

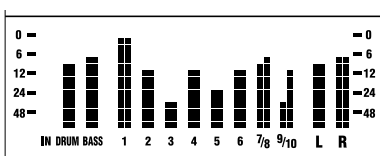
2 Raise the MASTER fader to the 0 (dB) position.

3 Press the PLAY [▶] button to play back the song, and use the faders of each channel (DRUM, BASS, 1 – 6, 7/8, 9/10) to adjust the volume balance.

The drum sound and bass sound of the rhythm section are assigned to the DRUM and BASS channels respectively, and recorder tracks 1 – 6, 7/8, 9/10 are assigned to mixer channels 1 – 6, 7/8, and 9/10 respectively. Use the DRUM/BASS faders to adjust the volume of the rhythm section, and faders 1 – 6, 7/8, and 9/10 to adjust the volume of each track of the recorder section.



The level meter (DRUM, BASS, 1 – 6, 7/8, 9/10) located in the center of the display indicates the post-fader signal level of each channel. The L/R level meter indicates the level of the signal that has passed through the MASTER fader. Adjust the mix, being careful that the 0 (dB) dot of each level meter does not light.



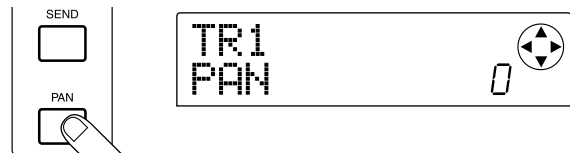
HINT

If necessary, you can also make the level meters show the pre-fader signal levels (→ p.54).

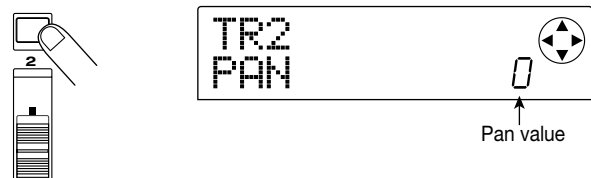
Adjust the pan

4 In the main screen, press the [PAN] key of the TRACK PARAMETER section.

When you press one of the keys of the TRACK PARAMETER section, the track parameter menu will appear, allowing you to set parameters such as pan and EQ for each channel. If you press the [PAN] key, a screen will appear in which you can adjust the Pan setting.



5 Press the status key of the channel whose pan you want to adjust.



When the track parameter menu is displayed, you can press a status key (or the cursor [◀]/[▶] keys) to select the channel whose parameter you want to adjust.

6 Turn the dial to adjust the pan value.

The pan value can be adjusted in a range of L100 (far left) – 0 (center) – R100 (far right).

7 Repeat steps 5 – 6 to adjust the pan of other channels.

NOTE

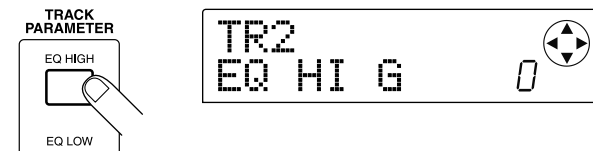
For the stereo channels (the DRUM channel, channels 7/8 and 9/10), the PAN parameter functions as a BALANCE parameter that adjusts the volume balance between the L/R channels.

Adjust the EQ

8 Press the [EQ HIGH] key or [EQ LOW] key.

Press the [EQ HIGH] key to adjust the high-frequency equalizer, or press the [EQ LOW] to adjust the low-frequency equalizer. The following illustration shows the

screen that will appear if you press the [EQ HIGH] key.



9 Press the status key of the channel whose EQ you want to adjust.

10 Use the cursor [▼]/[▲] keys to select the EQ parameter that you want to adjust, and turn the dial to modify the setting.

The available parameters and their ranges are as follows.

- If you press the [EQ HIGH] key first
 - EQ HI G: Adjust the amount of boost/cut -12 – 0 – 12 (dB) for the high-frequency range.
 - EQ HI F: Adjust the frequency at which the high-frequency boost or cut will occur, in the range of 500 – 18000 (Hz).
- If you press the [EQ LOW] key first
 - EQ LO G: Adjust the amount of boost/cut -12 – 0 – 12 (dB) for the low-frequency range.
 - EQ LO F: Adjust the frequency at which the low-frequency boost or cut will occur, in the range of 40 – 1600 (Hz).

HINT

- When the EQ HI G / EQ HI F parameters are displayed in the screen, you can press the [EQ HIGH] key to switch the high-frequency EQ on/off. (The key will be dark when this is turned off.)
- When the EQ LO G / EQ LO F parameters are displayed in the screen, you can press the [EQ LOW] key to switch the low-frequency EQ on/off. (The key will be dark when this is turned off.)

11 Repeat steps 9 – 10 to create settings in the same way for other EQ parameters or other channels.

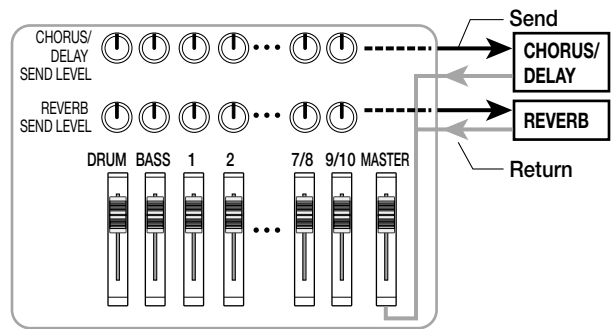
12 When you have finished creating settings, press the [EXIT] key.

You will return to the main screen.

4-2: Using the send/return effects

Two effects, reverb and chorus/delay, are internally connected to the send/return of the mixer. These effects are called "send/return effects." The following diagram shows

the signal flow of the send/return effects.



The amount of signal sent to each effect (send level) adjusts the depth of each send/return effect for each channel. Raising the send level will increase the amount of signal that is sent to the effect, producing a deeper effect for that channel.

In this example, we will select a send/return effect patch, and adjust the send level of each channel to adjust the amount of reverb and chorus.

Change the send/return effect patch

Newly created projects contain patches for reverb and chorus/delay. Here's how you can change the patch that is currently selected for reverb or chorus/delay, and edit the reverb or chorus effect as desired.

1 Press the [EFFECT] key.

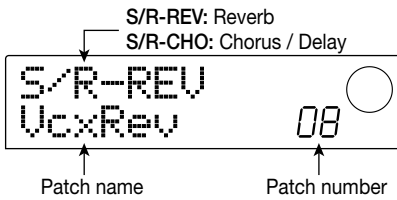
A screen will appear in which you can select the patches for the internal effects (insert effect or send/return effects).



2 Press the [REVERB] key or [CHORUS/DELAY] key.

Press the [REVERB] key to select a reverb patch, or the [CHORUS/DELAY] key to select a chorus/delay patch. The display will indicate the patch that is currently selected for the effect you selected.

The screen shown in the next page is an example of when the [REVERB] key is pressed.



3 Turn the dial to select a patch.

For this example, select the patch named "BrgtRoom" (number 01).

4 When you have finished selecting the patch, press the [EXIT] key.

You will return to the main screen.

Adjust the send level

5 In the TRACK PARAMETER section, press the [CHORUS/DELAY SEND] key or the [REVERB SEND] key.

Press the [REVERB SEND] key if you want to adjust the reverb send level, or the [CHORUS/DELAY SEND] key if you want to adjust the chorus/delay send level. A screen will appear in which you can adjust the send level of the selected effect. The screen shown below is an example of when the [REVERB SEND] key is pressed.



6 Press the status key of the channel (DRUM, BASS, 1 - 6, 7/8, 9/10) whose send level you want to adjust.

The send level value of the selected channel will be displayed.

7 Press the PLAY [▶] key, and while the song plays back, turn the dial to adjust the send level value.

The send level can be adjusted in a range of 0 - 100. As the value is increased, the effect will be applied more deeply to the selected channel.

8 Adjust the send level of other channels in the same way as in steps 6 - 7.

9 When you have finished making settings, press the [EXIT] key.

You will return to the main screen.

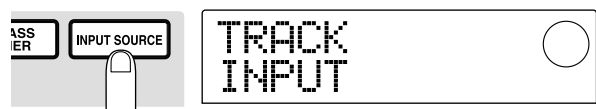
4-3: Apply an insert effect to the entire song

You can place the insert effect immediately before the MASTER fader, and use one of the MASTERING algorithm patches to modify the dynamics or tone of the entire song. Here's how you can use this method to apply an insert effect to the entire song.

Change the insert location of the insert effect

1 In the main screen, press the [INPUT SOURCE] key (located in the effect section).

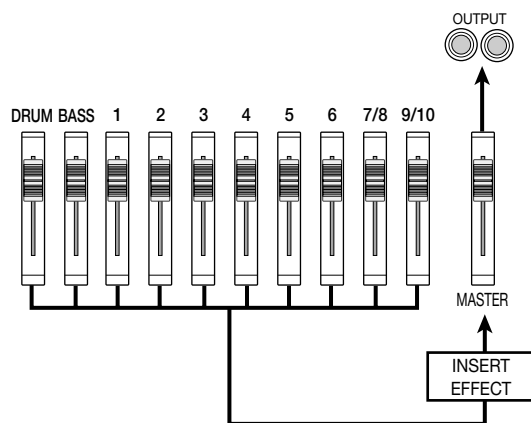
The [INPUT SOURCE] key will blink, and the display will indicate "TRACK INPUT." This means that the insert effect is inserted into the input mixer (the mixer section that processes the input signal).



2 Turn the dial to make the display read "TRACK MASTER."



Now the insert effect is inserted immediately before the MASTER fader, and can process the signal of the entire song that is sent from the [OUTPUT] jack.



HINT

The insert effect can also be inserted into any desired channel of the mixer, to process the signal of the rhythm section. For details refer to p.76.

3 Press the [EXIT] key.

You will return to the main screen.

Select a patch for the insert effect

4 Press the [EFFECT] key, and then press the [MASTERING] key.

The MASTERING algorithm will be selected for the insert effect.

5 Turn the dial to select a patch.

For this example, select patch number 07 "WarmMst"



6 Press the PLAY [▶] key to play back the song.

The entire song will pass through the insert effect and be sent from the [OUTPUT] jacks. If desired, you can edit the currently selected patch to make detailed adjustments to the way in which the effect is applied (→ p.78).

7 When you have finished selecting the patch, press the [EXIT] key.

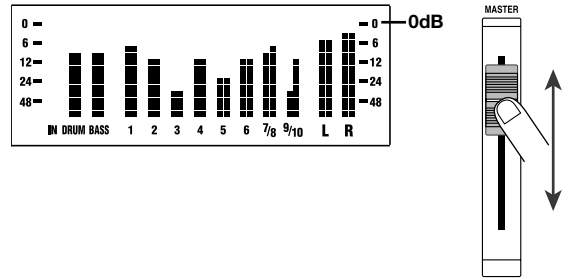
You will return to the main screen.

4-4: Perform the mixdown

Finally, you will record (mix down) the completed song onto an external master recorder.

1 Press the PLAY [▶] key to play back the song, and while you watch the level meter, adjust the overall volume of the song as desired.

Adjust the MASTER fader while making sure that the 0 dB dot of the L/R level meter does not light



2 When you have finished adjusting the MASTER fader, press the STOP [■] key to stop, and then press the ZERO [◀◀] key to return to the beginning of the song.

3 Start recording on the external recorder connected to the [OUTPUT] jack(s), and then press the PLAY [▶] key of the MRS-1044.

4 When you have finished recording, stop the external recorder. Press the MRS-1044's STOP [■] key to stop the song.

This completes the mixdown. Don't forget to save the current project on the hard disk.

HINT

When shipped from the factory, the hard disk contains a project with a completed mix of all recorded tracks. (Project name "Sample 4," project number 995.) For details on how to load a project, refer to p.17.

NOTE

On the MRS-1044, the current project will be saved automatically when you turn off the power or load another project. For this reason, if you modify the mix after having saved the project with its "completed" mix, you will be unable to return to the original "completed" mix. To make sure that you have preserved the completed mix, we recommend that you either Protect that project (→ p.85) or save the current mixer settings as a "scene" (→ p.51).

Reference [Recorder]

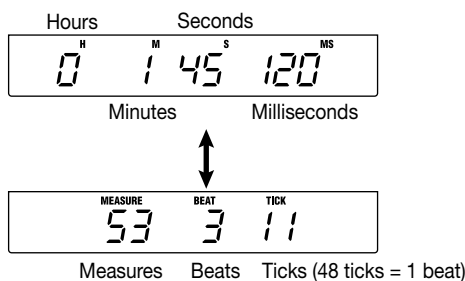
This section explains the functions and operations of the MRS-1044's recorder section.

Moving to a desired location in the song (Locate function)

You can specify a location within the song in time (minutes / seconds / 10 ms) units or in measure (measure / beat / tick) units, and move to that location.

1. In the main screen, press the [TIME BASE] key in the display section.

The time display and measure display will alternate each time you press the [TIME BASE] key.



NOTE

Locate operations can be performed even if the rhythm section is disconnected from the recorder section (i.e., when the [RHYTHM] key is lit). In this case, however, the measure display will always be used.

2. Make sure that the recorder is stopped, and press the cursor [▶] key once in the main screen.

The "M" character will blink for time display, and the "MEASURE" indicator will blink for measure display.



3. Use the cursor [◀]/[▶] keys to move the blinking area to the left or right, and turn the dial to specify the location to which you want to move.

The time display can be changed in minutes/seconds/10 millisecond units, and the measure display can be changed in measure/beat/tick units. When you change the value, you will immediately move to the specified location.

You can now press the PLAY [▶] key to begin playing from the point to which you located.

Assigning marks within the song (Marker function)

You can assign up to 100 marks in a song at any desired location, and locate to a mark by pressing a key or by specifying the desired mark number. This is convenient when you want to play back repeatedly from a specific location.

HINT

The marker function can also be used to recall mixer settings (scenes) at a desired location in a song (→ p.51).

Assigning a mark

Here's how to assign a mark at the desired location in a song.

1. Find to the point at which you want to assign a mark.

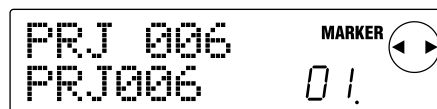
If necessary, you can use the Scrub function to make fine adjustments to the current location in 10 millisecond steps (→ p.31).

HINT

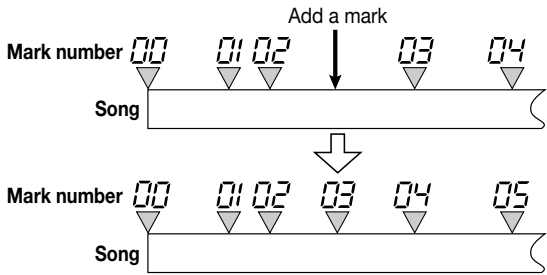
A mark can be assigned either during playback or when stopped.

2. Press the [MARK] key.

A mark will be assigned to the current location. When a mark has been assigned, the new mark number (01 – 99) will appear in the MARKER area in the upper right of the display.



The mark number is assigned automatically in ascending order from the beginning of the song. If you add a new mark between two existing marks, the subsequent marks will be renumbered.



HINT

- Mark number 00 is already set at the beginning of the song (the counter zero location).
- In the main screen, the MARKER area in the upper right of the display will show the number of the mark that you passed last (i.e., the previous mark in the song). If a dot is shown at the lower right of the mark number, this means that the mark location matches the current location.

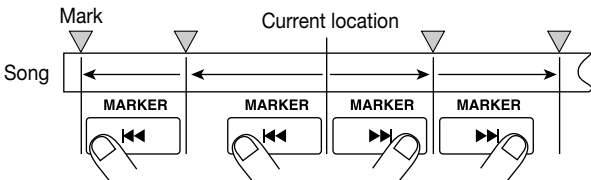
Locating to a mark location

Here's how to move to the location of a mark. This can be done in two ways: you can use key operations, or specify the mark number directly.

Using keys to locate

1. Press either the MARKER [◀◀] or [▶▶] key.

Each time you press the key, you will locate to the next mark before or after the current location.



Specifying the mark number to locate

1. In the main screen, press the cursor [◀] key once.

The word MARKER will blink in the upper right of the display.

2. Turn the dial to select the desired mark number.

As soon as the number is changed, you will locate to that number.

Deleting a mark

Here's how to delete a mark that you assigned.

1. Locate to the mark that you want to delete.

The mark number displayed in the MARKER area is the mark that will be deleted. However, it is not possible to delete a mark unless the mark location exactly matches the current location. Make sure that the dot at the lower right of the mark number is lit.

2. Press the [CLEAR] key.

The selected mark will be deleted, and subsequent marks will be renumbered.

NOTE

- A deleted mark cannot be recovered.
- It is not possible to delete mark number "00" located at the beginning of the song.

Finding a desired location (Scrub/Preview function)

The MRS-1044 provides a "Scrub" function that lets you search for a desired location while repeatedly playing a short region before or after the current location. This is convenient when you want to accurately find the point at which a specific sound starts or stops. When the Scrub function is on, you can use the "Preview function" that plays 0.7 seconds of the preceding or following sound when you press the REW [◀◀] or FF [▶▶] key. By using the Scrub and Preview functions together, you can find the desired location quickly and accurately.

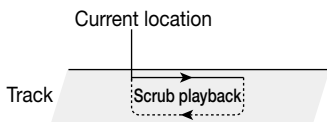
NOTE

When the Scrub/Preview functions are being used, only one of the tracks 1 – 10 can be played back.

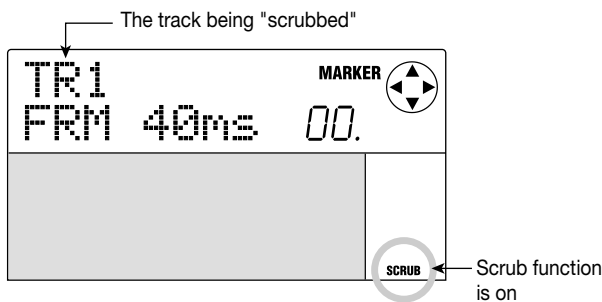
Using the Scrub/Preview functions

- In the main screen, hold down the STOP [■] key and press the PLAY [▶] key.

This turns on the Scrub function, and a short region (40 milliseconds by default) following the current location will play back repeatedly.



When the Scrub function is on, the SCRUB indicator will appear in the lower right of the display.



- Press one of the status keys 1 – 6, 7/8, or 9/10 to select the track that will be scrubbed.

For the stereo tracks (7/8, 9/10), the selection will alternate between odd-numbered and even-numbered tracks each time you press the status key.

- Use the cursor [◀]/[▶] keys to make the unit displayed at the right edge of the counter ("MS" for

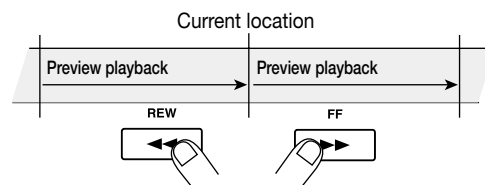
time display, or "TICK" for measure display) blink.

- Turn the dial to the left or right to find the desired location.

While scrub playback continues, the current location will move forward or backward in 10 millisecond steps (for time display) or one-tick steps (for measure display).

- If you want to use the Preview function to hear the region before the current location, press the REW [◀◀] key. To hear the region after the current location, press the FF [▶▶] key.

If you press the REW [◀◀] key, a region of 0.7 seconds prior to the current location will play (ending at the current location). If you press the FF [▶▶] key, a region of 0.7 seconds following the current location will play (beginning at the current location). This is called "preview playback." When preview playback ends, scrub playback will resume.



- To cancel the Scrub function, press the STOP [■] key.

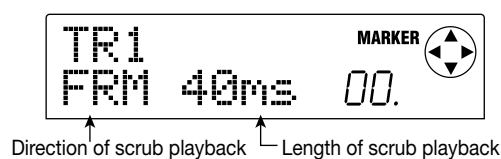
You will return to the main screen.

Changing the settings of the Scrub function

When the Scrub function is on, you can change the direction of the scrub playback (whether it will play the region before or after the current location), and the length of the scrub playback region.

- In the main screen, hold down the STOP [■] key and press the PLAY [▶] key.

This turns the Scrub function on, and the following screen will appear. The characters in the lower left (TO/FRM) indicate the direction of scrub playback, and the number in the lower right (40 – 200) is the length of scrub playback.



- If you want to change the length of scrub playback,

use the cursor [◀]/[▶] keys to make the scrub playback length setting blink, and turn the dial.

You can select 40, 80, 120, 160, or 200 (ms) as the length of scrub playback.

HINT

You can also use the cursor [▲]/[▼] keys to change the scrub playback length.

3. If you want to change the direction of scrub playback, use the cursor [◀]/[▶] keys to make the scrub playback direction setting blink, and turn the dial.

If you select "TO," scrub playback will begin from an earlier point and end at the current location. If you select "FRM," scrub playback will begin from the current location (this is the default setting).



HINT

The scrub function playback will be affected immediately by any change you make to the scrub settings.

4. If you want to use the new scrub playback settings to find a location, use the cursor [◀]/[▶] keys to move the blinking area to the unit displayed at the right of the counter ("MS" for time display, or "TICK" for measure display).

Turn the dial to the left or right, and the current location will move backward or forward. For details on operating the Scrub/Preview functions, refer to the preceding item.

5. To exit the Scrub function, press the STOP [■] key.

You will return to the main screen.

Playing back repeatedly (A-B Repeat function)

A-B Repeat is a function that repeatedly plays back a desired region of the song. This is useful when you want to listen to the same region repeatedly.

1. Locate to the point at which you want to begin repeat playback, and press the [A-B REPEAT] key.

The [A-B REPEAT] key will blink, and the repeat start location (point A) will be specified.

2. Locate to the point at which you want to end repeat playback, and press the [A-B REPEAT] key.

The [A-B REPEAT] key will change from blinking to solidly lit, and the repeat end location (point B) will be specified.

NOTE

If you specify a point B that is located earlier than point A, the region from points B → A will be played repeatedly.

HINT

- If you want to re-make the point A/B settings, press the [A-B REPEAT] key several times to make it go dark, and then repeat steps 1 – 2 once again.
- Point A/B settings can be made when the recorder is either stopped or playing.

3. To begin repeat playback, press the PLAY [▶] key.

Repeat playback will begin when you press the PLAY [▶] key while the [A-B REPEAT] key is lit. Even after pressing the STOP [■] key to stop playback, you can perform repeat playback again as many times as desired, as long as the [A-B REPEAT] key is lit.

4. To turn off repeat playback, press the [A-B REPEAT] key.

The [A-B REPEAT] key will go dark, and repeat playback will be turned off.

NOTE

When the [A-B REPEAT] key goes dark, the programmed point A/B locations will be erased.

Re-recording only a specified region (Punch-in/out function)

Punch-in/out is a function that lets you re-record just a specified region of a previously recorded track. The action of switching a currently-playing track to record mode is called "punch-in," and the action of switching back from recording to playback is called "punch-out."

The MRS-1044 provides two ways to do this. You can use the panel keys or a foot switch (sold separately) to punch-in/out manually ("manual punch-in/out"), or cause punch-in/out to occur automatically at previously specified points ("auto punch-in/out").

NOTE

When you use punch-in/out to re-record, the previously recorded material will be overwritten (replaced) by the newly recorded material. If you plan to compare the previous state with the result of punching-in/out, you must capture that track beforehand as Undo data (→ p.44).

Using manual punch-in/out

Here's how to use manual punch-in/out to re-record a region of a previously recorded track.

HINT

If you want to use a foot switch (ZOOM FS01/FS02) to punch-in/out, connect the foot switch to the rear panel [FOOT SW] jack.

NOTE

With the default settings of the MRS-1044, a foot switch connected to the [FOOT SW] jack is set to start/stop song playback. If you want to use the foot switch to punch-in/out, you must first change the internal setting (→ p.92).

1. Repeatedly press the status key of the track on which you want to punch-in/out, making the key light red.
2. Raise the fader of the corresponding channel to the 0 dB position.
3. While playing your instrument, use the [REC LEVEL] control to adjust the recording level.

As necessary, play back the recorder and use the faders of the mixer section to adjust the mix balance of your instrument and the playback of the tracks.

4. Locate to a point several measures earlier than where you want to punch-in, and press the PLAY [▶] key to begin playback.

5. When you come to the punch-in location, press the REC [●] key (or press the foot switch).

The REC [●] key will light, and recording will begin from that location.

6. When you come to the punch-out location, press the REC [●] once again (or press the foot switch once again).

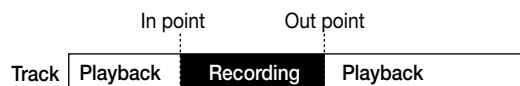
The REC [●] key will go dark, and recording will be defeated from that point.

7. To stop the transport, press the STOP [■] key.

8. To check the newly recorded content, locate to the point of step 4, and press the PLAY [▶] key.

Using auto punch-in/out

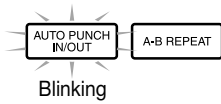
Auto punch-in/out is a function that lets you specify beforehand the region to be re-recorded. Punch-in will occur automatically when you reach the starting location (in point), and punch-out will occur automatically when you reach the ending location (out point).



In order to perform auto punch-in/out, use the [AUTO PUNCH-IN/OUT] key to first specify the In point and Out point, and then perform the recording operation. The procedure is as follows.

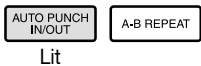
1. On the channel for the track that you want to re-record, raise the fader to the 0 dB position.
2. While playing your instrument, use the [REC LEVEL] control to adjust the recording level.
3. Locate to the point at which you want to punch-in, and press the [AUTO PUNCH-IN/OUT] key.

The [AUTO PUNCH-IN/OUT] key will blink. This sets the "In point" at which recording will begin.



4. Locate to the point at which you want to punch-out, and press the [AUTO PUNCH-IN/OUT] button once again.

This sets the "Out point" at which recording will end. The [AUTO PUNCH-IN/OUT] button will change from blinking to solidly lit. This indicates that the auto punch-in/out function is now enabled.



If you want to specify the in/out points precisely, it is convenient to use the Scrub function (→ p.31) to find the locations and assign a mark (→ p.29) beforehand at the desired locations.

5. Locate the recorder to a spot earlier than the In point.

6. Repeatedly press the status key for the track on which you want to punch-in/out, until the key blinks red.



A status key that is lit red means that the current location is between the In point and Out point. In this case, operate the transport once again to locate to a point that is earlier than the In point.

7. If you want to rehearse the auto punch-in/out, press the PLAY [▶] key.

The recorder will begin playing. When you reach the In point, the track on which you are punching-in/out will be muted. When you reach the Out point, muting will be defeated. (You will always be able to monitor the input signal during this time.) Performing this action will not record anything on the track.

When you are finished rehearsing, move once again to a location earlier than the In point.

8. To actually perform auto punch-in/out, hold down the REC [●] key and press the PLAY [▶] key.

When you reach the In point, recording will begin automatically (punch-in). When you reach the Out point, recording will end automatically, and playback will resume (punch-out).

9. When you are finished recording, press the STOP [■] key.

10. To check the recorded content, press the status key of the track on which you punched-in/out, making the status key light green. Then locate to a point earlier than the In-point, and press the PLAY [▶] key.

If you want to re-do the recording, repeat steps 5 – 8.

11. When you are satisfied with the recording, press the [AUTO PUNCH-IN/OUT] key.

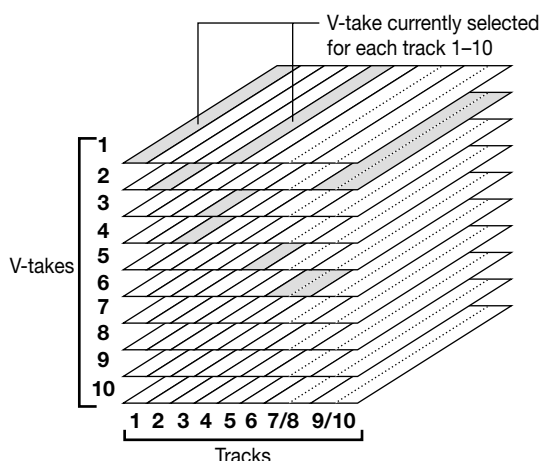
The [AUTO PUNCH-IN/OUT] key will go dark, and the Auto Punch-in/out function will be turned off. (The In point and Out point settings will be discarded.)



By using Auto Punch-in/out in conjunction with the A-B Repeat function (→ p.32), you can automatically return to the punch-in point after punching-out, and listen to the recorded content. To do this, set the In/Out points, and then set point A and point B outside this region, and enable A-B Repeat.

Using V-takes

Each track 1 – 10 of the recorder contains ten virtual tracks, called "V-takes." For each track, you can select one take, which will be used for recording and playback. For example, you can switch V-takes as you record multiple vocal or guitar solos on the same track, and later compare them and select the best V-take.



Switching V-takes

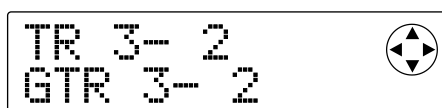
Here's how to switch the V-take used by each track 1 – 10.

HINT

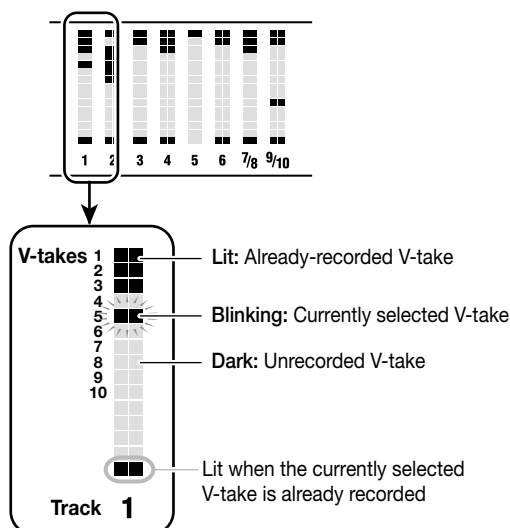
Even for the stereo tracks (tracks 7/8 and 9/10) you can select different V-takes for odd-numbered/even-numbered tracks.

1. In the main screen, press the display section [V-TAKE] key.

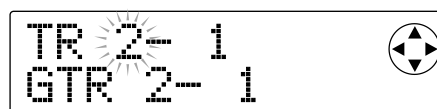
The [V-TAKE] key will light, and a screen will appear in which you can switch the V-take for each track. In the "TRxx-yy" indication, xx is the track number (1 – 10), and yy is the V-take number (1 – 10) currently selected for that track. The name of the V-take is displayed below "TRxx-yy."



The level meter display area will show dots as lit/blinking/dark to indicate the V-take currently selected for each track, and the V-takes that have already been recorded.



2. Use the cursor [◀]/[▶] keys to make the track number blink, and turn the dial to select a track (1 – 10).



HINT

You can also use the status keys (1 – 6, 7/8, 9/10) to select a track. When using status keys 7/8 and 9/10, the odd-numbered/even-numbered tracks will be selected alternately each time you press the key.

3. Use the cursor [◀]/[▶] keys to make the V-take number indicator blink, and turn the dial to select a V-take (1 – 10).

As necessary, repeat steps 2 – 3 to switch V-takes for other tracks as well.

V-takes that have already been recorded will be assigned a default name as follows. These names can be edited as desired. (See the following section.)

- GTRxx-yy: A V-take recorded through an insert effect (algorithm= GUITAR/BASS)
- MICxx-yy: A V-take recorded through an insert effect (algorithm= MIC)
- LINxx-yy: A V-take recorded through an insert effect (algorithm= LINE)
- MASxx-yy: A V-take recorded through an insert effect (algorithm= MASTERING)
- BYPxx-yy: A V-take recorded with the insert effect bypassed

- BOUxx-yy: A V-take recorded using the Bounce function
- * xx will be the track number (1 – 10), and yy will be the V-take number (1 – 10).

HINT

If an unrecorded V-take is selected, the V-take name area will indicate "NO DATA."

4. When you have finished switching V-takes, press the [EXIT] key.

The [V-TAKE] key will go dark, and you will return to the main screen.

Editing the name of a V-take

A V-take that has been recorded will be automatically assigned a default name, but you can edit this V-take name as follows.

1. In the main screen, press the [V-TAKE] key.

A screen will appear in which you can switch the V-take of each track.

2. Use the cursor [◀]/[▶] keys and the dial (or the status keys) to select the track (1 – 10) for which you want to edit the name of a V-take.

For details on how to select a track, refer to p.35.

HINT

- It is not possible to edit the name of an unrecorded V-take (NO DATA).
- The V-take name can be edited only for the V-take that is currently selected for each track 1 – 10.

3. Press the [EDIT] key.

The first character of the V-take name will blink.



4. Use the cursor [◀]/[▶] keys to move the blinking location, and turn the dial to change the character.

The following characters can be selected.

Numerals: 0 – 9

Letters: A – Z, a – z

Symbols: (space) ! " # \$ % & ' () * + , - . / : ; < = > ? @ [\] ^ _ ' { | } ~

5. When you have finished inputting the name, press the [EXIT] key.

The name will be updated, and you will return to the screen of step 2. If necessary, you can now edit the V-take name of another track.

6. When you have finished editing, press the [EXIT] key.

You will return to the main screen.

HINT

If all recorded data is erased from a V-take, the name will revert to "NO DATA."

Combining multiple tracks (Bounce function)

"Bounce" is a function that mixes the performances of the recorder section and rhythm section (drum kit + bass program), and records them on one or two tracks. (This is sometimes called "ping-pong recording.") As an example, we will explain how recorder tracks 1 – 8 and the rhythm section can be mixed in stereo, and recorded on tracks 9/10.

Executing bounce recording

1. Press the status key of the bounce-destination track (9/10) to make the key light red.

A maximum of two mono tracks or one stereo track can be selected as the bounce-destination.

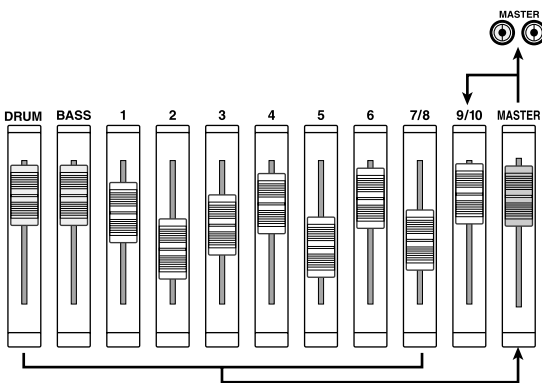
2. Press the [BOUNCE] key.

The [BOUNCE] key will light, and the Bounce function will be turned on.

3. Press the PLAY [▶] key to play back the song, and adjust the mix balance of each track.

While watching the L/R level meters, adjust the DRUM, BASS, 1 – 6, and 7/8 channel faders and the MASTER faders so that the L/R level meters do not clip.

When the Bounce function is on, the signal that passes through the MASTER fader will be output from the [OUTPUT] jacks, and at the same time will be sent to the bounce-destination track(s). Even if you are using the insert effect or a send/return effect, the sound with the effect(s) applied will be recorded on the bounce-destination track(s).



HINT

- If you turn the INPUT 1/2 [ON/OFF] keys on, you can mix the input signals from the [INPUT 1] and [INPUT 2] jacks into the bounce recording.
- If you select only one mono track as the bounce-

destination, the signal mixed to mono will be recorded.

- If necessary, you can play back all ten tracks, and bounce them to the desired one or two tracks. For details refer to the section that follows.

4. Press the STOP [■] key.

5. Press the ZERO [◀◀] key to return to the beginning of the song, and then hold down the REC [●] key and press the PLAY [▶] key.

Recording on track 9/10 will begin.

6. When you have finished recording, press the STOP [■] key.

The Bounce function will be turned off.

Making settings for the Bounce function

You can change the settings of the Bounce function if necessary.

■ Specifying playback/mute for the recording track(s)

By default, the bounce-destination recording track(s) will be muted. If you want to play back all ten tracks simultaneously while you bounce-record, use the following procedure to change the internal setting so that the recording track(s) will also play back.

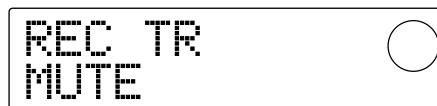
1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY BOUNCE," and press the [ENTER] key.

3. Use the cursor [◀]/[▶] keys to make the display read "BOUNCE REC TR," and press the [ENTER] key.

The current setting will be displayed.



- MUTE : The recording track(s) will be muted (default setting).
- PLAY : The recording track(s) will play back.

4. Turn the dial to change the setting to "PLAY."

- To return to the main screen, press the [EXIT] key several times.

■ Selecting the recording-destination V-take

By default, the result of the Bounce operation will be recorded on the V-take that is currently selected for the recording track(s). If you want to preserve the contents of the recording track(s), you can use the following procedure to change the recording-destination V-take.

HINT

For details on V-takes, refer to p.35.

- In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

- Use the cursor [◀]/[▶] keys to make the display read "UTILITY BOUNCE," and press the [ENTER] key.

- Use the cursor [◀]/[▶] keys to make the display read "BOUNCE REC TAKE," and press the [ENTER] key.

The currently selected recording-destination V-take will be displayed.



- CURRENT : The bounce result will be recorded on the V-take currently selected for the recording track.
- 1 - 10 : The bounce result will be recorded on the V-take of the number you specify here.

- Turn the dial to specify the recording-destination V-take (CURRENT or 1 - 10).

- To return to the main screen, press the [EXIT] key several times.

Track editing

The audio data recorded on the tracks of the recorder can be edited in a variety of ways, such as erasing portions of it or copying it to other tracks. This section explains the track editing functions.

HINT

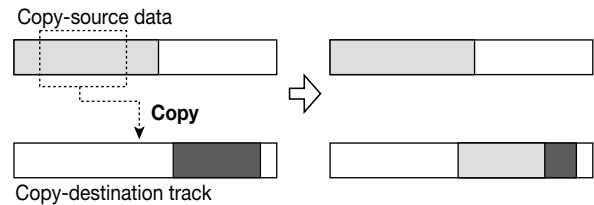
- When using the track editing functions, the two tracks of each stereo track (7/8, 9/10) are handled as separate tracks.
- V-takes not currently selected for tracks 1 - 10 can also be selected for editing.

NOTE

In general, recorded track data that was rewritten by an editing operation cannot be recovered. If you plan to compare the state of the data before and after editing, you must Capture the state of that track (→ p.44).

Copying a specified region of data to another location

A specified region of recorded data can be copied to any location in any track. The data that was previously at the copy-destination will be erased, and overwritten by the copy-source data.



- In the main screen, press the [PROJECT/UTILITY] key. The display will indicate "PROJECT."

- Use the cursor [◀]/[▶] keys to make the display read "UTILITY TR EDIT," and press the [ENTER] key.

The track edit menu will appear, from which you can select the desired type of editing function.

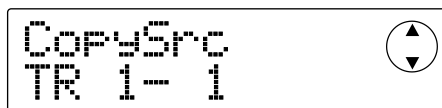


- Make sure that the display indicates "TR EDIT COPY," and press the [ENTER] key.

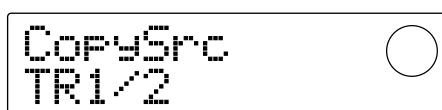
A screen will appear in which you can specify the copy-source track and V-take.

4. Use the dial and cursor [▲]/[▼] keys to specify the copy-source track and V-take.

In "TR xx-yy," "xx" is the copy-source track number, and "yy" is the V-take number. Use the dial to select the track number (1 – 10), and use the cursor [▲]/[▼] keys to select the V-take number (1 – 10).



If you turn the dial toward the right when track 10 is selected, the following screen will appear.



In this screen you can use the dial to specify two adjacent odd-numbered/even-numbered tracks (1/2, 3/4, 5/6, 7/8, 9/10) as the copy-source. In this case, the V-takes currently selected for the two selected tracks will automatically be selected as the copy-source.

5. Press the [ENTER] key.

A screen will appear in which you can specify the beginning of the copy-source.



6. Use the cursor [◀]/[▶] keys to move the blinking area in the display, and turn the dial to specify the location.

The location can be specified in one of the following two ways.

• Specifying the location numerically

Move the blinking area to one of the M (minutes) / S (seconds) / MS (millisecond) areas in the bottom of the display, and turn the dial to edit the value of each unit.

• Assigning a previously-specified mark location

Move the blinking area to the MARKER area in the upper right of the display, and turn the dial to specify the mark number.

HINT

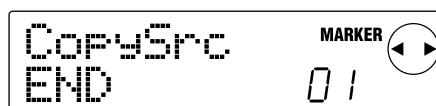
- By pressing the [TIME BASE] key to switch to the Measure display, you can specify the location in measure/beat/clock units.
- By holding down STOP[■] and pressing the PLAY[▶]

key, you can scrub-play the track and V-take you specified in step 4. For details on using scrub-playback, refer to p.31.

- The starting location can be specified only between the beginning of the song and the last-recorded location (i.e., within the recorded data).

7. When you have finished specifying the starting location, press the [ENTER] key.

A screen will appear in which you can specify the ending location of the copy-source.

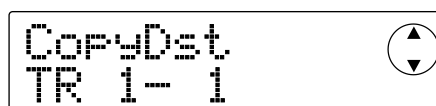


8. Specify the ending location of the copy-source in the same way as in step 6.

At this time, you can press the PLAY[▶] key to play back the region between the specified starting location and ending location. If there is no recorded data at the specified ending location, an "*" symbol will appear in the lower line of the screen.

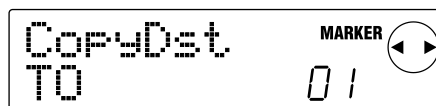
9. When you have finished specifying the ending location, press the [ENTER] key.

A screen will appear in which you can specify the copy-destination track (and V-take).



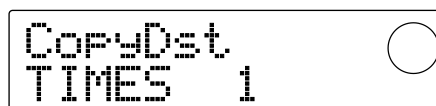
10. Specify the copy-destination track and V-take in the same way as in step 4.

A screen will appear in which you can specify the copy-destination location.



11. Specify the copy-destination location in the same way as in step 6, and press the [ENTER] key.

A screen will appear in which you can specify the number of times (1 – 100) that the data will be copied.



12. Turn the dial to specify the number of times that the data will be copied, and then press the [ENTER] key.

The display will indicate "TrCopy SURE?," asking you to confirm the Copy operation.

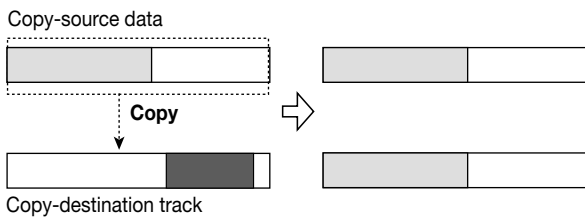
13. To execute the Copy, press the [ENTER] key. To cancel, press the [EXIT] key.

When you press the [ENTER] key and the copy is completed, the display will indicate "COMPLETE." If you then press [EXIT], you will return to the Track Edit menu of step 2.

If you press the [EXIT] key in step 13, you will return to the setting screen of step 11. If necessary, you can press the [EXIT] key repeatedly to step backward through each screen.

Copying the data of an entire track

The recorded data of an entire track can be copied to another track. The recorded data at the copy-destination will be erased, and overwritten by the copy-source data.

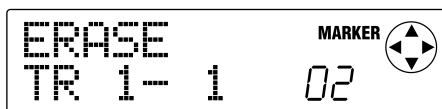


1. In the main screen, press the [V-TAKE] key.

The [V-TAKE] key will light, and a screen will appear in which you can switch the V-take for each track.

2. Press the [PROJECT/UTILITY] key.

A menu will appear in which you can select operations that edit the recorded data of an entire track.



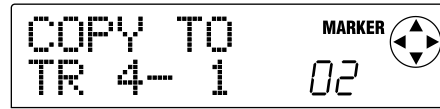
3. Repeatedly press the [PROJECT/UTILITY] key to make the display read "COPY TRxx-yy."

In "COPY TRxx-yy," the xx and yy values respectively indicate the copy-source track number and V-take.

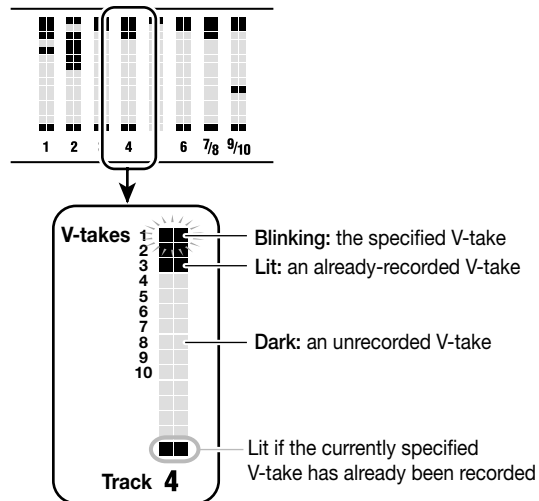


4. Use the cursor [◀]/[▶] keys and the dial to specify the copy-source track/V-take, and press the [ENTER] key.

A screen will appear in which you can specify the copy-destination track/V-take. In "COPY TO TRxx-yy," the xx value is the copy-destination track number, and the yy value is the V-take number.



In this screen, the dots of the level meter will be lit or unlit as follows to indicate whether the currently selected V-take has already been recorded or not.



5. Use the cursor [◀]/[▶] keys and the dial to specify the copy-destination track/V-take, and press the [ENTER] key.

The display will ask "COPY SURE?," asking you to confirm the copy operation.

6. To execute the copy, press the [ENTER] key. To cancel, press the [EXIT] key.

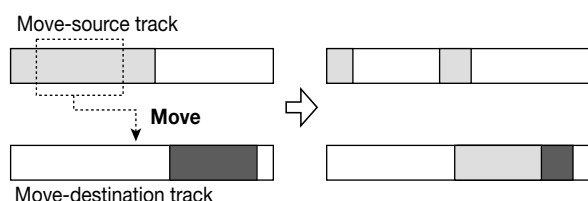
When you press the [ENTER] key and the copy is completed, you will return to the screen from step 1.

If you press the [EXIT] key, you will return to the setting screen from step 4. If necessary, you can press the [EXIT] key to step backward through each screen.

Moving a specified region of data to another location

A specified region of recorded data can be moved to the desired location of a desired track. The previous data at the

move-destination will be erased, and overwritten by the move-source data. When this operation is completed, the move-source region will contain silence.



1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY TR EDIT," and press the [ENTER] key.

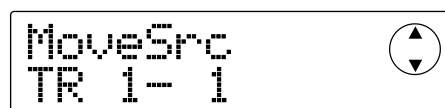
The track edit menu will appear.

3. Use the cursor [◀]/[▶] keys to make the display read "TR EDIT MOVE," and press the [ENTER] key.

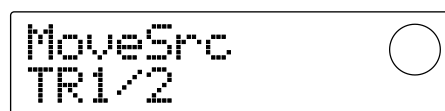
A screen will appear in which you can specify the move-destination track and V-take.

4. Use the dial and the cursor [▲]/[▼] keys to specify the move-source track and V-take.

In "TR xx-yy," "xx" specifies the move-source track number, and "yy" specifies the V-take number. Use the dial to select the track number (1 – 10), and use cursor [▲]/[▼] keys to select the V-take number (1 – 10).



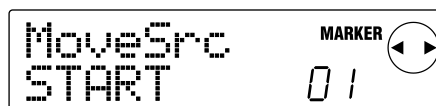
If you turn the dial toward the right when track 10 is selected, the following screen will appear.



In this screen you can use the dial to specify two adjacent odd-numbered/even-numbered tracks (1/2, 3/4, 5/6, 7/8, 9/10) as the move-source. In this case, the V-takes currently selected for the two selected tracks will automatically be selected as the move-source.

5. Press the [ENTER] key.

A screen will appear in which you can specify the starting location of the move-source.



6. Use the cursor [◀]/[▶] keys to move the blinking area in the display, and turn the dial to specify the location.

The location can be specified in one of the following two ways.

• **Specifying the location numerically**

Move the blinking area to one of the M (minutes) / S (seconds) / MS (millisecond) areas in the bottom of the display, and turn the dial to edit the value of each unit.

• **Assigning a previously-specified mark location**

Move the blinking area to the MARKER area in the upper right of the display, and turn the dial to specify the mark number.

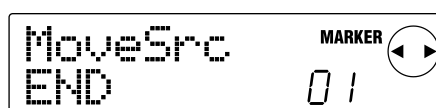
HINT

• By pressing the [TIME BASE] key to switch to the Measure display, you can specify the location in measure/beat/clock units.

• By holding down STOP[■] and pressing the PLAY[▶] key, you can scrub-play the track and V-take you specified in step 4. For details on using scrub-playback, refer to p.31.

7. When you have finished specifying the starting location, press the [ENTER] key.

A screen will appear in which you can specify the ending location of the move-source.

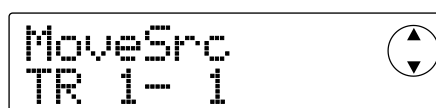


8. Specify the ending location of the move-source in the same way as in step 6.

At this time, you can press the PLAY[▶] key to play back the region between the specified starting location and ending location. If there is no recorded data at the specified ending location, an "*" symbol will appear in the lower line of the screen.

9. When you have finished specifying the ending location, press the [ENTER] key.

A screen will appear in which you can specify the move-destination track (and V-take).



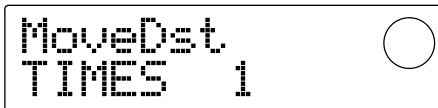
10. Specify the move-destination track and V-take in the same way as in step 4.

A screen will appear in which you can specify the move-destination location.



11. Specify the move-destination location in the same way as in step 6, and press the [ENTER] key.

A screen will appear in which you can specify the number of times (1 – 100) that the move-source region will be copied.



12. Turn the dial to specify the number of times that the data will be copied, and press the [ENTER] key.

The display will ask "TrMove SURE?," asking you to confirm the Move operation.

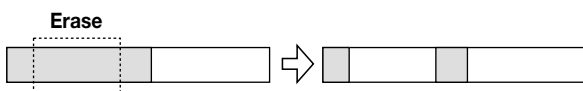
13. To execute the Move operation, press the [ENTER] key. To cancel, press the [EXIT] key.

When you press the [ENTER] key and the Move operation is completed, the display will indicate "COMPLETE." If you then press the [EXIT] key, you will return to the Track Edit menu of step 2.

If you press the [EXIT] key in step 13, you will return to the setting screen of step 11. If necessary, you can press the [EXIT] key repeatedly to step back through each setting screen.

Erasing a specified region

This operation erases the recorded data from the specified region, returning it to a silent (blank) state.



1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY TR EDIT," and press the [ENTER] key.

The Track Edit menu will appear.

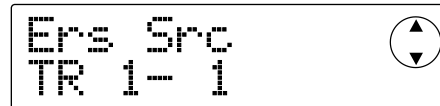
3. Use the cursor [◀]/[▶] keys to make the display

read "TR EDIT ERASE," and press the [ENTER] key.

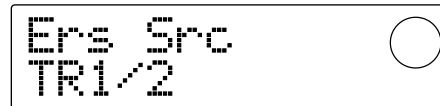
A screen will appear in which you can specify the track and V-take from which data will be erased.

4. Use the dial and the cursor [▲]/[▼] keys to specify the track and V-take from which data will be erased.

In "TR xx-yy," "xx" is the track number and "yy" is the V-take number from which data will be erased. Use the dial to select the track number (1 – 10), and use the cursor [▲]/[▼] keys to select the V-take number (1 – 10).



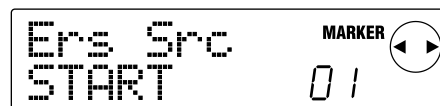
If you turn the dial toward the right when track 10 is selected, the following screen will appear.



In this screen you can use the dial to specify two adjacent odd-numbered/even-numbered tracks (1/2, 3/4, 5/6, 7/8, 9/10). In this case, data will be erased from the V-takes currently selected for the two selected tracks.

5. Press the [ENTER] key.

A screen will appear in which you can specify the starting location of the region that will be erased.



6. Use the cursor [◀]/[▶] keys to move the blinking area in the display, and turn the dial to specify the location.

The location can be specified in one of the following two ways.

- **Specifying the location numerically**

Move the blinking area to one of the M (minutes) / S (seconds) / MS (millisecond) areas in the bottom of the display, and turn the dial to edit the value of each unit.

- **Assigning a previously-specified mark location**

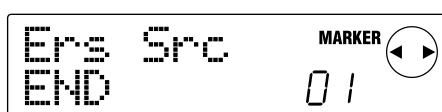
Move the blinking area to the MARKER area in the upper right of the display, and turn the dial to specify the mark number.

HINT

- By pressing the [TIME BASE] key to switch to the Measure display, you can specify the location in measure/beat/clock units.
- By holding down STOP[■] and pressing the PLAY[▶] key, you can scrub-play the track and V-take you specified in step 4. For details on using scrub-playback, refer to p.31.

7. When you have finished specifying the starting location, press the [ENTER] key.

A screen will appear in which you can specify the ending location of the region to be erased.



8. Specify the ending location of the region to be erased in the same way as in step 6.

At this time, you can press the PLAY[▶] key to play back the region between the specified starting location and ending location. If there is no recorded data at the specified ending location, an "*" symbol will appear in the lower line of the screen.

9. When you have finished specifying the ending location, press the [ENTER] key.

The display will ask "TrErase SURE?," asking you to confirm the Erase operation.

10. To execute the Erase operation press the [ENTER] key. To cancel, press the [EXIT] key.

When you press the [ENTER] key and the Erase operation has been completed, the display will indicate "COMPLETE." If you then press the [EXIT] key, you will return to the Track Edit menu from step 2.

If you press the [EXIT] key in step 9, you will return to the setting screen from step 7. If necessary, you can press the [EXIT] key repeatedly to step back through each setting screen.

Erasing the data of an entire track

You can erase all recorded data from a specified track. The erased track will revert to an unrecorded state.



1. In the main screen, press the [V-TAKE] key.

The [V-TAKE] key will light, and a screen will appear in

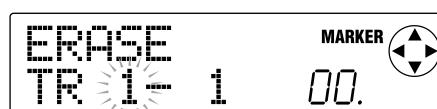
which you can switch the V-take of each track.

2. Press the [PROJECT/UTILITY] key.

A menu will appear in which you can edit recorded data in units of entire tracks.

3. Repeatedly press the [PROJECT/UTILITY] key to make the display indicate "ERASE TRxx-yy."

In "ERASE TRxx-yy," the xx and yy values respectively indicate the track number and V-take number that will be erased.

**HINT**

In this screen, the lit/unlit state of the dots in the level meter will indicate whether the currently specified V-take has already been recorded. For details refer to p.40.

4. Use the cursor [◀]/[▶] keys and the dial to specify the track/V-take that will be erased, and press the [ENTER] key.

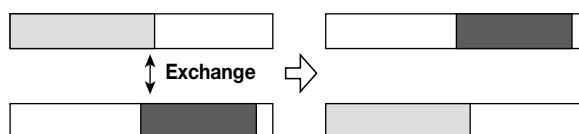
The display will indicate "ERASE SURE?," asking you to confirm the Erase operation.

5. Press the [ENTER] key to execute the Erase operation, or press the [EXIT] key to cancel.

When you press the [ENTER] key and the Erase operation has been completed, you will return to the screen from step 1. If you press the [EXIT] key, you will return to the screen from step 3. If necessary, you can press the [EXIT] key to step back through each screen.

Exchanging the data of entire tracks

You can exchange the recorded data of two specified tracks/V-takes.



1. In the main screen, press the [V-TAKE] key.

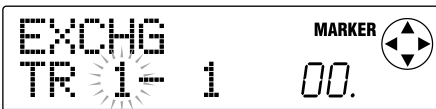
The [V-TAKE] key will light, and a screen will appear in which you can switch the V-take of each track.

2. Press the [PROJECT/UTILITY] key.

A menu will appear in which you can edit recorded data in units of entire tracks.

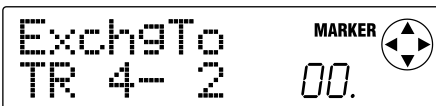
3. Repeatedly press the [PROJECT/UTILITY] key to make the display indicate "EXCHG TRxx-yy."

In "EXCGH TRxx-yy," the xx and yy values respectively indicate the track number and V-take number that will be exchanged with another track/V-take.



4. Use the cursor [◀]/[▶] keys and the dial to specify the track/V-take that you want to exchange, and press the [ENTER] key.

A screen will appear in which you can specify the other track/V-take with which the first will be exchanged. In "ExchgTo TRxx-yy," the xx and yy values respectively indicate the track number and V-take number.



HINT

In this screen, the lit/unlit state of the dots in the level meter will indicate whether the currently specified V-take has already been recorded. For details refer to p.40.

5. Use the cursor [◀]/[▶] keys and the dial to specify the other track/V-take for the exchange, and press the [ENTER] key.

The display will indicate "EXCHG SURE?", asking you to confirm the Exchange operation.

6. Press the [ENTER] key to execute the Exchange operation, or press the [EXIT] key to cancel.

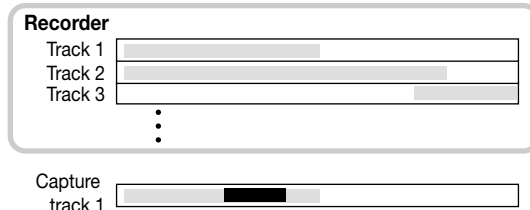
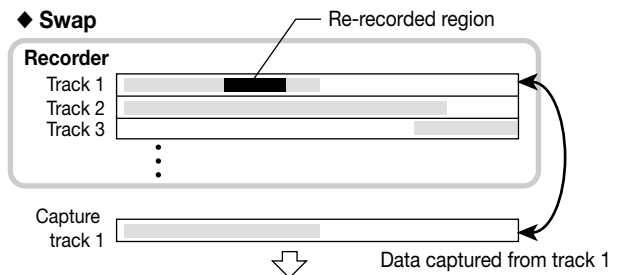
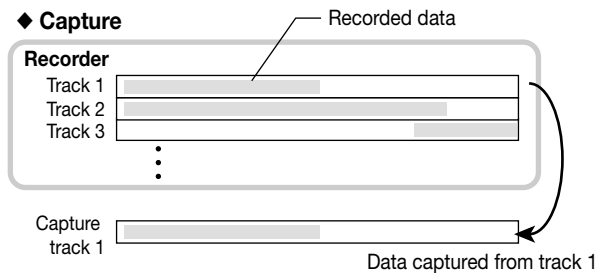
When you press the [ENTER] key and the Exchange operation has been completed, you will return to the screen from step 1.

If you press the [EXIT] key, you will return to the screen from step 4. If necessary, you can press the [EXIT] key to step back through each screen.

Capturing the recorded contents of a track

The MRS-1044 lets you capture the recorded data of a desired track, and temporarily store it on the hard disk. The captured data can be swapped (exchanged) with a current track when needed.

For example if you capture a track before performing punch-in/out recording on that track, you can repeat the Swap operation to compare its original state with the results of punch-in/out recording.



Capturing a track

Here's how to select and capture a desired track.

1. In the main screen, press the [UNDO/REDO] key.

A screen will appear in which you can select the track to be captured.



2. Press one of the status keys (1 – 6, 7/8, 9/10) or use the dial to select the track to be captured.

NOTE

It is not possible to capture a track that has not yet been recorded.

3. Press the [ENTER] key.

The display will ask "CAPTURE SURE?"

4. To execute the Capture operation, press the [ENTER] key once again.

When the capture is completed, the display will indicate "SWAP," and you will be able to execute the Swap operation for that track.

5. Press the [EXIT] key.

You will return to the main screen.

HINT

If necessary, you can repeat steps 2 – 4 to capture multiple tracks.

NOTE

The captured data will be erased from the hard disk when the currently selected project is saved.

Swapping with the captured data

Here's how to swap (exchange) the captured data with the current recorded data of a track.

1. In the main screen, press the [UNDO/REDO] key.
2. Press one of the status keys (1 – 6, 7/8, 9/10) or use the dial to select a track that was previously captured.

When a captured track is selected, the display will indicate "SWAP."



HINT

If you select a track that has not been captured, the display will indicate "CAPTURE."

3. Press the [ENTER] key.

The display will ask "SWAP SURE?"

4. To execute the Swap operation, press the [ENTER] key once again.

The recorded data of the selected track will be exchanged with the previously captured recorded data. The recorded data of the selected track will be saved as capture data on the hard disk until the project is saved.

HINT

You can return to the previous state by immediately executing Swap a second time.

5. Press the [EXIT] key.

You will return to the main screen.

Reference [Mixer]

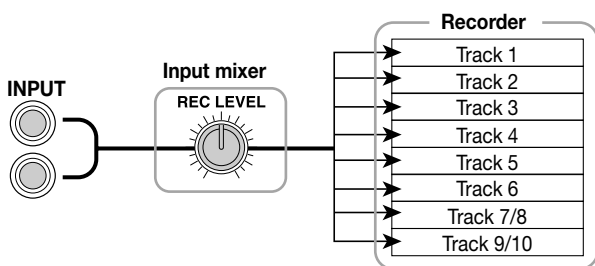
This section explains the functions and operation of the two mixers built into the MRS-1044.

About the mixer

The mixer of the MRS-1044 is divided into two sections: an "input mixer" that processes the input signals from the [INPUT 1/2] jacks, and a "track mixer" that processes the signals from the tracks of the recorder section and from the rhythm section. Details of each mixer are described below.

Input mixer

In the input mixer you can adjust the sensitivity of the signals that are input from the [INPUT 1/2] jacks, set various parameters such as pan and send levels to the send/return effects, and assign the signals to the recorder tracks.



The parameters that can be adjusted in the input mixer are listed in the following table.

Input mixer parameters

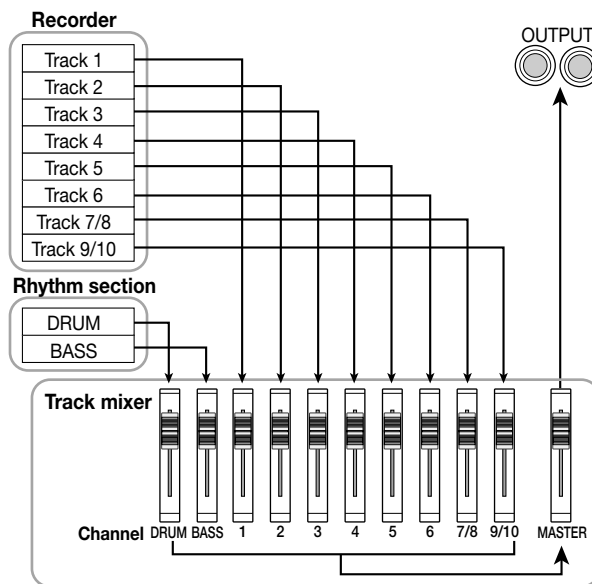
Parameter	Content
CHO SEND	Volume sent to chorus/delay (send/return effect)
REV SEND	Volume sent to reverb (send/return effect)
PAN	Left/right position (L/R channel balance)
REC LVL	Volume of the input signal (position of the [REC LEVEL] control)

Track mixer parameters

Parameter	Content	Channel			
		DRUM/BASS	1-6	7/8, 9/10	MASTER
EQ HI G	Amount of boost/cut for high-range EQ	○	○	○	
EQ HI F	Frequency at which high-range EQ will boost/cut	○	○	○	
EQ LO G	Amount of boost/cut for low-range EQ	○	○	○	
EQ LO F	Frequency at which low-range EQ will boost/cut	○	○	○	
CHO SEND	Volume sent to chorus/delay (send/return effect)	○	○	○	
REV SEND	Volume sent to reverb (send/return effect)	○	○	○	
PAN	Left/right position (L/R channel balance)	○	○	○	
FADER	Volume of each channel (fader position)	○	○	○	○
ST LINK	Link the parameters of the odd/even-numbered channels		○		

Track mixer

In the track mixer you can process the playback signals of the recorder tracks (1 – 6, 7/8, 9/10) and the sound of the drum kit / bass program of the rhythm section, and mix these signals to stereo. The signal mixed by the track mixer is output via the MASTER fader from the [OUTPUT] jacks.



In the track mixer, the signals that are output from each track are handled in units called "channels." The parameters that can be adjusted for each channel (DRUM, BASS, 1 – 6, 7/8, 9/10) are listed in the table below.

HINT

The DRUM, 7/8, and 9/10 channels are each stereo channels that respectively process the output signals from the drum kit, stereo tracks 7/8, and 9/10. The parameters of these stereo channels are linked.

Basic operation of the input mixer

Assigning input signals to recording tracks

Here's how the signals that are input from the [INPUT 1]/[INPUT 2] jacks can be sent to a recording track, and their recording levels can be adjusted.

1. Make sure that the instrument or mic that you want to record is connected to the [INPUT 1]/[INPUT 2] jack(s).
2. Press the [ON/OFF] key of the jack(s) (INPUT 1/2) to which you connected your instrument, to make the key light.

The [ON/OFF] key enables and disables the jack. When a key is lit, the corresponding jack is enabled.

3. While playing your instrument, turn the [INPUT 1]/[INPUT 2] control(s) to adjust the input sensitivity.

Make adjustments so that the [PEAK] indicator flickers slightly when you play your instrument at its loudest volume.

4. If you will be recording the sound through the insert effect, select an insert effect patch as necessary.

With the default settings of a project, the insert effect is inserted into the input mixer, and a patch suitable for guitar/bass recording is selected. (For details on how to select a different patch, refer to p.77.)

If you want to record without sending the sound through the insert effect, press the effect section [BYPASS/TUNER] key to bypass the insert effect.

5. While playing your instrument, turn the [REC LEVEL] control to adjust the recording level.

The [REC LEVEL] control adjusts the signal level before it is sent to the recording track (i.e., after it has passed through the insert effect). The [CLIP] indicator will light if the signal clips.

HINT

- Adjust the [REC LEVEL] control as high as possible without allowing the [CLIP] indicator to light.
- The level of the signal sent to the recording track will change according to the settings of the insert effect parameters. If you switch insert effect patches or edit the

parameters, you should once again check whether the recording level is appropriate.

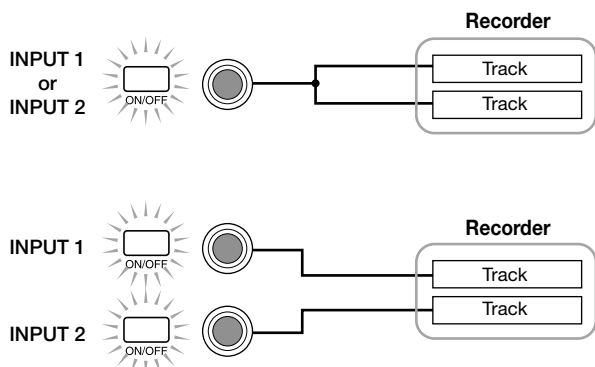
- The precise setting of the REC LEVEL parameter can be checked by pressing the TRACK PARAMETER section [PAN] key → INPUT 1 or 2 [ON/OFF] key → cursor [▼] key.

6. Press the status key for the recording-destination track (1 – 6, 7/8, 9/10) to make the key light red, putting the track in record-ready mode.

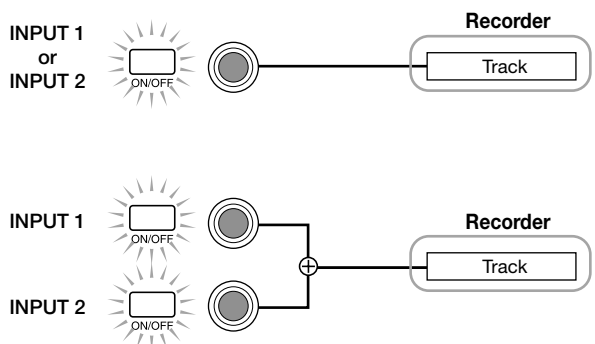
The input signal from the input mixer will be sent to the recording track. You can select record-ready mode for any one mono track 1 – 6, any one stereo track (7/8, 9/10), or any two mono tracks (only the track pairs 1/2, 3/4, or 5/6).

The signal flow from the input mixer to the track will change as follows, depending on the number of selected recording tracks and on the state of the INPUT 1/2 [ON/OFF] keys.

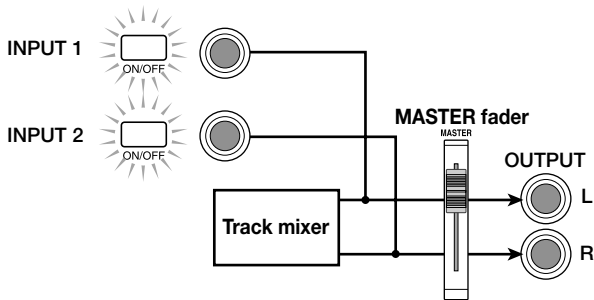
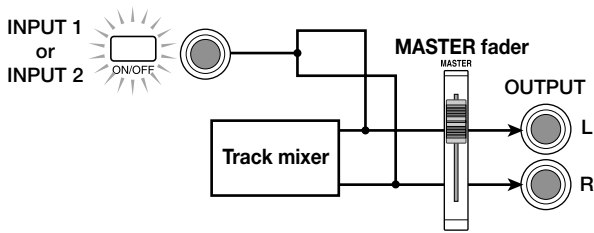
- When two mono tracks or a stereo track is selected as the recording track



- When one mono track is selected as the recording track



• When a recording track has not been selected



NOTE

The diagrams above show the signal flow when the insert effect has not been inserted into the input mixer. For details on the signal flow when the insert effect is inserted, refer to p.77.

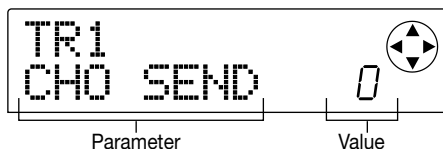
Adjusting the depth of the send/return effects

The depth of the send/return effects can be adjusted by setting the volume (send level) of the signal that is sent from the input mixer to each send/return effect (chorus/delay, reverb).

In normal operation, sending the signal from the input mixer to the send/return effect will only apply the effect to the signal that is sent from the [OUTPUT] jacks, and will not affect the signal that is recorded on a track.

1. Press the TRACK PARAMETER section [CHORUS/DELAY SEND] key or [REVERB SEND] key to select one of the send/return effects.

Press the [CHORUS/DELAY SEND] key to adjust the chorus/delay depth, or press the [REVERB SEND] key to adjust the reverb depth. The following illustration shows the screen that will appear when the [CHORUS/DELAY SEND] key is pressed.



HINT

For details on selecting a send/return effect patch, refer to p.81.

2. Press the INPUT 1 (or INPUT 2) [ON/OFF] key.

The input mixer (INPUT) will be selected for operations.



HINT

The CHORUS/DELAY SEND parameter and REVERB SEND parameter are common to both INPUT 1/2 input signals.

3. Turn the dial to edit the value.

Increasing the value will deepen the effect. The range and default value of each parameter are as follows.

- REVERB SEND : 0 – 100 (Default: 0)
- CHORUS/DELAY SEND : 0 – 100 (Default: 0)

HINT

- When the CHORUS/DELAY SEND parameter is displayed, pressing the [CHORUS/DELAY SEND] key will cause the signal sent from the input mixer to chorus/delay to be switched on/off. (The key will be dark when this is off.)
- In the same way, when the REVERB SEND parameter is displayed, pressing the [REVERB SEND] key will cause the signal sent from the input mixer to reverb to be switched on/off.

4. When you have finished making settings, press the [EXIT] key.

You will return to the main screen.

Adjusting the pan/balance

Here's how to adjust the pan (stereo position) of the signal sent from the input mixer to the [OUTPUT] jacks or recording tracks, or the balance (the volume balance between two channels).

1. Press the [PAN] key.

A screen will appear in which you can adjust the PAN parameter.



2. Press the INPUT 1 (or INPUT 2) [ON/OFF] key.

The input mixer will be selected for pan adjustments.

3. Turn the dial to edit the value of the PAN parameter.

The PAN parameter can be adjusted in a range of L100 (far left) – 0 (center) – R100 (far right).

4. When you have finished adjusting the pan, press the [EXIT] key.

You will return to the main screen.

The function of the PAN parameter will change as follows, depending on the number of input jacks that are currently turned on, and on the number of recording tracks that are currently selected.

• **When no recording track is selected**

For the signal that is sent from the input mixer to the L/R channels of the [OUTPUT] jacks, the PAN parameter will adjust the pan (if either but not both INPUT 1 or 2 are enabled) or the balance (if both INPUT 1 and 2 are enabled).

• **When two mono tracks or a stereo track is selected as the recording track**

For the signal that is sent from the input mixer to the pair of odd-numbered/even-numbered tracks, the PAN parameter will adjust the pan (if either but not both INPUT 1 and 2 are enabled) or the balance (if both INPUT 1 and 2 are enabled).

• **When one mono track is selected as the recording track**

The PAN parameter will have no effect.

Basic operation of the track mixer

Adjusting the volume/pan/EQ

For each channel, you can adjust the volume, pan (stereo position between the L/R channels of the [OUTPUT] jack), and EQ (equalizer).

1. To adjust the volume (output level) of a channel, operate the fader of the corresponding channel (DRUM, BASS, 1 – 6, 7/8, 9/10).

HINT

- To check the precise setting of the volume (FADER parameter), press the following sequence of keys: TRACK PARAMETER section [PAN] key → cursor [▼] key → status key of the desired channel.
- You can check the MASTER fader setting by pressing any TRACK PARAMETER key → MASTER status key.

2. To adjust the pan of a channel, press the TRACK PARAMETER section [PAN] key, and then press one of the status keys (DRUM, BASS, 1 – 6, 7/8, 9/10) to select the desired channel.

A screen will appear in which you can adjust the PAN parameter of the selected channel.



3. Turn the dial to adjust the value of the PAN parameter.

The range is L100 (far left) – 0 (center) – R100 (far right).

If you want to continue and adjust the pan of another channel, repeat steps 2 – 3.

HINT

- For channels 7/8, 9/10, and DRUM, the PAN parameter is used to adjust the balance (the volume balance of the left and right channels).
- In the parameter screen you can also use the cursor [▲]/[▼] keys to select parameters, and the cursor [◀]/[▶] keys to switch channels.

4. To adjust the EQ, press the [EQ HIGH] key or [EQ LOW] key.

Press the [EQ HIGH] key to adjust the high-range tone, or the [EQ LOW] key to adjust the low-range tone.

HINT

At this time, your editing will affect the channel that was last selected in steps 2 – 3. As necessary, use the status keys or the cursor [◀]/[▶] keys to switch channels.

5. Use the cursor [▲]/[▼] keys to select the EQ parameter that you want to adjust, and turn the dial to edit the value.

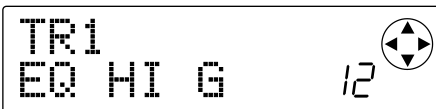
The parameters that can be selected and their ranges are as follows.

■ **If you pressed the [EQ HIGH] key first**

- EQ HI G : Adjust the amount of high-range boost/cut.
Range: -12 – 0 – 12 (dB), Default: 0
- EQ HI F : Adjust the frequency at which the high-range boost/cut will occur.
Range: 500 – 18000 (Hz), Default: 8000

■ **If you pressed the [EQ LOW] key first**

- EQ LO G : Adjust the amount of low-range boost/cut.
Range: -12 – 0 – 12 (dB), Default: 0
- EQ LO F : Adjust the frequency at which the low-range boost/cut will occur.
Range: 40 – 1600 (Hz), Default: 125



HINT

- When the EQ HI G / EQ HI F screens are displayed, you can press the [EQ HIGH] key to switch the high-range EQ on/off. (The key will be dark when off.)
- When the EQ LO G / EQ LO F screens are displayed, you can press the [EQ LOW] key to switch the low-range EQ on/off. (The key will be dark when off.)

6. Repeat steps 4 – 5 to adjust settings in the same way for another range or EQ parameter.

7. When you have finished adjusting settings, press the [EXIT] key.

You will return to the main screen.

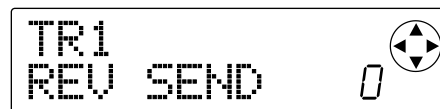
Adjusting the effect depth

Here's how to adjust the effect depth by setting the volume that is sent from each channel to the send/return effects (chorus/delay, reverb).

1. Press the TRACK PARAMETER section [CHORUS/DELAY SEND] key or [REVERB SEND] key to select a send/return effect.

2. Press one of the status keys (DRUM, BASS, 1 – 6, 7/8, 9/10) to select the desired channel.

The corresponding channel will be selected for operations.



3. Turn the dial to edit the value.

The effect will apply more deeply as you increase the value. The range and default setting of each parameter are as follows.

- REV SEND : 0 – 100 (Default: 0)
- CHO SEND : 0 – 100 (Default: 0)

HINT

When the CHORUS/DELAY SEND or REVERB SEND parameters are displayed, you can use the [CHORUS/DELAY SEND] key or [REVERB SEND] key as an on/off switch for the signal that is sent from that channel to the reverb or chorus/delay. For details refer to p.48.

4. When you have finished adjusting settings, press the [EXIT] key.

You will return to the main screen.

Linking odd-numbered/even-numbered channels

Adjacent odd-numbered → even-numbered mono channels (1/2, 3/4, 5/6) can be linked. (This is referred to as "stereo link.") The parameters of two stereo-linked channels will operate in tandem in the same way as channels 7/8 or 9/10.

1. Press the TRACK PARAMETER section [PAN] key.

2. Press the status key (1 – 6) for one of the two channels that you want to stereo-link.

3. Press the cursor [▼] key twice.

The ST LINK (stereo link) parameter screen will appear.



4. Turn the dial to switch the setting on.

Stereo linking will be enabled for the selected channel and the adjacent odd-numbered/even-numbered channel. To defeat stereo link, turn this parameter off (oFF).



5. Press the [EXIT] key.

You will return to the main screen.

HINT

The PAN parameter of two stereo-linked channels will function as a BALANCE parameter that adjusts the volume balance between the odd-numbered / even-numbered channels.

NOTE

- To adjust the volume of stereo-linked channels, use the odd-numbered fader. (The even-numbered fader will have no effect.)
- The parameters as well as the status keys of 2 stereo-linked channels will operate in tandem.

Saving/recalling mixer settings (Scene function)

The current mixer and effect settings can be saved as a "scene" in a special area of memory, and recalled either manually or automatically when desired. This is convenient when you want to compare various mixes, or when you want to automate mix operations.

A scene contains the following data.

- Input mixer (except for the REC LEVEL parameter) and track mixer settings
- MASTER fader setting
- The state of all status keys
- The patch number currently used by the insert effect and the send/return effects

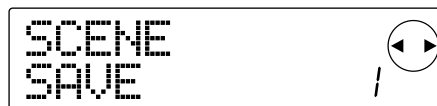
Up to 100 different scenes can be stored in memory. Scene data stored in memory is saved on the internal hard disk as part of the currently selected project.

Saving a scene

Here's how to save the current settings as a scene.

1. Press the [SCENE] key, and use the cursor [◀]/[▶] keys to make the display read "SCENE SAVE."

The right side of the display will indicate the scene number (0 – 99) in which the data will be saved.



NOTE

When you save a scene for the first time, pressing the [SCENE] key will automatically access the "SCENE SAVE" screen.

2. Turn the dial to select the number (0 – 99) in which the scene will be saved.

Numbers in which a scene is already saved are indicated by an asterisk "*" at the left.

3. To save the scene, press the [ENTER] key.

The scene will be saved in the selected number. To return to the main screen, press the [ENTER] key.

NOTE

If you select a scene that has already been saved, and execute this operation, the previously saved scene will be overwritten.

Recalling a saved scene

Here's how to recall a scene that was saved to memory.

1. Press the [SCENE] key, and use the cursor [◀]/[▶] keys to make the display read "SCENE CALL."

The right side of the display will indicate the scene number that will be recalled.



NOTE

It is not possible to access the above screen if no scene has been saved in memory.

2. Turn the dial to select the scene number (0 - 99) that you want to recall.

Only scene numbers for which data has been stored in memory can be selected.

3. To recall the selected scene, press the [ENTER] key.

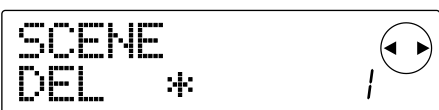
The scene will be selected, and you will return to the main screen. If you press the [EXIT] key instead of the [ENTER] key, you will return to the main screen without recalling.

Deleting a scene

Here's how to delete a scene that was stored in memory.

1. Press [SCENE], and use the cursor [◀]/[▶] keys to make the display indicate "SCENE DEL."

The right side of the display will indicate the scene number for deletion.



NOTE

It is not possible to access the above screen if no scene has been saved in memory.

2. Turn the dial to select the number (0 - 99) of the scene that you want to delete.

Only scene numbers for which data has been stored in memory can be selected.

3. To delete the selected scene, press the [ENTER] key.

The scene will be deleted, and you will return to the main screen. If you press the [EXIT] key instead of the [ENTER] key, you will return to the main screen without deleting.

Switching scenes automatically

By assigning a scene to a mark that was placed at a desired location in the song, you can cause scenes to switch automatically. This is convenient when you want to change the mix as the song progresses. Refer to p.29 for more about marks.

1. While playing back the song from the beginning, create the mix that will be the starting point, and save it in a scene.

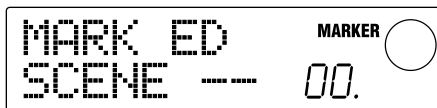
For details on scene operations, refer to p.51.

2. Make sure that the transport is stopped, and press the ZERO [◀◀] key to locate to the beginning of the song.

The beginning of the song (counter zero location) already contains mark number zero. First you will assign the starting scene to this mark.

3. Press the [MARK] key.

When you press the [MARK] key at a location where a mark has been assigned, a screen will appear in which you can assign a scene to the corresponding mark.

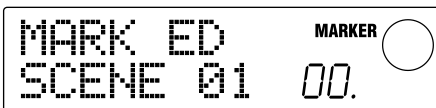


HINT

- If you press the [MARK] key at a location where a mark has not yet been assigned, a new mark will be assigned to that location.
- If a dot is shown at the lower right of the mark number, this means that the mark matches the current location.

4. Turn the dial to select the number of the scene you saved in step 1 (the scene that will be the starting point of the mix).

The scene will be assigned to the mark, and at the same time the selected scene will be recalled. The following screen shows an example of when mark number 0 is assigned to scene number 1.

**HINT**

To cancel a scene assignment, turn the dial to make the display indicate "--".

5. Press the [EXIT] key.

You will return to the main screen.

6. Locate the point at which you want the mix to change, and assign a mark.

7. While playing back the song from that point, create the new mix, and save it in a scene.

8. Use the MARKER [◀◀]/[▶▶] keys to locate to the mark you assigned in step 6, and press the [MARK] key.

A screen will appear, allowing you to assign a scene to the mark you selected in step 6.



9. Turn the dial to select the number of the scene you saved in step 7.

10. Press the [EXIT] key.

You will return to the main screen.

11. Using the procedure from steps 6 – 10, assign a mark to each point at which you want the mix to change, and assign a scene to each of these marks.

12. When you have assigned the desired scenes to the marks, press the ZERO [◀◀] key to locate to the beginning of the song, and press the PLAY [▶] key to play back.

Each time the song reaches the location of a mark to which a scene has been assigned, that scene will be recalled.

Switching the level meter display type

With the MRS-1044's default settings, the level meters displayed in the center of the screen will indicate the level of the signals that have passed through the [REC LEVEL] controls/faders (post-fader). If necessary, however, you can switch the meters so that they indicate the level of the signals before they pass through the [REC LEVEL] controls/faders (pre-fader).

1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY SYSTEM," and press the [ENTER] key.

3. Use the cursor [◀]/[▶] keys to make the display read "UTILITY LVL MET," and press the [ENTER] key.



4. Turn the dial to change the setting to "PRE" (pre-fader).

To return the setting to post-fader, select "POST."

5. Press the [EXIT] key several times.

You will return to the main screen.

Reference [Rhythm]

This section explains the functions and operation of the rhythm section, which uses internal drum sounds and bass sounds to generate backing performances.

About the rhythm section

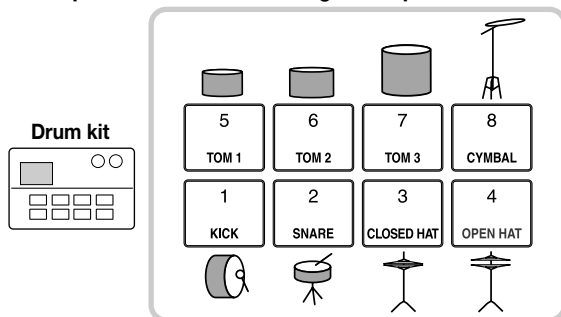
The "rhythm section" of the MRS-1044 contains drum sounds and bass sounds, and can be used as a drum + bass machine. The rhythm section can be operated in synchronization with the recorder section, or operated independently. Here we will explain the basic concepts and terms that you need to know in order to use the rhythm section.

■ Drum kits and bass programs

The accompaniment created by the rhythm section is produced by a "drum kit" and a "bass program."

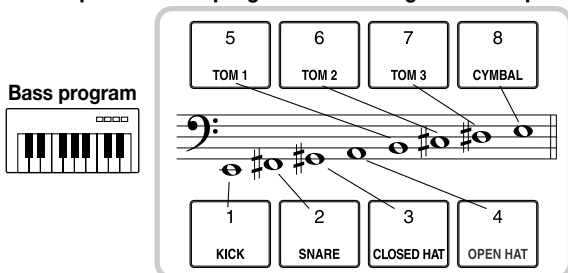
The drum kit is a set of 24 drum/percussion sounds such as kick, snare, and conga, and the MRS-1044 contains 31 different drum kits. You can select one of these drum kits, and use the front panel pads 1 – 8 to manually play each sound, or use them as a sound generator for accompaniment.

An example of drum sounds assigned to pads

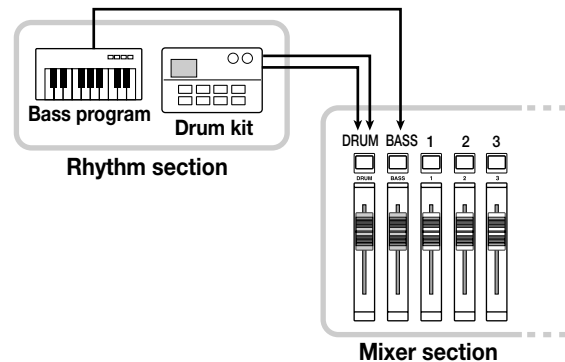


A bass program is a single bass sound, such as an electric bass or acoustic bass. You can choose one of the 16 different bass sounds built into the MRS-1044, and use the front panel pads 1 – 8 to play a scale, or use it as a sound generator for accompaniment.

An example of a bass program scale assigned to the pads



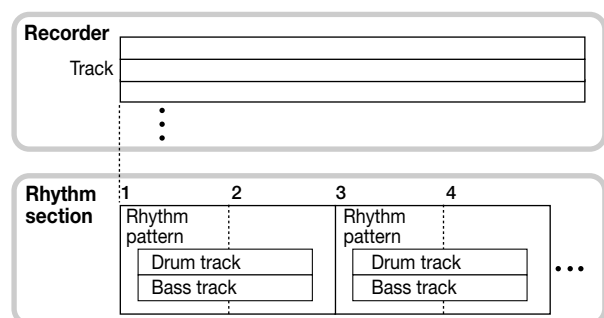
The output signal from the drum kit (stereo) and the output signal from the bass program (mono) are internally connected to the DRUM channel and BASS channel of the mixer section. For each, you can independently adjust the volume, pan/balance, and EQ, and apply send/return effects.



■ Rhythm patterns and the drum/bass tracks

A newly created project contains 255 accompaniment patterns (each several measures long) with drum/bass performance data. These accompaniment patterns are called "rhythm patterns."

Inside each rhythm pattern, the area that holds the drum performance data is called the "drum track," and the area that holds the bass performance data is called the "bass track."

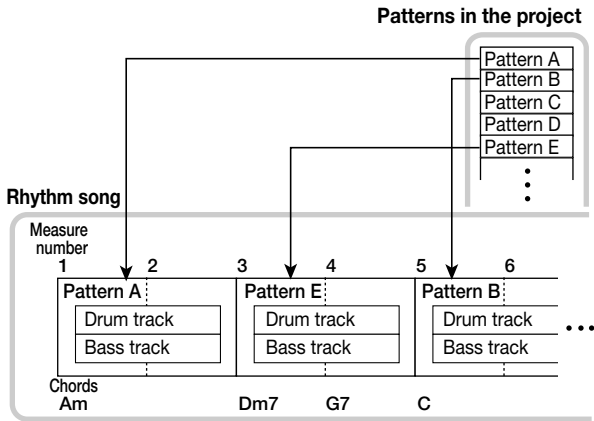


You can edit a portion of a rhythm pattern, or erase the entire recorded content and create an entirely original rhythm pattern. The rhythm patterns you modify are saved on the hard disk together with the other rhythm patterns as part of the project.

■ Rhythm songs

Multiple rhythm patterns arranged in a desired order of

playback are collectively called a "rhythm song." In a rhythm song, you can program the rhythm pattern data, bass track chord data, and tempo data to create the accompaniment for an entire song. A project can use only one rhythm song.



■ Rhythm Pattern mode and Rhythm Song mode

The rhythm section can operate in one of two modes: "Rhythm Pattern mode," in which you can create and play rhythm patterns, and "Rhythm Song mode," in which you can create and play a rhythm song. One of these two modes will always be selected.

The [PATTERN] key will light when Rhythm Pattern mode is selected, and the [SONG] key will light when Rhythm Song mode is selected.



■ Synchronizing the recorder section and rhythm section

With the default settings of the MRS-1044, the rhythm section will operate in synchronization with the recorder section. When you operate the transport to make the recorder section begin running, the rhythm pattern or rhythm song will also begin playing.

If necessary, however, the rhythm section can be disconnected from the recorder section and used as an independent drum + bass machine. To do this, press the [RHYTHM] key. In this state, operating the transport will cause only the rhythm section to begin playing, and the recorder section will remain stopped.

Playing rhythm patterns

This section explains how to play rhythm patterns, how to change the tempo, and how to change the drum kit or bass program.

Selecting and playing a rhythm pattern

Here's how to select and play one of the 255 rhythm patterns.

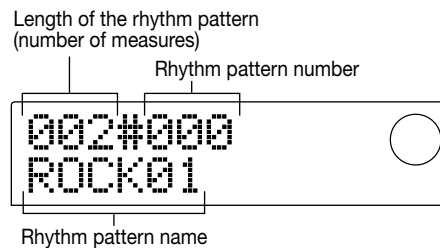
NOTE

Before you continue with the following procedure, make sure that the DRUM, BASS, and MASTER faders of the panel are raised, and that the DRUM and BASS status keys are lit.

1. In the main screen, press the [PATTERN] key.

The [RHYTHM] key will blink. If Rhythm Song mode ([SONG] key lit) has been selected, it will switch to Rhythm Pattern mode ([PATTERN] key lit).

The display will show the "rhythm pattern screen" in which you can select a rhythm pattern.



2. Turn the dial to select the rhythm pattern that you want to play.

3. Press the PLAY [▶] key.

The rhythm pattern will begin playing, and at the same time the recorder will begin running.

HINT

When the [RHYTHM] key is dark or blinking, the rhythm section and recorder section are synchronized.

4. If you want to mute the performance of the drum track or bass track, press the DRUM or BASS status key.

The status key will go dark, and the performance of the corresponding track will be muted. To defeat muting, press the same status key once again.

5. To stop playback, press the STOP [■] key.

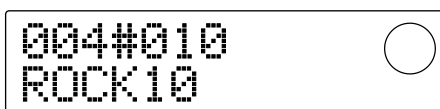
The recorder and rhythm pattern will stop.

6. To return to the main screen, press the [EXIT] key while the rhythm section is stopped.

The [PATTERN] key will remain lit, and the [RHYTHM] key will go dark. If you press the PLAY [▶] key in this state, the rhythm pattern that was used most recently will play.

7. If you want only the rhythm section to play independently, press the [RHYTHM] key while stopped.

The [RHYTHM] key will light, and the rhythm section will be disconnected from the recorder section. The rhythm pattern screen will appear in the display.



In this state, pressing the PLAY [▶] key will play only the rhythm pattern, and the recorder section will remain stopped.

NOTE

When the [RHYTHM] key is lit, the counter in the display will always indicate the measure.

HINT

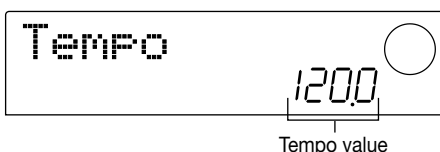
It is also possible to load rhythm pattern data from another project existing on the hard disk (→ p.72).

Changing the tempo of the rhythm pattern

You can use the [TEMPO] key to change the tempo of the rhythm pattern.

1. In Rhythm Pattern mode, press the [TEMPO] key.

The current tempo value will be displayed.



2. Turn the dial to adjust the tempo.

The tempo can be adjusted in steps of 0.1 over a range of 40 – 250 (BPM). The tempo can even be changed while the rhythm pattern is playing.

3. To change the tempo manually, press the [TEMPO] key twice or more at the desired tempo.

The interval between the last two times you pressed the key will be detected automatically, and set as the new tempo.

4. To return to the main screen, press the [EXIT] key.

HINT

The tempo you specify here will apply to all rhythm patterns played in Rhythm Pattern mode, and to a rhythm song in which tempo data has not yet been input. (For details on rhythm songs, refer to p.55.)

NOTE

If you record on the recorder tracks while listening to the rhythm patterns, and then later change the tempo of the rhythm patterns, the two sets of performances will no longer be synchronized. If you want to record on the recorder while listening to rhythm patterns, you must decide on the tempo first.

Changing the drum kit / bass program

You can change the sounds (drum kit / bass program) that are assigned to the drum or bass tracks of the rhythm pattern.

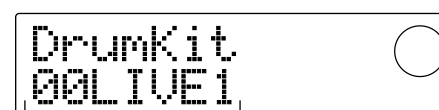
1. In the main screen, repeatedly press the [DRUM/BASS] key to make the display read either "Pad Drum" or "Pad Bass."

Select "Pad Drum" if you want to switch the drum kit, or "Pad Bass" if you want to switch the bass program.



2. Press the [KIT/PROG] key.

A screen will appear in which you can change the drum kit or the bass program.



Name of drum kit / bass program

NOTE

While this screen is displayed, all transport operations are invalid.

3. Turn the dial to select the desired drum kit / bass program.

For a list of drum kits / bass programs that can be selected, refer to the appendix at the end of this manual.

4. Press the [ENTER] key.

The change will be finalized, and you will return to the main screen.

NOTE

The drum kit / bass program you select here will apply to all rhythm patterns and rhythm songs.

Creating a rhythm song

This section explains how to arrange rhythm patterns in the desired order of playback in an empty rhythm song, and input chords and other data to create a complete rhythm song.

HINT

When you create a new project on the MRS-1044, the rhythm song will always be empty.

NOTE

Before you perform the following procedure, make sure that the DRUM, BASS, and MASTER faders of the panel are raised, and that the DRUM and BASS status keys are lit.

Inputting rhythm pattern data

Here's how to input rhythm pattern data into an empty rhythm song in the desired playback order.

1. In the main screen, press the [SONG] key, and then press the [RHYTHM] key.

The [RHYTHM] key will light. If Rhythm Pattern mode (the [PATTERN] key lit) has been selected, it will change to Rhythm Song mode (the [SONG] key lit).

The display will show the "rhythm song screen," which indicates the progress of the rhythm song.



NOTE

- While the rhythm song is playing, the lower line of the screen will show the number of the rhythm pattern that has been input at the current location, the type of chord, and the root.
- The rhythm song can be created/edited only when the [RHYTHM] key is lit.
- While the [RHYTHM] key is lit, the counter in the display will always indicate measure numbers.

2. Press the REC [●] key.

The REC [●] key will light, and you can now input data such as rhythm pattern numbers and chords into the rhythm song.



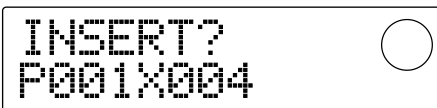
3. Use the cursor [▲]/[▼] keys to make the display read "←Ptn".



The number of the rhythm pattern that is input at the current location is displayed below "Ptn" in this screen. For an empty rhythm song, however, no rhythm pattern data has been input. For this reason, the area that displays the rhythm pattern number will indicate "EOS" (End Of Song) to show the end of the rhythm song.

4. Press the [INSERT/DELETE] key to make the display read "INSERT?"

Each time you press the [INSERT/DELETE] key, the display will cycle between "INSERT?" → "DELETE?" → original display. When "INSERT?" is displayed, new rhythm pattern data can be input at the current location.



5. Turn the dial to select the rhythm pattern that you want to input.

The number and length (in measures) of the currently selected rhythm pattern will be displayed.



Rhythm pattern number |
Rhythm pattern length (measures)

6. As necessary, use the cursor [▲]/[▼] keys to change the length of the rhythm pattern.

If you want to lengthen the rhythm pattern, play back the same rhythm pattern repeatedly. If you want to shorten the rhythm pattern, switch to the next rhythm pattern before it has finished playing.



This operation will not affect the original rhythm pattern.

7. To finalize the selected rhythm pattern, press the [ENTER] key.

The rhythm pattern data will be input at the current location.



When rhythm pattern data is input, the time signature, chord root, and drum track / bass track volume specified for that rhythm pattern will be input at the same location.

8. Repeatedly press the cursor [▶] key to move to the location at which you will input the next rhythm pattern.

Each time you press a cursor [◀]/[▶] key, the current location will move one measure backward or forward. When you advance to the end of the rhythm song, the display will indicate "EOS."



- At a location where no rhythm pattern data has been input, an "←" symbol will be displayed to the left of the "Ptn." This indicates that the immediately preceding rhythm pattern will continue playing.
- It is also possible to insert other rhythm pattern data into the middle of a rhythm pattern.

9. Repeat steps 3 – 8 to input rhythm patterns for the entire song.

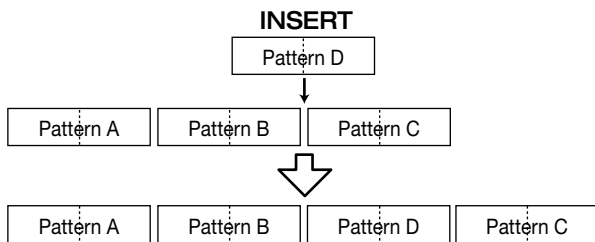
If you make a mistake during input, use the following procedures to correct the mistake.

■ To re-select a pattern that you input

Use the cursor [◀]/[▶] keys to move to the desired rhythm pattern data, and turn the dial to select a new pattern.

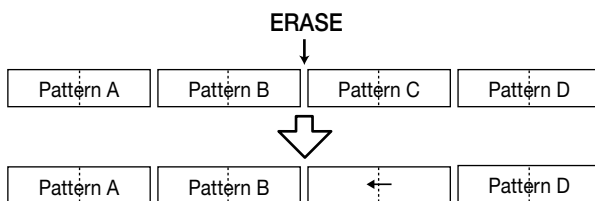
■ To insert a new pattern

Use the cursor [◀]/[▶] keys to move to the location at which you want to insert rhythm pattern data, and execute steps 4 – 7. The rhythm pattern data will be inserted at the current location, and subsequent rhythm pattern data will be moved backward according to the length of that pattern.



■ To erase rhythm pattern data

Use the cursor [◀]/[▶] keys to move to the location at which you want to erase rhythm pattern data, and press the [ERASE] key. The rhythm pattern data will be erased, and the display will change to "←Ptn," indicating that the preceding pattern will continue playing.

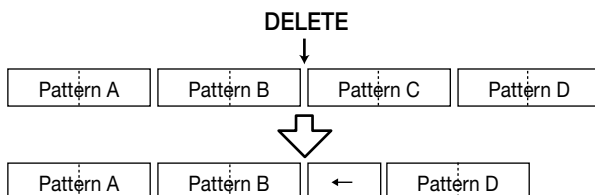


NOTE

If you erase the rhythm pattern data that is recorded at the beginning of the rhythm song, there will be silence until the next location at which rhythm pattern data is input.

■ To delete a specific measure

Use the cursor [◀]/[▶] keys to move to the beginning of the measure that you want to delete, and repeatedly press the [INSERT/DELETE] key to make the display read "DELETE?" When you press the [ENTER] key, the current measure will be deleted, and subsequent rhythm pattern data will be moved forward. If you delete the first measure of a two-measure rhythm pattern, the second measure will remain, and the display will change to "←Ptn". If necessary, repeat the step to delete this measure as well.



10. When you have completed the entire rhythm song, press the STOP [■] key.

The REC [●] key will go dark, and you will return to the rhythm song screen. If you want to check the content that you input, press the PLAY [▶] key.

11. To return to the main screen, stop the rhythm section and press the [EXIT] key.

Inputting chord data

Here's how to add chord data to the rhythm song that you created by inputting rhythm pattern data.

HINT

- Chord data consists of a "ROOT" that specifies the root (C, C#, D ...B) of the chord, and "CHORD" that specifies the type of chord (major or minor, etc.).
- The bass phrase of the rhythm pattern will be transposed according to the root that you input. Also, part of the bass phrase will be converted according to the type of chord you specify.

1. In the main screen, make sure that the [SONG] key is lit, and press the [RHYTHM] key.

The [RHYTHM] key will light, and the rhythm song screen will appear.

2. Press the REC [●] key.

3. Use the cursor [▲]/[▼] keys to make the display read "ROOT."

When inputting chord data into the rhythm song, you will specify the chord root (C – B) and chord type (major or minor, etc.) separately. When "ROOT" is displayed, you can specify the root of the chord.



Chord root Chord type

Chord data is input at locations where a rhythm pattern has been input, as in the illustration above. The default root and type for chord data is as follows.

- Root: the root of the chord specified for the rhythm pattern
- Type: "--" (no conversion)

HINT

For details on rhythm pattern chords, refer to p.69.

4. Turn the dial to specify the note name (C – B) that will be the root of the chord.

The following screen shows an example of when the chord

root has been changed to A.



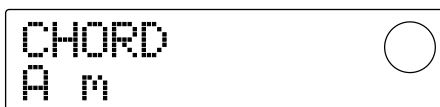
5. To specify the chord type, press the cursor [▼] key once to make the display read "CHORD."

6. Turn the dial to select the chord type.

You can choose from the following chord types.

Display	Content	Display	Content
---	No conversion	7sus4	7th Suspended 4th
Maj	Major Triad	sus4	Suspended 4th
m	Minor Triad	m7b5	Minor 7th flat 5
7	Dominant 7th	m6	Minor 6th
m7	Minor 7th	6	Major 6th
M7	Major 7th	m9	Minor 9th
aug	Augment	M9	Major 9th
dim	Diminish	mM7	Minor Major 7th

The following screen shows an example of when the chord type has been changed to minor (m). With these settings, chord data of "A minor" has been input at the beginning of the rhythm song.



HINT

If you select "--" (no conversion) as the chord type, only the bass will be transposed, and the phrase will not be converted. Select this when you want the original phrase to be played without change.

7. Move to the location at which you want to input the next chord data, and input chord data in the same way as described in steps 2 – 5.

Chord data does not necessarily have to be input at the same location as the rhythm pattern data. You can also change the chord in the middle of a rhythm pattern, or in the middle of a measure. The input location can be changed in the following ways.

(1) Moving in steps of a measure

Use the cursor [◀]/[▶] keys to move to the beginning of the preceding or following measure.

(2) Specify the location in 4th note units

Use the REW [◀◀]/FF [▶▶] keys to move to the beginning of the preceding or following quarter note.

(3) Specify the location in 16th note units

Repeatedly press the cursor [▲] key to make the display read "EV→", and turn the dial to move forward or backward in 12-tick (16th note) units.

When you use methods (1) or (2), a "←" symbol will be displayed to the left of "CHORD" or "ROOT" at locations where no chord data has been input. This indicates that the preceding chord data will remain in effect.



When you use method (3), the symbol displayed at the right of "EV→" will indicate the type of data that is input at the current location. For example, "Pt" indicates rhythm pattern data, and "TS" indicates time signature data. (For details refer to the table on p.63.)

8. Input the remaining chord data in the same way.

Chord data that you input can be edited in the following ways.

● **To change the chord**

Move to the location at which the chord data is input, use the cursor [▲]/[▼] keys to switch the display to "ROOT" (chord root) or "CHORD" (chord type), and turn the dial to change the chord.

● **To delete chord data**

Move to the location at which the chord data is input, use the cursor [▲]/[▼] keys to switch the display to "ROOT" or "CHORD," and press the [ERASE] key. The chord data will be erased, and the display will change to "←ROOT" or "←CHORD."

9. When you have finished, press the STOP [■] key.

You will return to the rhythm song screen. Then press the [EXIT] key to return to the main screen.

Inputting tempo data

If no tempo data has been input into a rhythm song, it will play at the tempo that was specified in Rhythm Pattern mode. In other words if you change the tempo in Rhythm Pattern mode, the tempo of the rhythm song will also change.

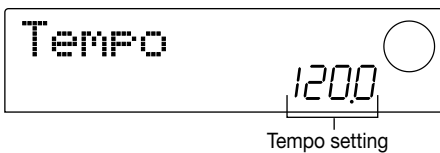
To prevent this, you can input tempo data at the beginning of the rhythm song in which the rhythm pattern / chord data was input, in order to fix a specific tempo for the rhythm song.

1. In the main screen, make sure that the [SONG] key is lit, and press the PLAY [▶] key.

The rhythm song will begin playing.

2. Press the [TEMPO] key.

The current tempo setting will be displayed.



3. While you listen to the rhythm song, turn the dial to adjust the tempo setting (40.0 – 250.0).

When you decide on the tempo, make a note of the setting.



If you press the [TEMPO] key two or more times in succession, the interval will be detected automatically, and specified as the new tempo.

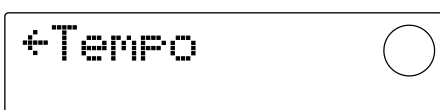
4. Press the STOP [■] key to stop the rhythm song, and press the [RHYTHM] key.

The [RHYTHM] key will light, and the rhythm song screen will appear.

5. Press the REC [●] key.

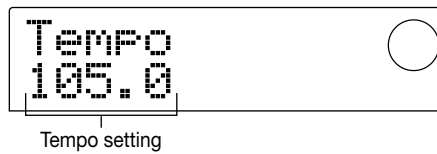
6. Use the cursor [▲]/[▼] keys to make the display show "←Tempo".

In this screen you can input new tempo data, or view/edit previously input tempo data.



7. Turn the dial to input the tempo setting that you decided on in step 3.

Now, each time you play the rhythm song from the beginning, it will be re-set to the tempo setting that you input here.



Tempo data can also be input in the middle of the rhythm song at 16th note intervals. For details refer to the section below.

8. Press the STOP [■] key.

You will return to the rhythm song screen. Then press the [EXIT] key to return to the main screen.



If you record on the recorder tracks while listening to the rhythm song, and then change the tempo, the two performances will no longer match. If you want to record while listening to the rhythm song, you must finalize the tempo first.

Inputting other data

A variety of other data (referred to as "events") such as tempo and drum/bass track volume can be added to the rhythm song that you created by inputting rhythm pattern data and chord data.

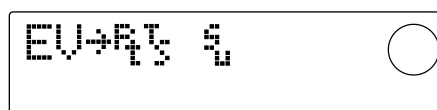
1. In the main screen, make sure that the [SONG] key is lit, and press the [RHYTHM] key.

The [RHYTHM] key will light, and the rhythm song screen will appear.

2. Press the REC [●] key.

3. Press the cursor [▲] key to make the display indicate "EV→".

When this display is shown, you can turn the dial to move the current location forward or backward in 16th note steps.



In this screen, symbols displayed following "EV→" such as "Pt" or "TS" let you see what type of events are input at the current location. The following table shows the types of events that can be input, and the corresponding symbols.

Type of event	Symbol	Content	Range
Ptn		Rhythm pattern number	000 – 254
TimSig		Time signature	1 – 8(1/4 – 8/4)
ROOT		Chord root	C – B
CHORD		Chord type	--, Maj, m, 7, m7, M7, aug, dim, 7sus4, sus4, m7b5, m6, 6, m9, M9, mM7
Tempo		Tempo	40.0 – 250.0
DrVOL		Drum track volume	0 – 15
BsVOL		Bass track volume	0 – 15

NOTE

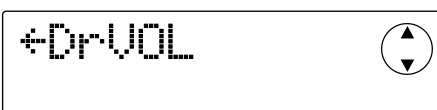
If no tempo data has been input, the tempo specified in Rhythm Pattern mode will be used. To specify a tempo for the rhythm song itself, input tempo data at the beginning of the rhythm song (→ p.62).

4. Move to the location at which you want to input a new event.

For details on how to move the current location, refer to page 61.

5. Use the cursor [▲]/[▼] keys to select the type of event that you want to input.

If the event you select here has been input at the current location, its value will be displayed. If there is no corresponding event, the display will indicate "←". This indicates that the previously input event will apply.



HINT

For all types of events, the minimum unit for input is a 16th note.

6. Turn the dial to input the value.



7. Input the remaining events in the same way.

The events you input can be edited in the following ways.

To edit the value of an event

Display the event that you want to edit, and turn the dial to input the new value.

To delete an event

Display the event that you want to delete, and press the [ERASE] key.

8. When you have finished, press the STOP [■] key.

You will return to the rhythm song screen. Then press the [EXIT] key to return to the main screen.

Playing a rhythm song

Here's how to play the rhythm song that you created by inputting rhythm pattern data and chord data.

1. In the main screen, make sure that the rhythm section [SONG] key is lit.

If it is dark, press the [SONG] key. (The rhythm section will switch to Rhythm Song mode.)

2. Press the PLAY [▶] key.

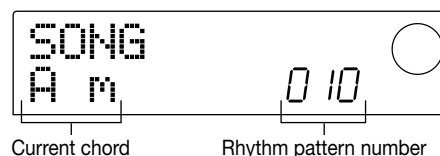
The rhythm song will begin playing. If something has been recorded on the recorder, those tracks will play back simultaneously.

3. To stop the rhythm song, press the STOP [■] key.

4. If you want the rhythm section to play independently, press the [RHYTHM] key while stopped.

The [RHYTHM] key will light, and the rhythm section will be disconnected from the recorder section. The display will show the rhythm song screen.

In this state, pressing the PLAY [▶] key will cause only the rhythm song to play, while the recorder section remains stopped. At this time, the display will show the number of the current pattern and chord.



5. To return to the main screen, press the [EXIT] key.

The [RHYTHM] key will go dark, and you will return to the main screen.

HINT

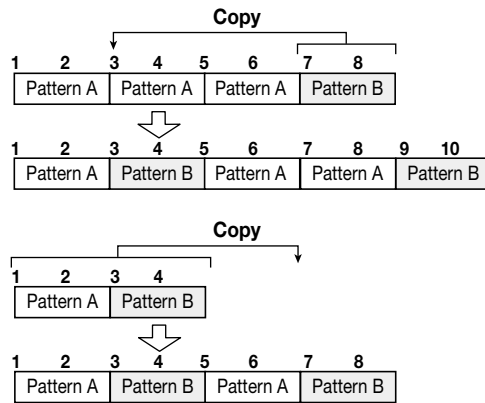
It is also possible to make the rhythm song play back using different rhythm section sounds (drum kit / bass program). For details refer to p.57 "Changing the drum kit / bass program."

Editing a rhythm song

This section explains how to edit a rhythm song that you created.

Copying a specific region of measures

Part of a rhythm song can be copied in measures and inserted into another location. This is convenient when you want to repeat a portion of a rhythm song.



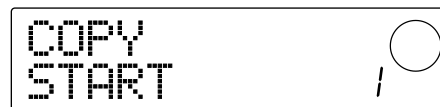
1. In the main screen, make sure that the [SONG] key is lit, and press the [RHYTHM] key.

The [RHYTHM] key will light, and the rhythm song screen will appear.

2. Press the REC [●] key.

3. Press the [EDIT] key.

The following screen will appear in the display.



4. Turn the dial to select the starting measure of the copy-source region, and press the [ENTER] key.



5. Turn the dial to select the last measure of the copy-source region, and press the [ENTER] key.



- 6. Select the starting measure of the copy-destination, and press the [ENTER] key.**

The copy will be executed, and you will return to the screen of step 2.

HINT

If the copy-destination region extends beyond the end of the rhythm song, the rhythm song will be lengthened automatically.

- 7. Press the STOP [■] key.**

You will return to the rhythm song screen.

Transposing the entire rhythm song

Here's how the bass track of the rhythm song can be transposed in semitone units.

- 1. In the main screen, make sure that the [SONG] key is lit, and press the [RHYTHM] key.**

The [RHYTHM] key will light, and the rhythm song screen will appear.

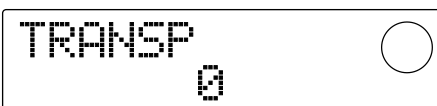
- 2. Press the [EDIT] key.**

The display will indicate "EDIT TRANSP."



- 3. Press the [ENTER] key.**

The current transpose setting (-6 - 0 - +6) will be displayed below "TRANSP".



- 4. Turn the dial to change the transpose setting, and press the [ENTER] key.**

The display will ask "SURE?"

- 5. Press the [ENTER] key to execute the Transpose operation, or press the [EXIT] key to cancel.**

If you press the [ENTER] key, the Transpose operation will be executed, and the chord data (root) that was input in the

rhythm song will be converted according to the setting you specified.

- 6. To return to the main screen, press the [EXIT] key several times.**

HINT

By adjusting the reference pitch of the MRS-1044's built-in tuner, you can make fine adjustments to the pitch of the bass program. (For details on the tuner, refer to p.92.)

Erasing the rhythm song

Here's how to erase the entire rhythm song, resetting it to a blank state.

- 1. In the main screen, make sure that the [SONG] key is lit, and press the [RHYTHM] key.**

The [RHYTHM] key will light, and the rhythm song screen will appear.

- 2. Press the [INSERT/DELETE] key.**

The display will ask "DELETE?"

- 3. Press the [ENTER] key to erase the rhythm song, or press the [EXIT] key to cancel.**

If you press the [ENTER] key, the rhythm song will be erased and you will return to the rhythm song screen. If you then press the [EXIT] key, you will return to the main screen.

NOTE

Once you erase the rhythm song, it cannot be recovered. Use this operation with care.

Creating an original rhythm pattern

This section explains how you can create your own original rhythm pattern by tapping the front panel pads 1 – 8.

Selecting the track that you want to record

Here's how to select an empty rhythm pattern, and then select the track (drum track or bass track) on which you will record a performance.

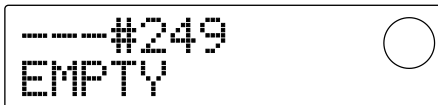
Selecting an empty rhythm pattern

1. In the main screen, press the [PATTERN] key and then press the [RHYTHM] key.

The [RHYTHM] key will light, and the rhythm pattern screen will appear.

2. Turn the dial to select an empty rhythm pattern.

Empty rhythm patterns are displayed with a name of "EMPTY".



If there is no empty rhythm pattern, you can select an unwanted rhythm pattern and erase it by pressing the [INSERT/DELETE] key → [ENTER] key. (For details refer to p.71.)

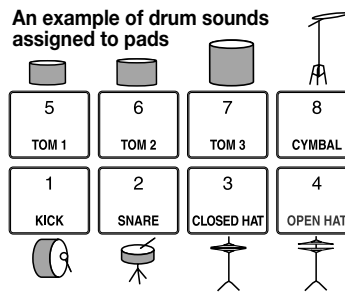
The subsequent procedure will differ depending on whether you select the drum track or the bass track as the recording destination.

Selecting the drum track

1. Repeatedly press the [DRUM/BASS] key to make the display indicate "Pad Drum."

The drum track will be selected. Now you can tap pads 1 – 8 to hear the sounds of the drum kit selected for the drum track.

The drum kit contains 24 drum/percussion sounds, and eight of these are assigned to the pads.

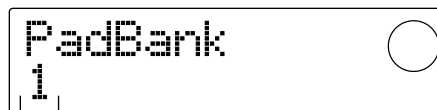


HINT

When the drum track is selected, "DRUM" will always be shown in the PAD area in the right of the display.

2. As necessary, press the [BANK] key and turn the dial to switch pad banks.

The group of sounds assigned to pads 1 – 8 is called the "pad bank." When the drum track is selected, you can switch pad banks to change the drum/percussion sounds that are played by pads 1 – 8. You can select from pad banks 1 – 3 (default: 1).



Pad bank

3. Press the [EXIT] key.

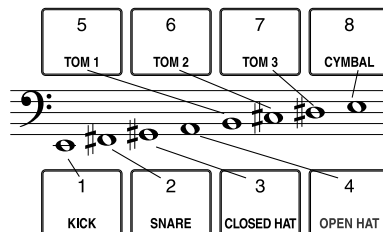
You will return to the rhythm pattern screen. The pad bank setting will remain valid even if you change screens or modes.

Selecting the bass track

1. Repeatedly press the [DRUM/BASS] key to make the display indicate "Pad Bass."

The bass track will be selected. Now you can tap pads 1 – 8 to play the scale of the bass program selected for the bass track.

An example of the scale of the bass program assigned to the pads

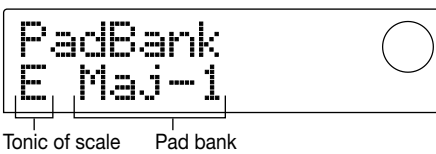


HINT

When the bass track is selected, "BASS" will always be shown in the PAD area in the right of the display.

2. As necessary, press the [BANK] key and turn the dial to switch the pad bank.

When the bass track is selected, you can switch the pad bank to change the scale or range of the bass program played by pads 1 – 8. For the bass track, you can select pad banks Maj-1 – Maj-3 and min-1 – min-3 (default: Maj-1). "Maj" is a major scale, and "min" is a natural minor scale. The number following Maj or min indicates the range in units of an octave.



3. As necessary, use the cursor [▲]/[▼] keys to change the tonic (C – B) of the currently selected scale (default: E).

4 Press the [EXIT] key.

You will return to the rhythm pattern screen. The pad bank and scale tonic settings will remain valid even if you change screens or modes.

HINT

If necessary, you can also change the drum kit / bass program sound that is assigned to the track (→ p.57).

Recording your pad performance in a rhythm pattern

You can specify the shortest note value to be recorded, and the length and time signature of the rhythm pattern, and then record your performance on the pads.

■ Setting the minimum note value unit (quantization)

With the initial settings, your performance on the pads will be aligned to the closest 16th note when it is recorded in a rhythm pattern. In a context like this, the minimum note value that is recorded is called the "quantization." The quantization can be changed as follows.

1. Make sure that the [PATTERN] key is lit, and press the [RHYTHM] key.

The [RHYTHM] key will light, and the rhythm pattern

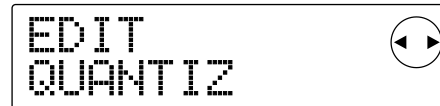
screen will appear.

NOTE

A rhythm pattern can be recorded or edited only when the [RHYTHM] key is lit.

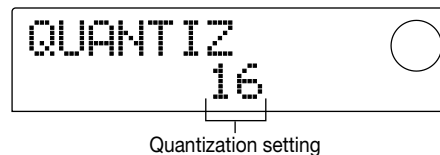
2. Press the [EDIT] key.

A screen will appear in which you can edit the rhythm pattern settings. (This is called the "rhythm pattern edit menu.")



3. Use the cursor [◀]/[▶] keys to make the display read "EDIT QUANTIZ," and press the [ENTER] key.

The current quantization setting will be displayed. The display has the following significance.



- 4: quarter note
- 8: 8th note
- 12: 8th note triplet
- 16: 16th note (default setting)
- 24: 16th note triplet
- 32: 32nd note
- Hi: one tick (no quantization)

HINT

- One tick is a length corresponding to 1/48th of a quarter note.
- This setting is common to all rhythm patterns.

4. Turn the dial to change the setting, and press the [EXIT] key.

The new setting will be finalized, and you will return to the rhythm pattern edit menu.

5. Press the [EXIT] key.

You will return to the rhythm pattern screen.

■ Setting the length and time signature of the rhythm pattern

When creating a new rhythm pattern, you can use the following procedure to specify the number of measures and time signature in the pattern.

● NOTE ●

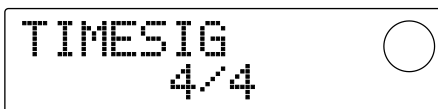
It is not possible to change the length or time signature after recording a rhythm pattern.

1. Make sure that an empty rhythm pattern is selected in the rhythm pattern screen, and press the [EDIT] key.

The rhythm pattern edit menu will appear.

2. Use the cursor [◀]/[▶] keys to select the "EDIT BARLEN" or "EDIT TIMESIG" screen, and press the [ENTER] key.

Select the "EDIT BARLEN" screen if you want to change the length of the rhythm pattern, or select the "EDIT TIMESIG" screen if you want to change the time signature. The screen shown below is an example of the display that appears when you select "EDIT TIMESIG" and press the [ENTER] key.



3. Turn the dial to change the setting.

- To specify the length of the rhythm pattern (BARLEN)

Turn the dial to specify the number of measures (1 – 99) in the rhythm pattern.

- To specify the time signature of the rhythm pattern (TIMESIG)

Turn the dial to specify the time signature of the rhythm pattern in a range of 1/4 – 8/4.

4. After making the change, press the [EXIT] key.

The new setting will be finalized, and you will return to the rhythm pattern edit menu.

5. Press the [EXIT] key.

You will return to the rhythm pattern screen.

■ Recording your pad performance

Here's how to record your pad performance into an empty rhythm pattern.

1. Make sure that an empty rhythm pattern is selected in the rhythm pattern screen.

2. Press the REC [●] key, and then press the PLAY [▶] key.

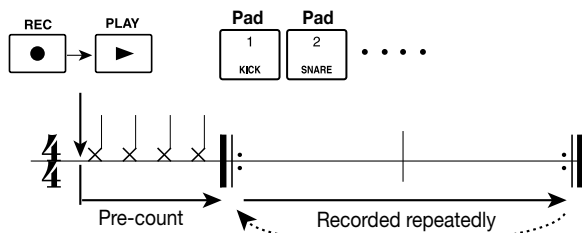
You will hear a pre-count of "click, click, click, click." When the pre-count ends, rhythm pattern recording will begin.

■ HINT ■

- The recorder section will not operate during rhythm pattern recording.
- The number of pre-count measures and the metronome volume can be changed as desired (→ p.72).

3. While listening to the metronome, tap pads 1 – 8.

Your performance on the pads will be recorded according to the quantization setting (→ p.67). When you reach the end of the pattern, you will automatically return to the beginning.

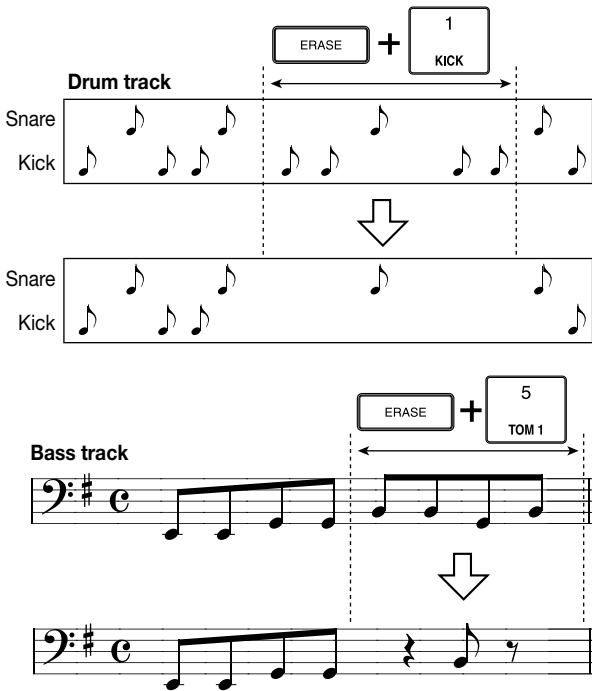


■ HINT ■

- The strength with which you tap the pads will be recorded in the pattern. If you are recording on the bass track, the length of time for which you hold down a pad will also be recorded.
- If you press the REC [●] key during recording, the REC [●] key will change to blinking, and recording will be temporarily suspended. In this state you can tap the pads to check which sound is assigned to each pad. Recording will resume when you press the REC [●] key once again.
- You can also input a pattern using a MIDI controller connected to the MRS-1044's [MIDI IN] connector, instead of tapping the pads.

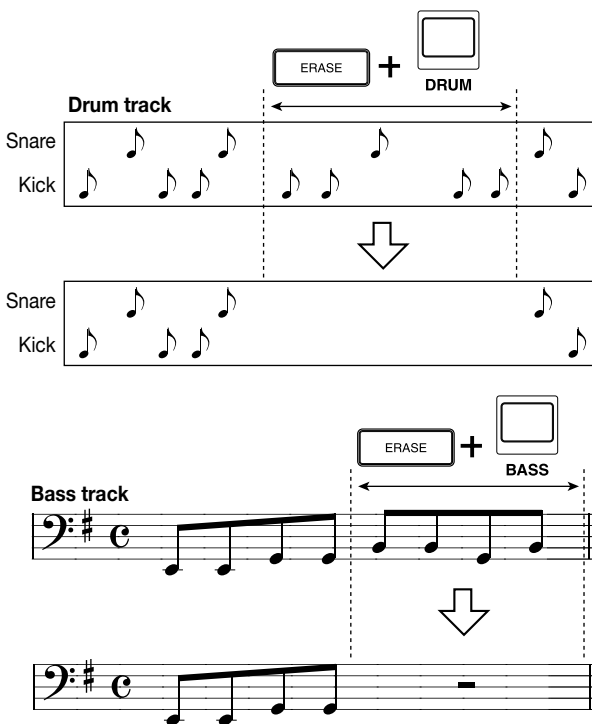
4. If you want to erase the performance of a specific pad from the track, hold down the [ERASE] key and press the corresponding pad.

Performance data for the corresponding pad will be erased from the pattern for the interval during which you hold down the [ERASE] key and the pad.



5. If you want to erase the performance of all pads from the track, hold down the [ERASE] key and press the status key of the corresponding track (DRUM or BASS).

Performance data for all pads will be erased from the pattern for the interval during which you hold down both keys.



6. When you have finished recording, press the STOP [■] key.

Pattern recording will stop, and you will return to the rhythm pattern screen. Press the PLAY [▶] key to hear the pattern that you recorded.

HINT

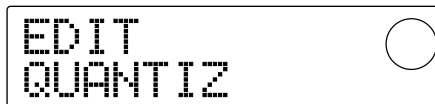
When you select an empty pattern and record it, a pattern name of "Patxxx" (xxx will be the pattern number) will be assigned automatically. You can edit this pattern name as necessary (→ p.71).

7. If you want to switch tracks and continue recording the rhythm pattern, repeatedly press the [DRUM/BASS] key to select the desired track (drum or bass), and repeat steps 2 – 6.
8. When you have finished recording the pattern and want to return to the main screen, press the [EXIT] key several times.

Specifying the chord of a rhythm pattern

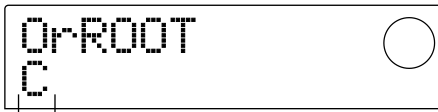
When you have created a new rhythm pattern that includes a bass track, and want to use this pattern in a rhythm song, you will need to specify the root and chord type for the pattern. If you fail to make these settings, the chords that were specified in the rhythm song may not play correctly. Use the following procedure to specify chords for newly created rhythm patterns.

1. In the main screen, press the [PATTERN] key, and then press the [RHYTHM] key.
The [RHYTHM] key will light, and the rhythm pattern screen will appear.
2. Turn the dial to select the rhythm pattern for which you want to specify a chord.
3. Press the [EDIT] key.
The rhythm pattern edit menu will appear.



4. Use the cursor [◀]/[▶] keys to access either the "EDIT OrROOT" or "EDIT OrCHORD" screen, and press the [ENTER] key.
Select "EDIT OrROOT" if you want to specify the chord root, or "EDIT OrCHORD" if you want to specify the chord type. The following screen shows an example of

what you see when you select "EDIT OrROOT" and press the [ENTER] key.



Setting

5. Turn the dial to specify the chord root / type.

● **To specify the chord root (OrROOT)**

Turn the dial to specify the note name of the chord root in a range of C – B (default: C).

● **To specify the chord type (OrCHORD)**

Turn the dial to specify the chord type. Only "Maj" (major) or "min" (minor) can be selected (default: Maj).

For example if you input an E minor bass phrase into the rhythm pattern, you would set the root to "E," and the chord type to "min."

6. Press the [EXIT] key.

The setting will be finalized, and you will return to the rhythm pattern edit menu.

7. To return to the main screen, press the [EXIT] key several times.

Editing a rhythm pattern

This section explains how to edit an existing rhythm pattern.

Adjusting the volume balance of the drum kit and bass program

The volume of the drum kit and bass program can be adjusted by the DRUM and BASS faders of the mixer section. If necessary, however, the volumes of the drum kit and bass program can also be programmed for each rhythm pattern.

1. In the main screen, press the [PATTERN] key, and then press the [RHYTHM] key.

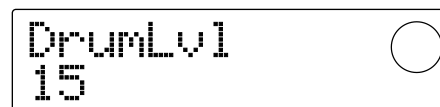
The [RHYTHM] key will light, and the rhythm pattern screen will appear.

2. Turn the dial to select the desired rhythm pattern, and press the [EDIT] key.

The rhythm pattern edit menu will appear.

3. Use the cursor [◀]/[▶] keys to select either the "EDIT DrumLvl" or "EDIT BassLvl" screen, and press the [ENTER] key.

Select the "EDIT DrumLvl" screen if you want to adjust the volume of the drum track, or the "EDIT BassLvl" screen if you want to adjust the volume of the bass track. The following screen is an example of what you see when you select the "EDIT DrumLvl" screen and press the [ENTER] key.



The display will indicate the current volume level (0 – 15).

4. Turn the dial to adjust the setting, and press the [EXIT] key.

The change will be finalized, and you will return to the rhythm pattern edit menu.

5. To return to the main screen, press the [EXIT] key several times.

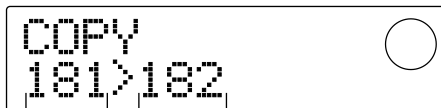
Copying a rhythm pattern

Here's how a rhythm pattern can be copied to another pattern number.

1. In the rhythm pattern screen, select the copy-source rhythm pattern, and press the [EDIT] key.

The rhythm pattern edit menu will appear.

2. Use the cursor [◀]/[▶] keys to make the display read "EDIT COPY," and press the [ENTER] key.



Copy-source rhythm pattern number Copy-destination rhythm pattern number

3. Turn the dial to select the copy-destination rhythm pattern, and press the [ENTER] key.

The display will ask "SURE?"

4. Press the [ENTER] key to execute the copy, or press the [EXIT] key to cancel.

When the copy is completed, you will return to the rhythm pattern edit menu.

5. To return to the main screen, press the [EXIT] key several times.

Editing the name of a rhythm pattern

Here's how you can edit the name of a rhythm pattern.

1. In the rhythm pattern screen, select the rhythm pattern whose name you want to edit, and press the [EDIT] key.

The rhythm pattern edit menu will appear.

2. Use the cursor [◀]/[▶] keys to make the display read "EDIT NAME," and press the [ENTER] key.

The rhythm pattern name will appear, and the first character will be blinking.



3. Use the cursor [◀]/[▶] keys to move the blinking area, and turn the dial to change the character.

For details on the characters that can be used, refer to p.36.

HINT

When you select an empty rhythm pattern and record onto it, the pattern will automatically be assigned a default name of "Patxxx" (xxx will be the pattern number).

4. When you have finished editing the name, press the [EXIT] key.

The rhythm pattern name will be updated, and you will return to the rhythm pattern edit menu.

5. To return to the main screen, press the [EXIT] key several times.

Erase a rhythm pattern

Here's how you can erase all data from a specified rhythm pattern, returning it to a blank state.

1. In the rhythm pattern screen, select the rhythm pattern that you want to erase.

2. Press the [INSERT/DELETE] key.

The display will ask "SURE?"

3. Press the [ENTER] key to execute the erasure, or press the [EXIT] key to cancel.

When the pattern has been erased, you will return to the rhythm pattern screen.

4. To return to the main screen, press the [EXIT] key several times.

Importing rhythm patterns and the rhythm song from another project

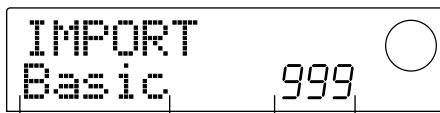
Here's how you can import (load) the rhythm pattern data (255 patterns) and rhythm song data from another project that was saved on the hard disk.

1. In the main screen, press the [RHYTHM] key, and then press the [PROJECT/UTILITY] key.

A screen will appear in which you can make various settings for the rhythm section. (This screen is called the "rhythm utility menu.") This operation can be performed whether the rhythm section is in Rhythm Pattern mode or in Rhythm Song mode.

2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY IMPORT," and press the [ENTER] key.

A screen will appear in which you can select the project to be imported.



Import-source project name Project number

3. Turn the dial to select a project, and press the [ENTER] key.

The display will ask "SURE?"

4. Press the [ENTER] key to import, or press the [EXIT] key to cancel.

After the data has been imported, you will return to the rhythm utility menu. To return to the main screen, press the [EXIT] key several times.

NOTE

The rhythm patterns and rhythm song that are imported will overwrite the rhythm patterns and rhythm song of the project that you are currently operating.

Editing various settings of the rhythm section

Here's how you can edit various settings that affect the entire rhythm section, such as adjusting the sensitivity of pads 1 – 8 or adjusting the volume of the metronome.

Basic procedure

The basic procedure for editing the rhythm section settings is the same for most items. Here's the basic procedure.

HINT

You can use the same procedure in either Rhythm pattern mode or Rhythm Song mode.

1. In the main screen, press the [RHYTHM] key.

The [RHYTHM] key will light, and either the rhythm pattern screen or the rhythm song screen will appear, depending on the currently selected mode.

2. Press the [PROJECT/UTILITY] key.

The rhythm utility menu will appear, where you can make various settings for the rhythm section.

3. Use the cursor [◀]/[▶] keys to select one of the following items to edit, and press the [ENTER] key.

- COUNT: Change the length of the pre-count.
- CLICK: Change the volume of the metronome.
- PAD SENS (sensitivity): Specify how the volume will be affected by the force with which a pad is struck.
- MIDI: Make MIDI-related settings (→ p.90).
- IMPORT: Import rhythm patterns and the rhythm song from a project saved on the hard disk.
- MEMORY (memory remaining): Check the remaining amount of rhythm pattern and rhythm song memory.

4. Turn the dial to edit the setting.

The screen display and operation will be different for each item. For details refer to the sections that follow.

HINT

For details on MIDI operations, refer to page 90. For details on the Import procedure, refer to the preceding section.

5. When you have finished creating settings, press the [EXIT] key several times.

You will return to the main screen.

Changing the length of the pre-count (COUNT)

You can change the length of the pre-count that is sounded when you record a rhythm pattern. When the following screen is displayed, turn the dial to choose one of these settings.



- OFF: The pre-count will be turned off.
- 1: A one-measure pre-count will be sounded (default setting).
- 2: A two-measure pre-count will be sounded.
- PAD: The pre-count will be turned off, and recording will begin the instant you tap a pad.

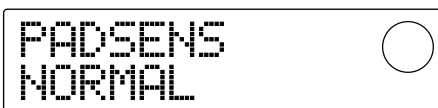
Changing the metronome volume (CLICK)

You can change the volume of the metronome that sounds while you record a rhythm pattern. When the following screen is displayed, turn the dial to adjust the volume (0 – 15).



Adjusting the sensitivity of the pads (PAD SENS)

You can specify how the volume will respond to the force with which you tap the pads (pad sensitivity). When the display indicates "PAD SENS," turn the dial to select one of the following settings.



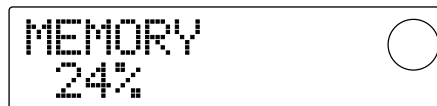
- SOFT: The volume will be soft, regardless of how strongly you tap.
- MEDIUM: The volume will be medium, regardless of

how strongly you tap.

- LOUD: The volume will be loud, regardless of how strongly you tap.
- LITE: Maximum sensitivity. Even light taps will produce a loud volume.
- NORMAL: Normal sensitivity (default setting).
- HARD: Low sensitivity.
- EX HARD: Lowest sensitivity. Loud volumes will not be produced unless you tap quite strongly.

Checking the remaining amount of memory (MEMORY)

The remaining amount of recording memory for rhythm patterns and the rhythm song will be displayed as a percentage (%). This screen is for display only, and has no setting that can be edited.



Reference [Effects]

This section explains how to use the effects built into the MRS-1044.

About the effects

The MRS-1044 has two types of effects, an "insert effect" and two "send/return effects." The two types can be used simultaneously. The two types of effect are described below in detail.

Insert effect

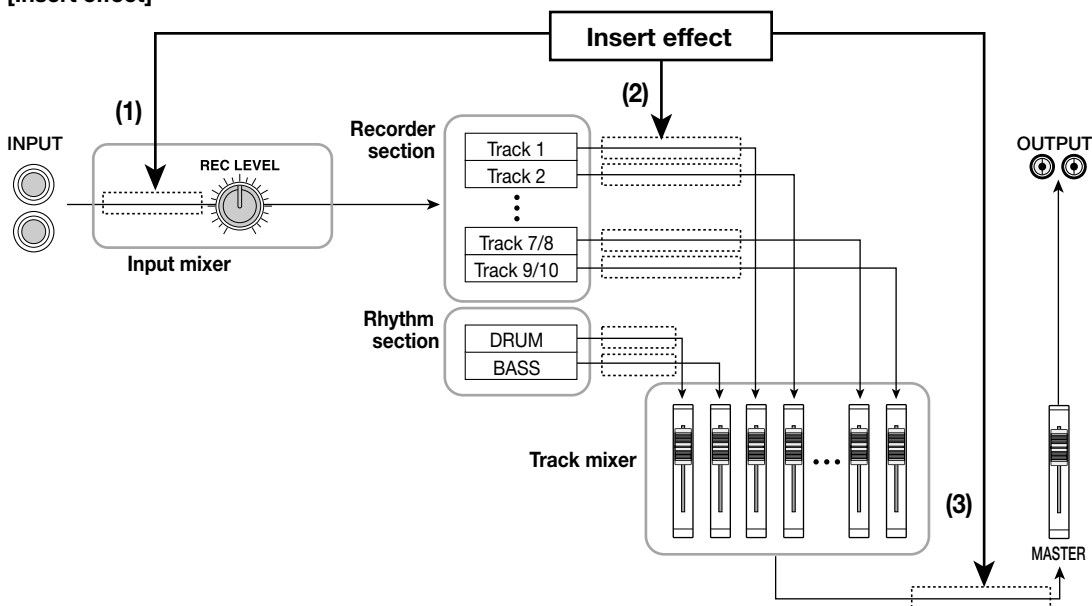
The insert effect is used by inserting it into a specific signal route. You can select one of the following locations at which to insert the effect. (See the "Insert Effect" diagram below.)

- (1) Input mixer
- (2) Any channel of the track mixer (1 – 6, 7/8, 9/10, DRUM, BASS)
- (3) Immediately before the MASTER fader

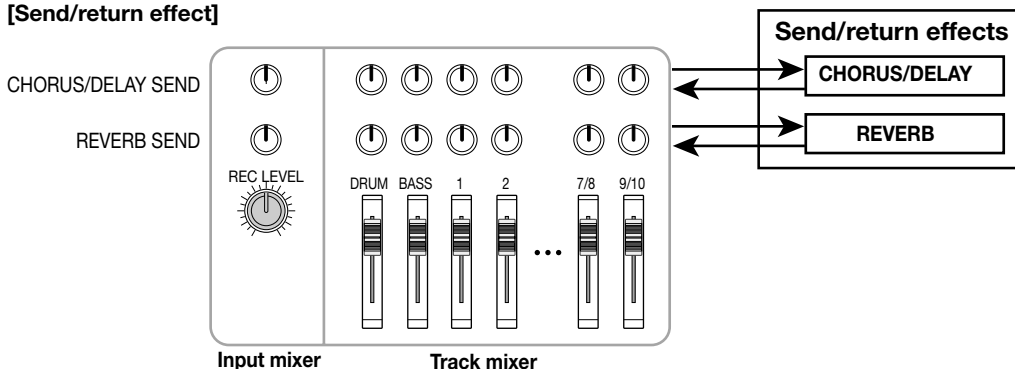
Send/return effects

The send/return effects are internally connected to the send/return of the mixer section. The MRS-1044 has two send/return effects, reverb (REVERB) and chorus/delay (CHORUS/DELAY), and these two can be used simultaneously. The send levels of the input mixer or track mixer adjust the effect depth of the send/return effects. Raising the send level will send the corresponding signal to the input of the effect, and the signal processed by the effect will be returned immediately before the MASTER fader, and mixed with the other signals. (See the "Send/return effect" diagram below.)

[Insert effect]



[Send/return effect]



Using the insert effect

This section explains how to insert the insert effect, how to select a patch, and how to edit the patch.

About insert effect patches

The insert effect is a multi-effect unit that contains a chain of separate effects such as compressor, distortion, and delay. Each of these separate effects is called an "effect module," and up to six effect modules can be used simultaneously. A set of effect modules that can be used simultaneously is called an "algorithm." You can use one of the following four types of algorithms.

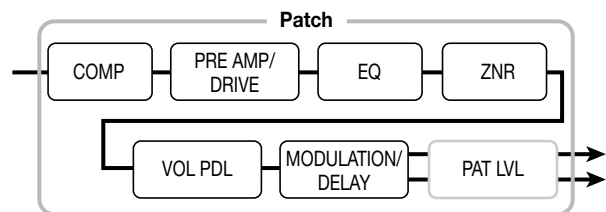
- **GUITAR/BASS:** An algorithm suitable for recording guitar/bass.
- **MIC:** An algorithm suitable for recording vocals etc. through a mic. This algorithm has two variations, "MIC SINGLE" for use with one mic, or "MIC DUAL" for use with two mics.
- **LINE:** An algorithm used mainly when recording stereo-output line-level devices such as synthesizers or electronic pianos.
- **MASTERING:** An algorithm suitable for processing a stereo mix signal during mixdown, etc.

The arrangement of the effect modules and the signal flow for each algorithm is shown in the diagram below.

HINT

- Some algorithms are mono input / stereo output, and others are stereo input / stereo output. This difference will affect the signal flow when the insert effect is inserted. For details refer to p.77.
- The MIC algorithms "MIC SINGLE" and "MIC DUAL" will switch according to the effect type selected for the COMP/LIM module. For details on the effect types, refer to p.78.

Each module has various parameters (corresponding to the knobs of a compact effect unit) that can be edited to adjust the character or depth of the effect. Settings for the parameters of each effect module and an overall volume setting (patch level) are collectively referred to as a "patch."



A newly created project contains 220 patches designed by ZOOM, and these patches are organized according to the four algorithms. You can instantly switch insert effect settings simply by selecting the appropriate algorithm, and then selecting a patch. The following table shows how the patches are organized for each algorithm.

Algorithm	Patch number	Types
GUITAR/BASS	00 – 99	100 types
MIC	00 – 49	50 types
LINE	00 – 49	50 types
MASTERING	00 – 19	20 types

[Module arrangement for each algorithm]

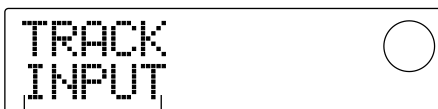
Algorithm	Effect modules	Input/output type
GUITAR/BASS	COMP → PRE AMP/ DRIVE → EQ → ZNR → VOL PDL → MODULATION/ DELAY	Mono → stereo
MIC SINGLE	COMP/LIM → MIC PRE+ DE-ESSER → EQ → ZNR → VOL PDL → MODULATION/ DELAY	
MIC DUAL	COMP/LIM CONM → MIC PRE MIC PRE → EQ EQ → ZNR ZNR → VOL PDL → DOUBLING DOUBLING	Stereo → stereo
LINE	COMP/LIM → ISOLATOR → EQ → ZNR → VOL PDL → MODULATION/	
MASTERING	3BAND COMP/ LO-FI → NORMALIZE → EQ → ZNR → VOL PDL → DIMENSION/ RESONANCE	

Changing the insert location of the insert effect

When the project is in its initial state, the insert effect is sent into the input mixer. However, you may change the insert location as necessary. The procedure is as follows.

1. In the main screen, press the effect section [INPUT SOURCE] key.

The currently selected insert location will appear in the display.



Location at which the insert effect is inserted

The display has the following significance.

- INPUT: Input mixer (default setting)
- DRUM: DRUM channel of the track mixer
- BASS: BASS channel of the track mixer
- TR 1 – TR6: Channels 1 – 6 of the track mixer
- TR1/2, TR3/4, TR5/6, TR7/8, TR9/10: Channels 1/2, 3/4, 5/6, 7/8, or 9/10 of the track mixer
- MASTER: Immediately before the MASTER fader

2. Turn the dial to select the insert location.

HINT

While the above screen is displayed, you can also select the insert location by pressing an INPUT 1/2 [ON/OFF] key or a status key (DRUM, BASS, 1 – 6, 7/8, 9/10, MASTER). When using the status keys to select channels 1/2, 3/4, or 5/6 as a pair, press status keys 1/2, 3/4, or 5/6 simultaneously.

3. Press the [EXIT] key.

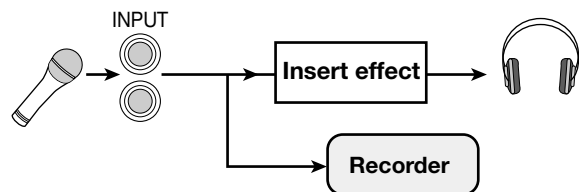
You will return to the main screen.

HINT

If the [INPUT SOURCE] key is lit when you are in the main screen, this means that the insert effect is placed in a location other than in the input mixer.

Applying the insert effect only to the monitor signal

Normally when the insert effect is placed into the input mixer, the signal processed by the effect will be recorded on the track. If necessary, however, you can apply the insert effect only to the monitor signal, and record the unprocessed input signal on the track. For example when recording the unprocessed sound of a vocal performance, the vocalist will be more comfortable singing if an insert effect suitable for mic recording is applied to the monitor signal.



1. Send the insert effect into the input mixer.

For the procedure, refer to the preceding section.

2. Press the [EFFECT] key, and then press one of the ALGORITHM keys that is already lit.

A screen will appear in which you can select an insert effect patch.

3. Press the [PROJECT/UTILITY] key, and use the cursor [◀]/[▶] keys to make the display read "UTILITY REC SRC."



4. Press the [ENTER] key.

A screen will appear in which you can select one of the following two types of signal to be recorded on the track.



- WET: The input signal that has passed through the insert effect will be recorded on the track (default setting).
- DRY: Only the unprocessed input signal will be recorded on the track. Even in this case, however, the insert effect will be applied to the monitor signal.

5. Turn the dial to change the setting to "DRY."

6. When you have finished adjusting settings, press the [EXIT] key several times.

You will return to the main screen.

NOTE

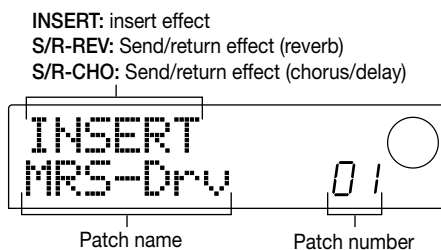
The "UTILITY REC SRC" setting is stored independently for each project. Before you begin recording other parts, change the setting back to "WET."

Selecting the patch for the insert effect

Here's how to select the patch for the insert effect.

1. Press the [EFFECT] key.

The [EFFECT] key will light, and a screen will appear in which you can select a patch for the effect that you operated last (either the insert effect or send/return effect). The display will indicate the currently selected patch.



2. In the effect section, press the desired ALGORITHM key.

- GUITAR/BASS algorithm: [GUITAR/BASS] key
- MIC algorithm: [MIC] key
- LINE algorithm: [LINE] key
- MASTERING algorithm: [MASTERING] key

When selecting a patch for the insert effect, you will begin by first selecting the algorithm (the combination of effect modules). When you press the ALGORITHM key, the display will show the insert effect patches of that algorithm.



3. Turn the dial to select the desired patch.

As you turn the dial, new patches will be recalled immediately.

4. If you want to temporarily turn the insert effect off, press the effect section [BYPASS/TUNER] key.

The [BYPASS/TUNER] key will light, and the insert effect will be bypassed. Bypass will be disabled when you press the [BYPASS/TUNER] key once again.

HINT

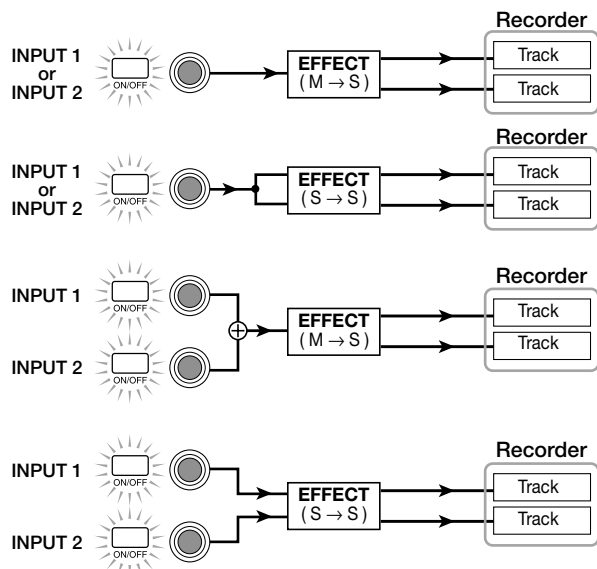
If you press the [ENTER] key after pressing the [BYPASS/TUNER] key, the Tuner function will be turned on. (For details on the Tuner function, refer to p.92.)

5. To return to the main screen, press the [EXIT] key.

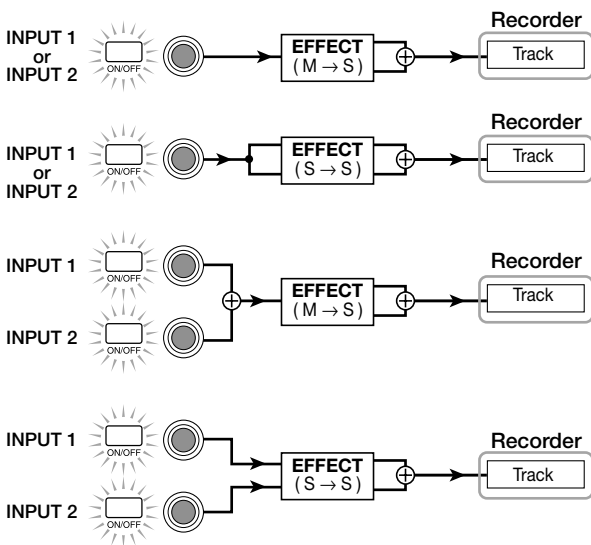
The flow of the signal that passes through the insert effect will change as shown below, depending on the insert location, the number of input signal channels (1 or 2 channels), and the input/output type of the insert effect (mono input / stereo output, or stereo input and output). ("M → S" indicates mono input / stereo output, and "S → S" indicates stereo input/output algorithms.)

■ When inserted into the input mixer

- When recording on two mono tracks (tracks 1/2, 3/4, 5/6) or on a stereo track (7/8, 9/10)



- When recording on one mono track (track 1 – 6)

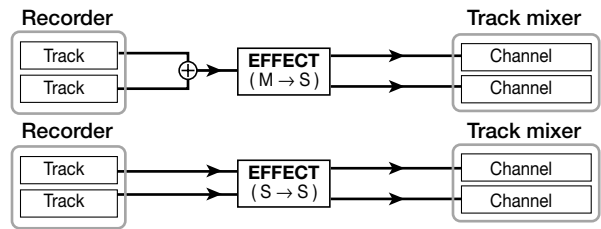


HINT

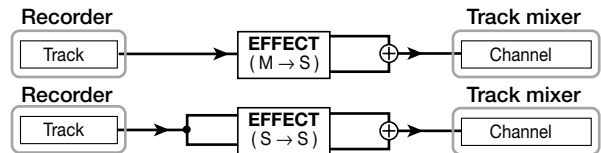
If no recording track is selected, the output signal of the insert effect will be sent to a location immediately before the MASTER fader, and mixed with the signals of the track mixer.

■ When inserted into the track mixer

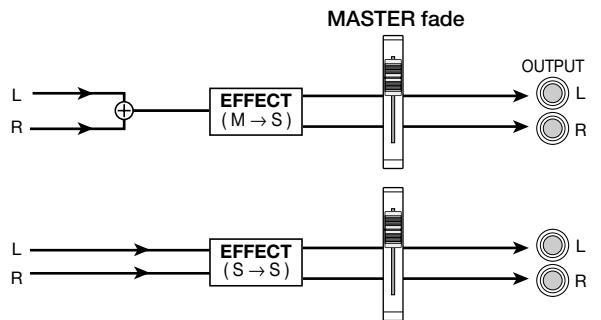
- If two mono channels (channels 1/2, 3/4, 5/6), a stereo channel (7/8, 9/10), or the DRUM channel is selected as the insert location



- If a mono channel (channel 1 – 6) or the BASS channel is selected as the insert location

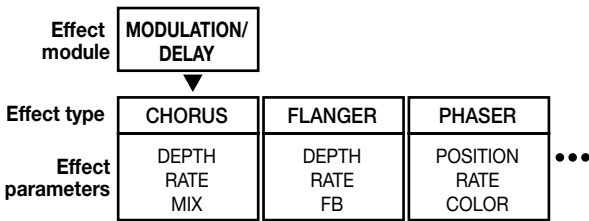


■ When inserted immediately before the MASTER fader



Editing the insert effect patch

The effect modules of the insert effect have various "effect parameters" that can be adjusted to make detailed changes to the character of the effect. By editing the effect parameters, you can obtain the desired tone or effect. For some effect modules, you can change the "effect type." For example in the GUITAR/BASS algorithm, the MODULATION/DELAY effect module provides twelve effect types such as chorus, flanger, and phaser, and you can select and use any one of these. When you change the effect type, the effect parameters will also change.



Here's how to edit the effect type and effect parameters for the currently selected patch.

1. Press the [EFFECT] key to make the key light.

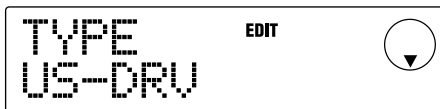
The display will indicate the currently selected patch.

2. Use the ALGORITHM keys to select an algorithm, and turn the dial to select the patch that you want to edit.

It is not possible to change the algorithm of the currently selected patch. For this reason, you must first begin by selecting a patch that uses the desired algorithm, even when you want to create a patch from scratch.

3. Press the [EDIT] key.

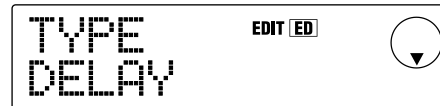
The upper part of the display will indicate "EDIT." This means that the patch may now be edited.



4. From the MODULE keys, press the key for the effect module that you want to edit.

When editing a patch, use the MODULE keys to select the module for editing. The table below shows how the MODULE keys correspond to the various effect modules.

The following display is an example of when the [MODULATION/DELAY] key is pressed to select the MODULATION/DELAY effect module.



If you select an effect module using a key other than the [TOTAL] key, you can use the cursor [▲]/[▼] keys to access the setting screens for the effect type and effect parameters of that module.

HINT

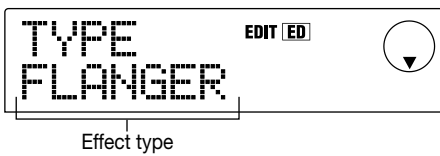
- The lit/dark condition of the [COMPRESSOR], [PRE AMP/DRIVE], [EQUALIZER], and [MODULATION/DELAY] keys indicates the on/off status of the corresponding module. (If you select an effect module that is off, the display will indicate "-OFF-.") Each time you press one of these keys, the setting will alternate on/off.
- To edit the ZNR or VOL PDL modules, press [TOTAL], and then use the cursor [▲]/[▼] keys to display either "ZNR" or "VOL PDL." Then turn the dial to edit the parameter.

5. If you want to switch the effect type for the selected module, press the cursor [▲] key to make the display show "TYPE," and then turn the dial to select the desired effect type.

[MODULE key correspondence]

Key		Algorithm					TOTAL		
		COMPRESSOR	PRE AMP DRIVE	EQUALIZER	MODULATION DELAY				
GUITAR/BASS		COMP	PRE AMP/ DRIVE	EQ	MODULATION/ DELAY	ZNR	VOL PDL	PAT LVL	
MIC	SINGLE	COMP/LIM	MIC PRE+ DE-ESSER	EQ	MODULATION/ DELAY	ZNR	VOL PDL	PAT LVL	
	DUAL	COMP/LIM	MIC PRE	EQ	DOUBLING	ZNR	VOL PDL	PAT LVL	
LINE		COMP/LIM	ISOLATOR	EQ	MODULATION/	ZNR	VOL PDL	PAT LVL	
MASTERING		3BAND COMP/ LO-FI	NORMALIZE	EQ	DIMENSION/ RESONANCE	ZNR	VOL PDL	PAT LVL	

The following diagram shows an example of when the MODULATION/DELAY module effect is changed from "CHORUS" to "FLANGER."



NOTE

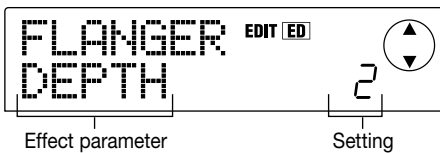
Some effect modules have only one effect type. For such modules, there will be no screen for selecting the effect type.

HINT

If the contents of a patch have been edited, the "EDIT" indicator in the upper part of the display will change to "EDITED."

6. Use the cursor [▲]/[▼] keys to select the effect parameter that you want to edit.

The following diagram shows an example of what you see when you have selected the DEPTH parameter of the "FLANGER" effect.



7. Turn the dial to change the setting.

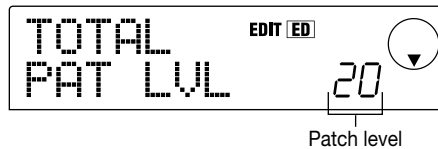
For details on the effect types that can be selected for each effect module, and on the effect parameters of each type, refer to the appendix (→ p.98) at the end of this manual.



8. Repeat steps 4 – 7 to make the desired edits for other modules.

9. If you want to adjust the patch level (the final volume of the patch), press the [TOTAL] key, use the cursor [▲]/[▼] keys to make the display read "TOTAL PAT LVL," and turn the dial.

The patch level can be adjusted in a range of 1 – 30.



HINT

Strictly speaking, the patch level is not an effect module, but is one of the parameters included in the patch.

10. When you have finished editing, press the [EXIT] key.

You will return to the patch select screen.

NOTE

Be aware that if you return to the patch select screen and select another patch, the edited contents will be lost. If you want to keep the results of your editing, refer to the following section.

Storing an insert effect patch

A patch you edited can be stored in any location of the same algorithm. You can also store an existing patch in another location to create a copy of that patch.

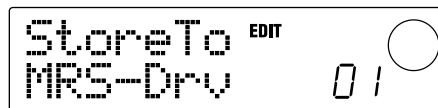
1. Press the [EFFECT] key, and then press the [EDIT] key.

The currently selected patch can now be edited.

2. Press the [TOTAL] key, and use the cursor [▲]/[▼] keys to make the display read "STORE."

3. Press the [ENTER] key.

A screen will appear in which you can specify the store-destination patch number.



4. Turn the dial to select the store-destination patch number, and press the [ENTER] key.

The display will ask "SURE?"

5. Press the [ENTER] key.

The patch will be stored, and you will return to the patch select screen.

HINT

- Patches that you store are saved on the hard disk as part of the project.
- Patch data included in an already existing project can be loaded into the current project (→ p.84). This is convenient when you want to use an edited patch in a different project.

Editing the name of an insert effect patch

Here's how to edit the name of the currently selected patch.

1. Press the [EFFECT] key, and then press the [EDIT] key.

The currently selected patch can now be edited.

2. Press the [TOTAL] key, and use the cursor [▲]/[▼] keys to make the display read "PAT NAM."

The name of the patch will be displayed below "PAT NAM," and the character currently selected for editing will blink.



3. Use the cursor [◀]/[▶] keys to move the blinking area, and turn the dial to change the character.

For details on the characters that can be selected, refer to p.36.

4. When you have finished editing the name, use the cursor [▲]/[▼] keys to make the display read "STORE," and press the [ENTER] key three times.

The patch will be stored with the edited name, and you will return to the patch select screen.

Using the send/return effects

This section explains how to select and edit patches for the send/return effects (reverb, chorus/delay)

About the send/return effect patches

The "reverb" and "chorus/delay" send/return effects are separate and independent.

Reverb and chorus/delay each have an "effect type" that determines the type of effect, and various parameters that let you adjust the character of the effect. Settings for the effect type and parameters, together with a name, are collectively called send/return effect "patches."

A newly created project contains 20 different reverb patches and 20 different chorus/delay patches. You can instantly switch reverb or chorus/delay settings simply by choosing the effect for which you want to select a patch (reverb or chorus/delay), and then selecting a patch.

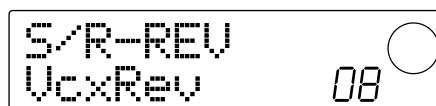
Algorithm	Patch number	Types
REVERB	00 – 19	20 types
CHORUS/DELAY	00 – 19	20 types

Selecting a send/return effect patch

Here's how to select a reverb or chorus/delay patch.

1. Press the [EFFECT] key, and then press the [REVERB] key or [CHORUS/DELAY] key.

Press the [REVERB] key if you want to select a reverb patch, or the [CHORUS/DELAY] key if you want to select a chorus/delay patch. The currently selected patch will be displayed. The following display shows an example of what you see when the [REVERB] key is pressed.



2. Turn the dial to select the new patch.

As you turn the dial, new patches will be recalled immediately. If the track mixer REVERB SEND and CHORUS/DELAY SEND parameter settings are raised, you can press the PLAY [▶] key to play back the song, and listen to the result of the newly selected patch.

HINT

- When a reverb or chorus/delay patch is selected, you can press the corresponding key ([REVERB] or [CHORUS/DELAY]) to switch that effect on/off. (When off, the key will be dark.)
- For details on track mixer operations, refer to p.49.

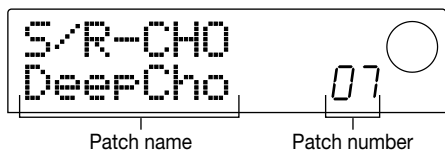
3. To return to the main screen, press the [EXIT] key.

Editing a send/return effect patch

Here's how to edit a reverb or chorus/delay patch.

1. Press the [EFFECT] key, and then press the [REVERB] key or [CHORUS/DELAY] key.

Press the [REVERB] key to edit a reverb patch, or press the [CHORUS/DELAY] key to edit a chorus/delay patch. When either key is pressed, the currently selected patch will be displayed. The following screen is an example of what you see when the [CHORUS/DELAY] key is pressed.



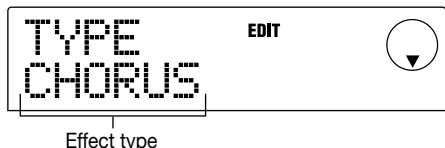
Patch name

Patch number

2. If necessary, turn the dial to select the patch that you want to edit.

3. Press the [EDIT] key.

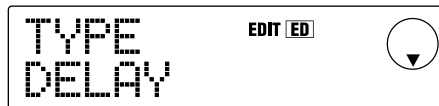
The display will indicate "EDIT," and a screen will appear in which you can edit the patch. When the [EDIT] key is first pressed, a screen will appear in which you can select the effect type of the selected send/return effect (in this example, chorus/delay).



Effect type

4. If you want to change the effect type, turn the dial.

In this example, the chorus/delay effect type has been changed from "CHORUS" to "DELAY." When the effect type is changed, the effect parameters will also be different.

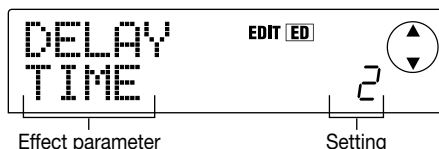


HINT

When the contents of a patch are modified, the "EDIT" indicator in the upper part of the display will change to "EDITED."

5. Use the cursor [▲]/[▼] keys to select the effect parameter that you want to edit.

In this example, the TIME parameter of the "DELAY" effect type has been selected.



Effect parameter

Setting

6. Turn the dial to change the setting.

For details on the effect types that can be selected for reverb or chorus/delay, and on the range of each effect parameter, refer to the appendix (→ p.105) at the end of this manual.

7. As necessary, repeat steps 5 – 6 to edit other effect parameters.

8. When you have finished editing, press the [EXIT] key.

You will return to the patch select screen.

NOTE

Be aware that if you return to the patch select screen and select another patch, your edits will be lost. If you want to keep the edited patch, refer to the following section.

Storing a send/return effect patch

A patch you edited can be stored in any location of the same send/return effect. You can also store an existing patch in another location to create a copy of that patch.

1. Press the [EFFECT] key, and then press the [EDIT] key.

The currently selected patch can now be edited.

2. Use the cursor [▲]/[▼] keys to make the display read "STORE."

3. Press the [ENTER] key.

A screen will appear in which you can specify the store-destination patch number.



4. Turn the dial to select the store-destination patch number, and press the [ENTER] key.

The display will ask "SURE?"

5. Press the [ENTER] key.

The patch will be stored, and you will return to the patch select screen.

HINT

- Patches that you store are saved on the hard disk as part of the project.
- Patch data included in an already existing project can be loaded into the current project (→ p.84). This is convenient when you want to use an edited patch in a different project.

Editing the name of a send/return effect patch

Here's how to edit the name of the patch that is currently selected for a send/return effect.

1. Press the [EFFECT] key, and then press the [REVERB] key or [CHORUS/DELAY] key.

Press the [REVERB] key if you want to edit the name of the reverb patch, or press the [CHORUS/DELAY] key if you want to edit the name of the chorus/delay patch. When either key is pressed, the currently selected patch will be displayed. If necessary, turn the dial to select the patch

whose name you want to edit.

2. Press the [EDIT] key, and use the cursor [▲]/[▼] keys to make the display read "PAT NAM."

The name of the patch will be displayed below "PAT NAM," and the character currently selected for editing will blink.



3. Use the cursor [◀]/[▶] keys to move the blinking area, and turn the dial to change the character.

For details on the characters that can be selected, refer to p.36.

4. When you have finished editing the name, use the cursor [▲]/[▼] keys to make the display read "STORE," and press the [ENTER] key three times.

The patch will be stored with the edited name, and you will return to the patch select screen.

Importing patches from another project

Here's how to import (load) all patches for the internal effects (insert effect and send/return effect) from another project that is already saved on the hard disk.

- 1. Press the [EFFECT] key, and then press the [PROJECT/UTILITY] key in the display section.**

The display will indicate "UTILITY REC SRC."

- 2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY IMPORT," and press the [ENTER] key.**

A screen will appear, allowing you to select the project from which the patch data will be imported.

- 3. Turn the dial to select the project from which the patch data will be imported, and press the [ENTER] key.**

The display will ask "IMPORT SURE?"

- 4. Press the [ENTER] key to execute the Import operation, or press the [EXIT] key to cancel.**

When the data has been imported, you will return to the "UTILITY IMPORT" screen. At this time, all effect patches of the project you selected in step 3 will be overwritten onto the current project.

Reference [Project]

This section explains operations that affect an entire project.

About projects

On the MRS-1044, the data needed to reproduce a song you create is managed in units called "projects." A project contains the following data.

- The data recorded on V-takes 1 – 10 of tracks 1 – 10
- The current mixer settings
- The settings saved in scene numbers 0 – 99
- The numbers of the patches currently selected for the insert effect / send return effects
- Insert effect and send/return effect patches (260 patches)
- The recorded contents of the rhythm patterns (255 patterns)
- The recorded contents of the rhythm song
- The number of the drum kit and bass program currently selected by the drum and bass tracks
- MIDI-related settings

The internal hard disk can store a maximum of 1,000 projects, as long as space is available. A project can be loaded at any time.

NOTE

On the MRS-1044, recording/playback operations can be performed only for the currently loaded project. It is not possible to operate multiple projects simultaneously.

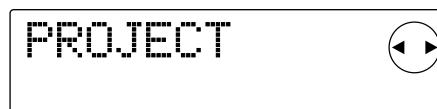
Project operations

This section explains operations such as loading or saving a project. The procedure is the same for most project operations. The basic procedure is as follows.

Basic procedure

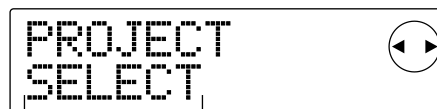
1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."



2. Press the [ENTER] key.

The "project menu" will appear, allowing you to select the desired project operation.



Project menu item

3. Use the cursor [◀]/[▶] keys to select one of the following operations, and press the [ENTER] key.

- PROJECT SELECT: Load a previously saved project from the internal hard disk.
- PROJECT NEW: Create a new project.
- PROJECT SIZE: View the size of the currently loaded project.
- PROJECT COPY: Duplicate a specified project on the hard disk.
- PROJECT ERASE: Erase a specified project from the hard disk.
- PROJECT NAME: Edit the name of the currently loaded project.
- PROJECT PROTECT: Write-protect the currently loaded project.
- PROJECT STORE: Store the currently loaded project.

4. Execute the operation (or change the setting) that you selected.

For details on the procedure, refer to the sections that follow.

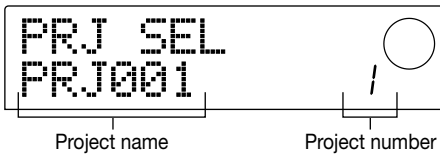
5. To return to the main screen, press the [EXIT] key several times.

HINT

In the case of an operation that you execute, you will automatically return to the main screen after execution.

Loading a project (PROJECT SELECT)

You can select a project that was saved on the hard disk, and load it. When the following screen is displayed, use the dial to select the project that you want to load.



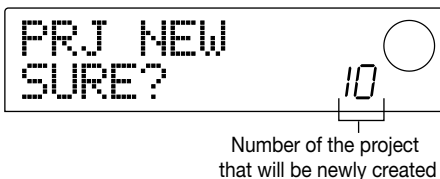
Press the [ENTER] key to load the project, or press the [EXIT] key to cancel. After the project has been loaded, you will return to the main screen.

HINT

- When you press the [ENTER] key, the project that you had been working on will be saved automatically before the selected project is loaded.
- When the power of the MRS-1044 is turned on, the project that you were last working on will be loaded automatically.

Creating a new project (PROJECT NEW)

This operation creates a new project. To execute, press the [ENTER] key when the following screen is displayed. To cancel, press the [EXIT] key.



When you press the [ENTER] key, a new project will be loaded, and you will return to the main screen.

HINT

- A newly created project will be automatically assigned a default name of "PRJxxx" (xxx will be a project number in the range of 000 – 999). You can edit this name as desired.
- When you press the [ENTER] key, the project that you had been working on will be saved automatically before the new project is created.

Checking the project size / available hard disk capacity (PROJECT SIZE)

This displays the size of the currently loaded project, the available capacity of the internal hard disk, and the remaining recording time. Use the cursor [▲]/[▼] keys to switch between the following display items.

- **REMAIN MB:** This shows the remaining space on the internal hard disk in MB (megabyte) units. (One megabyte is 1,048,576 bytes.)



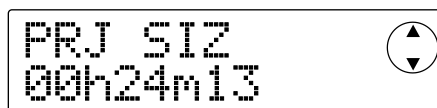
- **REMAIN h/m:** The approximate recordable time remaining for each track is shown in hours (h) / minutes (m) / seconds.



- **PRJ SIZ MB:** This shows the size of the currently loaded project in MB (megabyte) units.



- **PRJ SIZ h/m:** This shows the size of the currently loaded project in terms of the recorded time per track, in hours (h) and minutes (m).

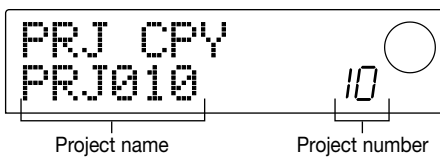


NOTE

- These screens are for display only, and contain no items that can be edited.
- The remaining recordable time is an approximation.

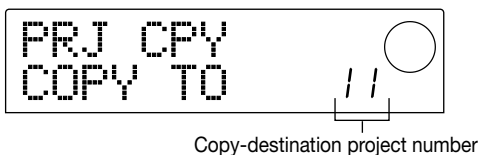
Duplicating a project (PROJECT COPY)

This operation copies a specified project that is saved on the hard disk.



1. When the above screen is displayed, turn the dial to select the copy-source project, and press the [ENTER] key.

A screen will appear in which you can specify the copy-destination project number.



2. Turn the dial to select the copy-destination project number, and press the [ENTER] key.

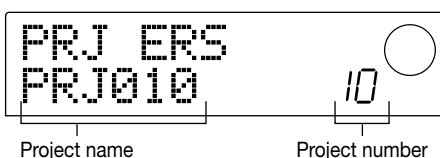
The display will ask "SURE?"

3. To execute the copy, press the [ENTER] key. To cancel, press the [EXIT] key.

When the copy operation has been completed, you will return to the main screen with the copy-destination project selected.

Erasing a project (PROJECT ERASE)

This operation erases the specified project from the hard disk. When the following screen is displayed, use the dial to select the project that you want to erase.



To execute the erasure, press the [ENTER] key. To cancel, press the [EXIT] key. When the erase operation has been completed, you will return to the main screen.

HINT

It is also possible to erase the currently loaded project. In this case, the lowest-numbered project will automatically be loaded after the erase operation has been completed.

NOTE

Once a project has been erased, it cannot be recovered. Use this operation with care.

Editing the project name (PROJECT NAME)

This lets you edit the name of the currently loaded project. When the following screen is displayed, the character selected for editing will blink.



Use the cursor [◀]/[▶] keys to move the blinking area, and use the dial to change the character.

For details on the characters that can be used, refer to p.36.

HINT

The edited name of the project will be updated when the project is saved.

Protecting a project (PROJECT PROTECT)

This setting lets you write-protect the currently loaded project. When the following screen is displayed, use the dial to select one of the following two settings.




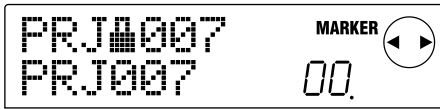
- **OFF:** Protect is turned off.
- **ON:** Protect is turned on. When protect is on, the following operations will be impossible.

- Editing or recording on the recorder
- Changing the V-take
- Editing a patch
- Recording or editing a rhythm pattern or the rhythm

song

- Deleting or saving the project
- Saving/deleting scenes, making marker settings, etc.

A project for which the Protect setting is turned on is indicated by a  symbol displayed at the left of the project number in the main screen.



HINT

- If you save the project after completing the mix, it will be impossible to return to that state if you continue making changes. If you do not want a completed mix to be changed further, we recommend that you turn Protect on.
- The Protect setting will be stored on the internal hard disk as soon as you switch the setting on or off.

Storing a project (PROJECT STORE)

This operation stores the currently loaded project on the hard disk. To store the project, press the [ENTER] key when the following screen is displayed.



When the project has been stored, you will return to the "PROJECT STORE" screen.

HINT

The currently loaded project will be stored automatically when you load another project, when you create a new project, or when you press the [POWER] switch to turn off the power.

NOTE

If the AC adaptor is pulled out of the outlet and power to the MRS-1044 is lost, all changes that occurred since the project was last stored will be lost. This is also true of any other miscellaneous power failure. As a precaution against such occurrences, we recommend that you store the project periodically.

Reference [MIDI]

This section explains the MIDI-related settings of the MRS-1044.

About MIDI

MIDI (Musical Instrument Digital Interface) is a standard that allows messages such as performance data (collectively called "MIDI messages") to be exchanged between devices such as electronic musical instruments and computers. The MRS-1044 supports MIDI, and can transfer messages to and from another MIDI-compatible device via the [MIDI IN/OUT] connectors located on its rear panel.

What you can do using MIDI

On the MRS-1044, you can use MIDI for the following things

- **Play a drum kit / bass program from an external device**

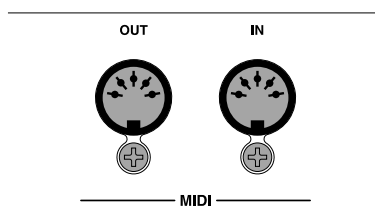
Performance data can be sent from a MIDI keyboard or computer to the MRS-1044, to play a drum kit or bass program. When creating a rhythm pattern, you can also record a performance from an external MIDI device instead of using the pads.

- **Operate the MRS-1044 and an external MIDI device in synchronization**

Synchronization messages called "(MIDI) Timing Clock" can be transmitted from the MRS-1044 to an external rhythm machine, sequencer, or similar MIDI device, so that the two devices will operate in synchronization.

About the MIDI connectors

The MRS-1044 has the following connectors in order to exchange MIDI messages with external MIDI devices.



- **[MIDI IN] connector**

This connector receives MIDI messages that are sent from an external MIDI device. This connector is used mainly to

receive Note messages from an external MIDI device in order to play a drum kit or bass program.

- **[MIDI OUT] connector**

This connector transmits MIDI messages from the MRS-1044. Note messages that represent the content played by a rhythm pattern or rhythm song are transmitted from this connector, as well as MIDI Timing Clock messages when the MRS-1044 is running.

Making MIDI-related settings

This section explains the procedure for making MIDI-related settings. The procedure is the same for most settings. The basic procedure is as follows.

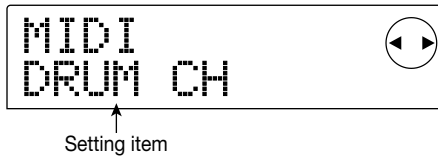
Basic procedure

1. Press the [RHYTHM] key, and then press the [PROJECT/UTILITY] key.
2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY MIDI."



3. Press the [ENTER] key.

Now you can select MIDI-related setting items.



4. Use the cursor [◀]/[▶] keys to select one of the following items that you want to set, and press the [ENTER] key.

- DRUM CH: Set the MIDI channel of the drum track.
- BASS CH: Set the MIDI channel of the bass track.
- CLOCK: Turn Timing Clock transmission on/off.
- SPP: Turn Song Position Pointer transmission on/off.
- COMMAND: Turn Start/Stop/Continue message transmission on/off.

5. Use the dial to set the item.

For details on each item, refer to the explanations that follow.

6. When you have finished creating settings, press the [EXIT] key several times.

You will return to the usual screen.

Setting the drum/bass MIDI channel (DRUM CH / BASS CH)

You can specify the MIDI channels for the drum track and bass track.

When the display shows "DRUM CH" or "BASS CH," turn the dial to select one of the following settings.

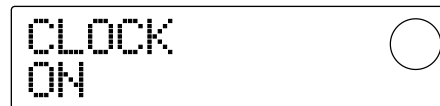


- 1 – 16CH: MIDI channels 1 – 16 (default: DRUM CH=10, BASS CH=9)
- OFF: Channel messages (Note messages) will not be transmitted or received.

If you specify a MIDI channel (1 – 16) for the drum or bass track, you can transmit Note messages from an external MIDI device on that MIDI channel to play the sounds of the MRS-1044's drum or bass track (i.e., to play the drum kit or bass program). Also, when you play back a rhythm pattern (or rhythm song) on the MRS-1044, the content of the drum and/or bass track will be transmitted as Note messages. If this setting is turned OFF, Note messages will not be transmitted or received.

Specifying transmission of Timing Clock messages (CLOCK)

This setting specifies whether the MIDI synchronization message Timing Clock will be transmitted. When the display shows "CLOCK," turn the dial to select one of the following settings.



- ON (transmission on): MIDI Timing Clock will be transmitted when the MRS-1044 is running (default setting).
- OFF (transmission off): Timing Clock will not be transmitted.

Timing clock will be output according to the tempo of the rhythm pattern (or rhythm song) that is playing. In order for the external MIDI device to play back in synchronization at an appropriate tempo, you will need to specify the tempo and time signature of the rhythm pattern

(rhythm song) even if you are not using the rhythm track.

NOTE

Timing Clock will be transmitted even if the drum and/or bass tracks are muted (DRUM/BASS status keys dark).

HINT

- When using MIDI Timing Clock messages transmitted from the MRS-1044 to synchronize the operation of an external MIDI device, you should also turn on transmission for Song Position Pointer and Start/Stop/Continue messages as well as Timing Clock.
- When transmitting Timing Clock from the MRS-1044, we recommend that you turn the drum/bass MIDI channels OFF. Synchronization may become unstable if MIDI messages other than timing clock are also being transmitted.

Specifying transmission of Song Position Pointer messages (SPP)

You can specify whether Song Position Pointer messages will be transmitted. Song Position Pointer is a MIDI message that indicates the current measure position. Normally it is used in conjunction with Timing Clock.

When the display indicates "SPP," turn the dial to select one of the following settings.



- ON (transmission on): MIDI Song Position Pointer messages will be transmitted when a Locate operation is performed on the MRS-1044 (default setting).
- OFF (transmission off): Song Position Pointer messages will not be transmitted.

Specifying transmission of Start/Stop/Continue messages (COMMAND)

You can specify whether Start/Stop/Continue messages will be transmitted. Start/Stop/Continue are MIDI messages that control the transport of a device, causing it to "run" or "stop." Normally these messages are used in conjunction with Timing Clock. When the display indicates "COMMAND," turn the dial to select one of the following settings.



- ON (transmission on): The appropriate Start/Stop/Continue message will be transmitted when the MRS-1044 stops or begins running (default setting).
- OFF (transmission off): Start/Stop/Continue messages will not be transmitted.

Reference [Other]

This section explains how to use functions such as the MRS-1044's built-in tuner, and how to change the function of the foot switch.

Changing the function of the foot switch

With the default settings of the MRS-1044, a separately sold foot switch (ZOOM FS01) connected to the [FOOT SW] jack can be used to play/stop the MRS-1044. If you want to use the foot switch to perform manual punch-in/out recording (→ p.33), use the following procedure to change the internal setting.

1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

2. Use the cursor [◀]/[▶] keys to make the display read "UTILITY SYSTEM," and press the [ENTER] key.

3. Use the cursor [◀]/[▶] keys to make the display read "UTILITY FOOT SW," and press the [ENTER] key.

The function currently assigned to the foot switch will be displayed.



- PLY_STP: The MRS-1044 will alternate between play/stop each time you press the foot switch (default setting).
- PUNCH IO: The foot switch can be used to perform manual punch-in/out.

4. Use the dial to select either "PLY_STP" or "PUNCH IO."

5. To return to the main screen, press the [EXIT] key several times.

Using the tuner

The MRS-1044 has a built-in chromatic tuner that can be used when tuning an instrument (e.g., guitar or bass) connected to the [INPUT 1/2] jacks. Here's how to use the tuner.

1. Connect the instrument that you want to tune to the [INPUT 1/2] jack, and turn on the [ON/OFF] key for the jack to which you connected it.

2. In the main screen, press the [EFFECT] key, and then press one of the lit ALGORITHM keys.

The patch currently selected for the insert effect will be displayed.

NOTE

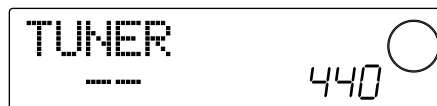
It is not possible to use the tuner from a screen that shows a send/return effect patch.

3. Press the [BYPASS/TUNER] key.

The display will alternately show "INSERT BYPASS" and "TUNER→ENTER." During this time, the insert effect will be bypassed.

4. Press the [ENTER] key.

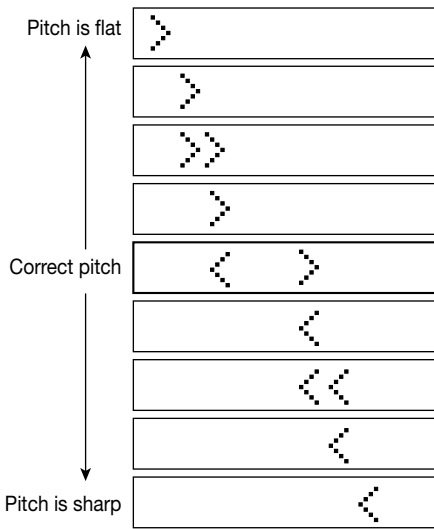
The display will indicate "TUNER," and the tuner function will be turned on. While the tuner function is on, the insert effect will remain bypassed, and the send/return effects (reverb and chorus/delay) will also be turned off.



5. Play the note that you want to tune, and tune your instrument so that the desired note name (C, C#, D, D#, E...) appears in the display.

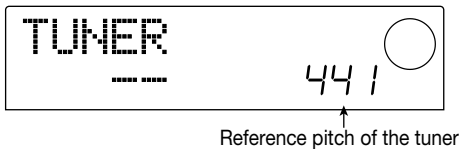


6. When the desired note name appears, watch the ">" and "<" symbols in the display, and make fine adjustments to the tuning.



7. If you want to change the reference pitch of the tuner, turn the dial.

The reference pitch of the tuner is set to middle A=440 Hz by default. The reference pitch can be adjusted in a range of 435 – 455 Hz.



HINT

If you change the reference pitch, the pitch of the bass program will also change accordingly.

8. When you have finished tuning, press the [EXIT] key.

You will return to the main screen. At the same time, the insert effect will remain bypassed, but the send/return effects will be switched back on.

9. To disable bypass for the insert effect, press the [BYPASS/TUNER] key.

Preventing digital copying of your master tape

When mixing down to a DAT recorder etc. via the [DIGITAL] jack, you can prevent digital copies from being made from your completed master tape onto another digital recorder. The procedure is as follows.

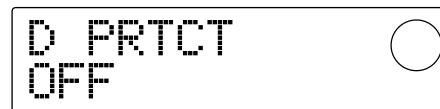
1. In the main screen, press the [PROJECT/UTILITY] key.

The display will indicate "PROJECT."

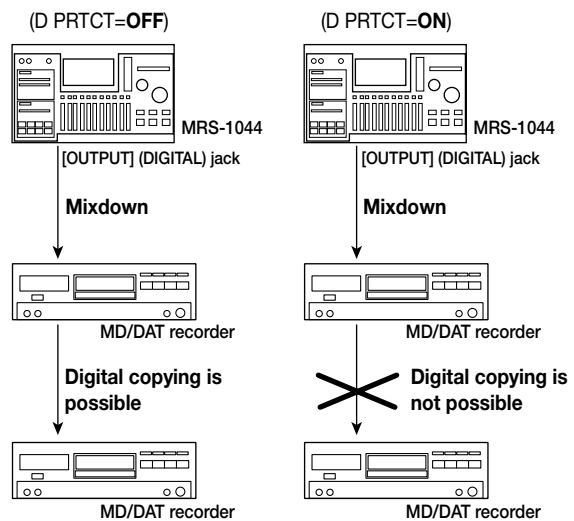
2. Use the cursor [◀]/[▶] keys to make the display show "UTILITY SYSTEM," and press the [ENTER] key.

3. Use the cursor [◀]/[▶] keys to make the display show "UTILITY D PRCTCT," and press the [ENTER] key.

The current digital copy setting will be displayed.



- OFF: Digital copying from your master tape to another digital recorder will be permitted (default setting).
- ON: SCMS (Serial Copy Management System) data will be added to the digital signal that is output from the [DIGITAL] jack. It will not be possible to make digital copies from a master tape that contains this data.



Reference [Other]

4. Turn the dial to switch the setting "ON."
5. When you have finished making settings, press the [EXIT] key several times.

You will return to the main screen.

 **HINT** 

This setting must be made before you mixdown. If you turn the setting ON after mixing down, it will have no effect.

Appendices

Specifications of the MRS-1044

• Recorder

Physical tracks	10
Virtual tracks	100 (10 virtual tracks for each track)
Drum track	1 (stereo)
Bass track	1 (mono)
Simultaneously recordable tracks	2 tracks
Recorded data format	16 bit linear (uncompressed)
Maximum recording time	More than 44 hours (calculated for mono tracks)
Markers	100 mark points per project
Location display	Hour/Min/Sec/mSec display, or Meas/Beat/Tick display
Track editing functions	Copy, Move, Paste, Erase, Exchange
Punch-in/out function	Manual, Auto
Other functions	Bounce, Scrub/Preview, A-B Repeat, Undo/Redo

• Mixer

Simultaneously playable tracks	13 (10 audio tracks + stereo drum track + mono bass track)
Faders	11 (1 – 6 mono, 7/8 – 9/10 stereo, drum, bass, stereo master)
Level meter display	Switchable post-fader/pre-fader, fader value monitor function
Track parameters	Equalizer, effect send, pan (balance for stereo-link)
Equalizer	HIGH (f: 500 Hz-18 kHz, GAIN: +/-12 dB) LOW (f: 40 Hz-1.6 kHz, GAIN: +/-12 dB)
Effect send	Chorus/delay send, reverb send
Stereo link	Selectable for tracks 1/2, 3/4, 5/6; fixed for tracks 7/8 and 9/10
Scene function	100 scenes for each project (can be registered at markers)

• Effects

Algorithms	4 types (guitar/bass, mic, line, mastering)
Modeling method	VAMS (Variable Architecture Modeling System)
Number of patches	220 (100 guitar/bass + 50 mic + 50 line + 20 mastering)
Number of effect modules	4 (compressor, pre-amp/drive, equalizer, modulation/delay)
Number of send/return patches	40 (20 chorus/delay + 20 reverb)
Tuner type	Auto chromatic tuner
Tuner calibration	435 – 445 Hz, adjustable in 1 Hz steps

• Rhythm

Number of voices	8 drum voices, 1 bass voice
Sound generator type	16 bit linear PCM
Drum kits	30 drum kits
Number of drum sounds	24 for each drum kit (8 pads x 3 banks)
Number of bass sounds	15 types (5 octaves for each sound)

Number of pads	8 pads (velocity sensitive)
Resolution	48 PPQN
Time signatures	1/4 – 8/4 time signatures
Number of factory preset patterns	More than 400 (rewritable)
Maximum number of patterns	255 patterns for each song (rewritable)
Maximum number of measures	999 measures (for each Rhythm song), 255 measures (for each Rhythm pattern)
Number of notes	Approximately 10,000 notes (for each Rhythm song)
Tempo	40.0 – 250.0 (resolution 1/10)

Hard disk	3.5 inch E-IDE type, 15 GB
Number of projects	Maximum of 1,000 projects
A/D converter	24 bit 64 times oversampling
D/A converter	24 bit 128 times oversampling
Sampling frequency	44.1 kHz
Signal processing	24 bit
Frequency response	20 Hz – 20 kHz +/-1 dB (for 10 k-ohm load)

S/N	93 dB (IHF-A)
Dynamic range	97 dB (IHF-A)
THD+N	0.02% (400 Hz, at 10 k-ohm load)
Display	60 x 42 mm original LCD (with backlight)

Guitar/bass (Hi-Z) input	1 x mono phone jack, input impedance 500 k-ohms
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Unbalanced inputs	2 x mono phone jack, input impedance greater than 50 k-ohms, unbalanced
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Balance inputs	2 x XLR-3-31 type, input impedance 1 k-ohm balanced, pin 2 hot
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Phantom power	48 V (with on/off switch)
Input level	-50 dBm < continuously variable < +4 dBm

Master out	RCA phono jacks (L/R)
Output impedance	1 k-ohm
Nominal output level	-10 dBm
Headphone out	Stereo phone jack, 50 mW (at 32 ohm load)

Digital out	S/P DIF optical (20 bit)
MIDI	IN, OUT
Control input	FP02 input jack, FS01 input jack
Optional board slot	1
Dimensions	430 (W) x 260 (D) x 77 (H)
Weight	3.4 Kg
Power supply	DC 12V, 2A (requires included AD-0009 AC adaptor)

Power consumption	20 W (12V 1A) typical
Included items	Universal AC adaptor (AD-0009), AC cable

Optional accessory	FS01 (foot switch), FP02 (expression pedal)
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Optional board	UIB-01 (USB interface board), SIB-01 (SCSI interface board)
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0 dBm = 0.775 V_{rms}

Specifications and appearance are subject to change without notice for improvement.

Troubleshooting

If the MRS-1044 does not function as you expect, check the following points first.

Problems during playback

■ No sound, or sound is very weak

- Check the connections to your audio system, and the volume of your audio system.
- Make sure that the status keys of each channel are lit green. If a key is dark, press the key to make it light green.
- Make sure that the fader of each channel and the MASTER fader are raised. If they are already raised, lower each fader and then raise it once again.
- If a scene with the volume lowered has been assigned to a mark, the volume will automatically be lowered when that mark is reached. Delete the scene that is assigned to the mark (→ p.52).
- The recorder will not operate when the [RHYTHM] key is lit. Press the [EXIT] key several times to make the [RHYTHM] key go dark.

■ Operating the fader does not affect the volume

- On channels for which stereo link is turned on, the fader of the even-numbered channel will have no effect. Either turn stereo link off (→ p.50), or operate the fader of the odd-numbered channel.

■ The display indicates "Don't Play" and playback is not possible

- The recorder will not operate in the current screen. Press the [EXIT] key several times to switch to the main screen.

Problems during recording

■ The input signal cannot be heard, or is too soft

- Make sure that the INPUT 1/2 [ON/OFF] keys are lit.
- Make sure that the [INPUT 1]/[INPUT 2] controls are raised.
- Make sure that the [REC LEVEL] control is raised. If it is already raised, lower it and then raise it again.

■ Can't record on a track

- Make sure that you have selected a recording track.
- Check whether you have run out of free space on the

hard disk (→ p.85).

- Recording is not possible if the project is write-protected. Either turn protect off (→ p.85), or use a different project.

■ The signal from the [INPUT 1/2] (BALANCE) jack(s) is not input

- If plugs are inserted in the [INPUT 1] (GUITAR/BASS, UNBALANCE) jacks or the [INPUT 2] (UNBALANCE) jack, disconnect these plugs.

■ The recorded sound is distorted

- Check whether the input sensitivity setting ([INPUT 1/2] control) and recording level setting ([REC LEVEL] control) were appropriate.
- Lower the fader so that the 0 (dB) dot of the level meter does not light.
- If the EQ gain of the track mixer is set extremely high, the sound may be audibly distorted even if the fader is lowered. Set the EQ to an appropriate value.

Problems with effects

■ Insert effect does not apply

- Make sure that the [BYPASS/TUNER] key is dark.
- Make sure that the insert effect is sent to the desired location (→p.76).
- Make sure that a MODULE key is lit. If all MODULE keys are dark, either press one or more MODULE keys to make them light, or select another patch.

■ Send/return effect does not apply

- Make sure that the [CHORUS/DELAY] or [REVERB] key is lit. If it is dark, press the key several times to make it light.
- For each channel of the mixer, make sure that the REVERB SEND or CHORUS/DELAY SEND parameter is turned on. If it is on, make sure that the send level is raised (→ p.50).

Problems with the rhythm section

■ Can't hear the rhythm pattern play back

- Make sure that the DRUM/BASS status keys are lit green.
- Make sure that the DRUM/BASS faders are raised. If the faders are already raised, lower them and then raise them once again.
- Make sure that you have not selected a blank rhythm pattern (pattern name "EMPTY").

■ Can't hear the rhythm song play back

- In the case of a new project, the rhythm song has not yet been created, so you will hear no sound. Either create the rhythm song, or load a project for which a rhythm song has been created.

■ No sound when you tap the pads

- If the pad sensitivity has been set to "SOFT," loud sounds will not be produced even when you tap strongly. Change the setting to "NORMAL," "LITE," or "LOUD" (→ p.72).

■ Can't record or edit a rhythm pattern / rhythm song

- When the [RHYTHM] key is dark or blinking, it is not possible to record or edit a rhythm pattern or rhythm song. Press the [RHYTHM] key to make the key light.
- If the display indicates "FULL," this means that you have used up the rhythm section memory. Please delete unneeded rhythm patterns.

■ Sounds recorded in the rhythm pattern do not play

- Sounds that exceed the maximum polyphony (8 notes for the drum track, and 1 note for the bass track) will not be played. Either delete some of the other notes that have already been recorded (→ p.68), or stay within the maximum polyphony when you record.

Problems with MIDI

■ The MRS-1044's drum/bass sounds cannot be played from an external MIDI device

- Make sure that a MIDI cable is correctly connected from the MIDI OUT connector of the external device to the MRS-1044's [MIDI IN] connector.
- Make sure that the MIDI channels for the drum track and bass track are set appropriately (→ p.90).
- Make sure that the MIDI transmit channel(s) of the

external device matches the MIDI channel(s) of the drum track and/or bass track.

■ Can't synchronize with an external MIDI device

- Make sure that a MIDI cable is correctly connected from the [MIDI OUT] connector of the MRS-1044 to the MIDI IN connector of the external device.
- On the MRS-1044, make sure that transmission is enabled for the Timing Clock, Song Position Pointer, and Start/Stop/Continue messages (→ p.90).
- On the external MIDI device, make sure that it is set to receive Timing Clock and synchronize to it.
- Make sure that the external MIDI device is in playback mode.

Other problems

■ Can't save the project

- The project cannot be saved if the Protect setting is on. Turn protect off (→ p.85).

■ Can't use the tuner

- The tuner cannot be used if the insert effect is inserted in a location other than the input mixer. Change the insert location to the input mixer.

■ Can't record on an external recorder connected to the [OUTPUT] (DIGITAL) jack.

- Make sure that the external recorder is set to a sampling frequency of 44.1 kHz.
- Make sure that the audio format of the external recorder supports S/P DIF.

■ Can't create a new project or copy a project

- If the display indicates "FULL," this means that 1,000 projects already exist, and no further projects can be created. Please delete unwanted projects.

■ The display indicates "STOP RECORDER," and operation is not possible

- The currently-performed operation cannot be performed while the recorder is running. Press the STOP[■] key to stop the recorder, and then perform the operation.

Effect type/parameter list

Insert effect

■ GUITAR/BASS ALGORITHM

COMPRESSOR MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3
COMP	SENS	ATTACK	LEVEL
	A compressor that makes the dynamics more consistent.		

Explanation of COMPRESSOR MODULE parameters

Parameter name	Range	Explanation of parameter
SENS	0 – 10	Set the input sensitivity of the compressor.
ATTACK	0 – 10	Adjust the speed at which compression is applied.
LEVEL	1 – 8	Adjust the output level of the module.

PRE AMP/DRIVE MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6
J-CLN	GAIN	TONE	LEVEL	--	--	--
	Clean sound that models a transistor combo amp.					
US-CLN	GAIN	TONE	LEVEL	--	--	--
	Clean sound that models a built-in type vacuum tube amp.					
US-DRV	GAIN	TONE	LEVEL	--	--	--
	Drive sound that models a built-in type vacuum tube amp.					
Tweed	GAIN	TONE	LEVEL	--	--	--
	Model of a small built-in vacuum tube combo amp, with characteristic distortion.					
Class A	GAIN	TONE	LEVEL	--	--	--
	Unique crunch sound that models a British-style combo amp.					
UK-CRU	GAIN	TONE	LEVEL	--	--	--
	Crunch sound that models a British-style vacuum tube stack amp.					
UK-DRV	GAIN	TONE	LEVEL	--	--	--
	Drive sound that models a British-style vacuum tube stack amp.					
CMB 335	GAIN	TONE	LEVEL	--	--	--
	Models a vacuum tube combo amp characterized by long sustain.					
MTL PNL	GAIN	TONE	LEVEL	--	--	--
	High-gain drive sound that models a vacuum tube stack amp.					
BLK BTM	GAIN	TONE	LEVEL	--	--	--
	Model of a vacuum tube stack amp, characterized by thick lows and delicate distortion.					
MD LEAD	GAIN	TONE	LEVEL	--	--	--
	Drive sound that models a high-gain amp suitable for lead.					
FZ-STK	GAIN	TONE	LEVEL	--	--	--
	60's sound typical of a Fuzz unit played through an amp stack.					
TE Bass	GAIN	TONE	LEVEL	--	--	--
	Model of a bass amp with a distinctively clean low-mid range.					
FD Bass	GAIN	TONE	LEVEL	--	--	--
	Model of a bass amp with vintage-style drive.					
SnsBass	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Trebly drive sound for bass.					
CR+CAB	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Combination of crunch and cabinet simulator.					
TS+CAB	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Combination of vintage overdrive and cabinet simulator.					
GV+CAB	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Combination of vintage distortion and cabinet simulator.					
MZ+CAB	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Combination of metal-style distortion and cabinet simulator.					
9002+CB	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Combination of the Zoom 9002 distortion and cabinet simulator.					
Aco.Sim	TOP	BODY	LEVEL	CABINET	SPEAKER	DEPTH
	Transforms the sound of an electric guitar into an acoustic-guitar-like tone.					
E-AcPRE	COLOR	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Pre-amp for electric-acoustic.					
BassSim	TONE	LEVEL	--	--	--	--
	Transforms the sound of an electric guitar into a bass-guitar-like tone.					
CABINET	CABINET	SPEAKER	DEPTH	--	--	--
	Simulation of the cabinet of a guitar/bass amp.					

Explanation of PRE AMP/DRIVE MODULE parameters

Parameter name	Range	Explanation of parameter
GAIN	1 – 30	Adjusts the amount of gain.
TOPE	0 – 10	Adjusts the tone.
LEVEL	1 – 8	Adjusts the output level of the module.
TOP	1 – 30	Adjusts the resonance of the strings.
BODY	0 – 10	Adjusts the resonance of the body.
CABINET	CM	Combo: Simulation of a combo-type cabinet.
	br	Bright Combo: Produces a brighter tone than Combo.
	Ft	Flat: A cabinet with a flat response.
	St	Stack: Produces the character of a stack-type cabinet.
	bC	BassCombo: The sound of a combo-type cabinet for bass.
	bS	BassStack: The sound of a stack-type cabinet for bass.
SPEAKER	C1	Combo 1: The sound of a combo-type guitar amp with one 12 inch speaker.
	C2	Combo 2: The sound of a combo-type guitar amp with two 12 inch speakers.
	C3	Combo 3: The sound of a combo-type guitar amp with one 10 inch speaker.
	GS	Gt Stack: The sound of a stack-type guitar amp with four 10 inch speakers.
	GW	Gt Wall: The sound of multiple stack-type amps placed together.
	bC	Bs Combo: The sound of a combo-type bass amp with one 15 inch speaker.
	bS	Bs Combo: The sound of a stack-type bass amp with four 6.5 inch speakers.
		Adjusts the cabinet resonance of the speaker.
DEPTH	0 – 10	Adjusts the cabinet resonance of the speaker.
COLOR	1 – 4	Adjusts the character of the electric-acoustic pre-amp.

EQ MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4
3BandEQ	HIGH	MID	LOW	LEVEL
	Three-band equalizer.			

Explanation of EQ MODULE parameters

Parameter name	Range	Explanation of parameter
HIGH	-12 – 12	Boosts/cuts the high-frequency range.
MID	-12 – 12	Boosts/cuts the mid-frequency range.
LOW	-12 – 12	Boosts/cuts the low-frequency range.
LEVEL	1 – 8	Sets the output level of the module.

ZNR MODULE

TYPE	PARAMETER 1
ZNR	THRSHOLD
	Zoom's proprietary noise reduction that minimizes noise when you are not playing.

Explanation of ZNR MODULE parameters

Parameter name	Range	Explanation of parameter
THRSHOLD	OFF, 1 – 30	Adjusts the sensitivity of ZNR. For best results, set this as high as possible without allowing the attacks or decays to sound unnatural.

VOL PDL MODULE

TYPE	PARAMETER 1
VOL PDL	MIN VOL
	You can use an expression pedal to control the volume.

Explanation of VOL PDL MODULE parameters

Parameter name	Range	Explanation of parameter
MIN VOL	0 – 10	When using an expression pedal as a volume pedal, this specifies the minimum volume.

MODULATION/DELAY MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4
CHORUS	DEPTH	RATE	MIX	--
	Stereo chorus with clear sound and great spaciousness.			
FLANGER	DEPTH	RATE	FB	--
	An effect that adds a pronounced character and modulation to the sound.			
PHASER	POSITION	RATE	COLOR	--
	An effect that adds a swooshing modulation to the sound.			
TREMOLO	DEPTH	RATE	CLIP	--
	An effect that cyclically varies the volume.			
PDL-WAH	POSITION	FREQ	LEVEL	RTM
	An effect that lets you use an expression pedal to control wah manually.			
AutoWah	FLT TYPE	POSITION	RESO	SENS
	An effect in which wah is applied according to your playing dynamics.			
PITCH	SHIFT	TONE	BALANCE	--
	An effect that modifies the pitch of the original sound.			
RingMod	POSITION	RATE	BALANCE	--
	An effect that produces a metallic resonance.			
EXCITER	FREQ	DEPTH	LowBoost	--
	An effect that gives the sound more focus and spatial definition.			
AIR	SIZE	TONE	MIX	--
	Simulates the effect of air on the room resonance, giving the sound spatial depth.			
WIDE	TIME	WET LVL	DRY LVL	--
	An effect that produces the sound of a stereo recording made with two mics.			
DELAY	TIME	FB	MIX	--
	A delay effect with a maximum of 500 mSec.			

Explanation of MODULATION/DELAY MODULE parameters

Parameter name	Range	Explanation of parameter
DEPTH	0 – 10	Adjusts the depth of the effect.
RATE	1 – 30	Adjusts the speed of the effect.
MIX	0 – 30	Adjusts the mix amount of the effect.
FB	TYPE = FLANGER : -10 – 10 TYPE = DELAY : 0 – 10	Adjusts the amount of feedback.
POSITION	AF / bF	Exchanges the effect locations of the DRIVE module and MOD module.
COLOR	1 – 4	Changes the type of the phase tone.
CLIP	0 – 10	Emphasizes the effect.
FREQ	TYPE = PDL-WAH : 1 – 50 TYPE = EXCITER : 1 – 5	Specifies the center frequency of the wah. Specifies the frequency.
LEVEL	1 – 8	Sets the output level of the module.
RTM	OFF / On	Specifies whether the expression pedal will be used as a wah pedal.
FLT TYPE	bPF / LPF	Specifies the type of filter.
RESO	1 – 10	Adds character to the sound.
SENS	-10 – 10	Adjusts the sensitivity with which the effect is applied.
SHIFT	-12.0 – 24.0	Sets the amount of shift produced by the pitch shifter.
tone	0 – 10	Adjust the tone.
BALANCE	0 – 30	Adjusts the balance between the direct sound and effect sound.
LowBoost	0 – 10	Emphasizes the low-frequency range.
SIZE	1 – 10	Specifies the spatial width.
TIME	TYPE = WIDE : 1 – 64 TYPE = DELAY : 1 – 50	Sets the delay time.
WET LVL	0 – 30	Adjusts the mix amount of the effect sound.
DRY LVL	0 – 30	Adjusts the mix amount of the direct sound.

■ MIC ALGORITHM

COMP/LIM MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6
SINGLE COMP x1	SENS	ATTACK	LEVEL	--	--	--
A mono input/output compressor.						
SINGLE LIMITx1	THRSHLD	RELEASE	LEVEL	--	--	--
A mono input/output limiter.						
DUAL COMP x2	SENS_1	ATTACK_1	LEVEL_1	SENS_2	ATTACK_2	LEVEL_2
A two-channel input/output compressor. Parameters for left and right can be set independently.						
DUAL LIMITx2	THRSH_1	RELEASE1	LEVEL_1	THRES_2	RELEASE2	LEVEL_2
A two-channel input/output limiter. Parameters for left and right can be set independently.						

Explanation of COMP/LIM MODULE parameters

Parameter name	Range	Explanation of parameter
SENS	0 – 15	Adjusts the input sensitivity of compression.
SENS 1		
SENS 2		
ATTACK	0 – 15	Adjusts the speed at which compression is applied.
ATTACK_1		
ATTACK_2		
THRSHLD	0 – 15	Adjusts the sensitivity at which the limiter begins to apply.
THRSH_1		
THRES_2		
RELEASE	0 – 15	Specifies the length from when the input signal level falls below the threshold until compression ends.
RELEASE1		
RELEASE2		
LEVEL	1 – 8	Specifies the output level of the module.
LEVEL_1		
LEVEL_2		

MIC PRE MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6
MIC PRE (*1)	COLOR	tone	LEVEL	DE-ESSER	--	--
A pre-amp for use with an external mic.						
MIC PRE (*2)	COLOR 1	tone 1	LEVEL 1	COLOR 2	tone 2	LEVEL 2
A pre-amp for use with an external mic.						

*1: When a SINGLE type effect is selected for the COMP/LIM module

*2: When a DUAL type effect is selected for the COMP/LIM module

Explanation of MIC PRE MODULE parameters

Parameter name		Range	Explanation of parameter
COLOR	SINGLE	1 – 6	Specifies the response of the mic pre-amp. 1. Flat response 2. Low-cut response curve. 3. Response curve for acoustic guitar. 4. Low-cut response curve for acoustic guitar. 5. Response curve for vocal. 6. Low-cut response curve for vocal.
COLOR 1	DUAL (Lch)		
COLOR 2	DUAL (Rch)		
TONE	SINGLE	0 – 10	Adjusts the tone.
TONE 1	DUAL (Lch)		
TONE 2	DUAL (Rch)		
LEVEL	SINGLE	1 – 8	Sets the output level of the module.
LEVEL 1	DUAL (Lch)		
LEVEL 2	DUAL (Rch)		
DE-ESSER	SINGLE	0 – 10	Specifies the amount by which vocal sibilants will be cut.

EQ MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6	PARAMETER 7	PARAMETER 8
3BandEQ (*1)	HIGH	MID	LOW	LEVEL	--	--	--	--
	Three-band equalizer.							
3BandEQ (*2)	HIGH 1	MID 1	LOW 1	LEVEL 1	HIGH 2	MID 2	LOW 2	LEVEL 2
	Three-band equalizer.							

*1: When a SINGLE type effect is selected for the COMP/LIM module

*2: When a DUAL type effect is selected for the COMP/LIM module

Explanation of EQ MODULE parameters

Parameter name		Range	Explanation of parameter
HIGH	SINGLE	-12 – 12	Boosts/cuts the high-frequency range.
HIGH 1	DUAL (Lch)		
HIGH 2	DUAL (Rch)		
MID	SINGLE	-12 – 12	Boosts/cuts the mid-frequency range.
MID 1	DUAL (Lch)		
MID 2	DUAL (Rch)		
LOW	SINGLE	-12 – 12	Boosts/cuts the low-frequency range.
LOW 1	DUAL (Lch)		
LOW 2	DUAL (Rch)		
LEVEL	SINGLE	1 – 8	Sets the output level of the module.
LEVEL 1	DUAL (Lch)		
LEVEL 2	DUAL (Rch)		

ZNR MODULE

TYPE	PARAMETER 1	PARAMETER 2
ZNR (*1)	THRSHOLD	--
	Zoom's proprietary noise reduction that minimizes noise when you are not playing.	
ZNR (*2)	THRSH 1	THRSH 2
	Zoom's proprietary noise reduction that minimizes noise when you are not playing.	

*1: When a SINGLE type effect is selected for the COMP/LIM module

*2: When a DUAL type effect is selected for the COMP/LIM module

Explanation of ZNR MODULE parameters

Parameter name		Range	Explanation of parameter
THRSHOLD	SINGLE	OFF, 1 – 30	Adjusts the sensitivity of ZNR. For best results, set this as high as possible without allowing the attacks or decays to sound unnatural.
THRSH 1	DUAL (Lch)		
THRSH 2	DUAL (Rch)		

VOL PDL MODULE

TYPE	PARAMETER 1
VOL PDL	MIN VOL
You can use an expression pedal to control the volume.	

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

MODULATION/DELAY MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6
CHORUS	DEPTH	RATE	MIX	--	--	--
	Stereo chorus with clear sound and great spaciousness.					
FLANGER	DEPTH	RATE	FB	--	--	--
	An effect that adds a pronounced character and modulation to the sound.					
PHASER	RATE	COLOR	--	--	--	--
	An effect that adds a swooshing modulation to the sound.					
TREMOLO	DEPTH	RATE	CLIP	--	--	--
	An effect that cyclically varies the volume.					
PITCH	SHIFT	TONE	BALANCE	--	--	--
	An effect that modifies the pitch of the original sound.					
RingMod	RATE	BALANCE	--	--	--	--
	An effect that produces a metallic resonance.					
EXCITER	FREQ	DEPTH	LowBoost	--	--	--
	An effect that gives the sound more focus and spatial definition.					
AIR	SIZE	TONE	MIX	--	--	--
	Simulates the effect of air on the room resonance, giving the sound spatial depth.					
DELAY	TIME	FB	MIX	--	--	--
	A delay effect with a maximum of 500 mSec.					
DOUBLE (*1)	TIME	TONE	MIX	--	--	--
	A doubling effect that allows the delay time to be set in 1 mSec steps up to 100 mSec.					
DOUBLE (*2)	TIME 1	TONE 1	MIX 1	TIME 2	TONE 2	MIX 2
	A doubling effect that allows the delay time to be set in 1 mSec steps up to 100 mSec.					

*1: When a SINGLE type effect is selected for the COMP/LIM module

*2: When a DUAL type effect is selected for the COMP/LIM module (usable only with DOUBLE)

Explanation of MODULATION/DELAY MODULE parameters

Parameter name	Range	Explanation of parameter
DEPTH	SINGLE 0 - 10	Specifies the depth of the effect.
RATE	SINGLE 1 - 30	Specifies the speed of the effect.
COLOR	SINGLE 1 - 4	Modifies the type of phase tone.
CLIP	SINGLE 0 - 10	Emphasizes the effect.
SHIFT	SINGLE -12.0 - 24.0	Specifies the amount of pitch shift produced by the pitch shifter.
BALANCE	SINGLE 0 - 30	Adjusts the balance between the direct sound and effect sound.
FREQ	SINGLE 1 - 5	Specifies the frequency.
LowBoost	SINGLE 0 - 10	Emphasizes the low range.
SIZE	SINGLE 1 - 10	Specifies the spatial width.
FB	SINGLE TYPE = FLANGER : -10 - 10 TYPE = DELAY : 0 - 10	Adjusts the amount of feedback.
TIME	SINGLE TYPE = DELAY : 1 - 50 TYPE = DOUBLE : 1 - 100	Sets the delay time. (x 10 mSec) Sets the delay time. (x 1 mSec) Sets the delay time. (x 1 mSec)
TIME 1	DUAL (Lch)	Adjusts the tone.
TIME 2	DUAL (Rch)	
TONE	SINGLE	Adjusts the tone.
TONE 1	DUAL (Lch)	
TONE 2	DUAL (Rch)	Adjusts the mix amount of the effect.
MIX	SINGLE	
MIX 1	DUAL (Lch)	Adjusts the mix amount of the effect.
MIX 2	DUAL (Rch)	

LINE ALGORITHM

COMP/LIM MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3
COMP	SENS	ATTACK	LEVEL
	A stereo input/output compressor.		
LIMITER	THRSHOLD	RELEASE	LEVEL
	A stereo input/output limiter.		

Explanation of COMP/LIM MODULE parameters

Parameter name	Range	Explanation of parameter
SENS	0 - 15	Specifies the input sensitivity of compression.
ATTACK	0 - 15	Adjusts the speed at which compression is applied.
LEVEL	1 - 8	Specifies the output level of the module.
THRSHOLD	0 - 15	Specifies the sensitivity at which the limiter will begin to apply.
RELEASE	0 - 15	Specifies the time from when the input signal falls below the threshold until compression ends.

ISOLATOR MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5
ISOLATOR	XOVER_Lo	XOVER_Hi	MIX_HIGH	MIX_MID	MIX_LOW
	An effect that divides the signal into three frequency bands, and lets you specify the mix amount.				

Explanation of ISOLATOR MODULE parameters

Parameter name	Range	Explanation of parameter
XOVER_Lo	50 - 16000	Specifies the frequency at which the Lo/Mid bands will be divided.
XOVER_Hi	50 - 16000	Specifies the frequency at which the Mid/Hi bands will be divided.
MIX_HIGH	OFF, -24 - 6	Specifies the mix amount of the high range.
MIX_MID	OFF, -24 - 6	Specifies the mix amount of the mid range.
MIX_LOW	OFF, -24 - 6	Specifies the mix amount of the low range.

EQ MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4
3BandEQ	HIGH	MID	LOW	LEVEL
	Three-band equalizer.			

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

ZNR MODULE

TYPE	PARAMETER 1
ZNR	THRSHOLD
	Zoom's proprietary noise reduction that minimizes noise when you are not playing.

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

VOL PDL MODULE

TYPE	PARAMETER 1
VOL PDL	MIN VOL
	You can use an expression pedal to control the volume.

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

MODULATION/DELAY MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3
CHORUS	DEPTH	RATE	MIX
	Stereo chorus with clear sound and great spaciousness.		
FLANGER	DEPTH	RATE	FB
	An effect that adds a pronounced character and modulation to the sound.		
PHASER	RATE	COLOR	--
	An effect that adds a swooshing modulation to the sound.		
TREMOLO	DEPTH	RATE	CLIP
	An effect that cyclically varies the volume.		
PITCH	SHIFT	STONE	BALANCE
	An effect that modifies the pitch of the original sound.		
RingMod	RATE	BALANCE	--
	An effect that produces a metallic resonance.		
DOUBLE	TIME	STONE	MIX
	A doubling effect that allows the delay time to be set in 1 mSec steps up to 100 mSec.		

Explanation of MODULATION/DELAY MODULE parameters

Parameter name	Range	Explanation of parameter
DEPTH	0 – 10	Specifies the depth of the effect.
RATE	1 – 30	Specifies the speed of the effect.
MIX	0 – 30	Adjusts the mix amount of the effect.
FB	TYPE = FLANGER : -10 – 10	Adjusts the amount of feedback.
COLOR	1 – 4	Modifies the type of phase tone.
CLIP	0 – 10	Emphasizes the effect.
SHIFT	-12.0 – 24.0	Sets the amount of change produced by the pitch shifter.
STONE	0 – 10	Adjusts the tone.
BALANCE	0 – 30	Adjusts the volume balance between the direct sound and effect sound.
TIME	1 – 100	Specifies the delay time.

■ MASTERING ALGORITHM**3BAND COMP/Lo-Fi MODULE**

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6	PARAMETER 7	PARAMETER 8
MLT CMP	XOVER_Lo	XOVER_Hi	SNS_HIGH	SENS_MID	SENS_LOW	MIX_HIGH	MIX_MID	MIX_LOW
	An effect that divides the input signal into three frequency bands, and lets you specify a compressor and mix amount for each band.							
Lo-Fi	CHARA	COLOR	DIST	STONE	EFX_LVL	DRY_LVL	--	--
	An effect that intentionally degrades the audio quality of the sound.							

Explanation of 3BAND COMP/Lo-Fi MODULE parameters

Parameter name	Range	Explanation of parameter
XOVER_Lo	50 – 16000	Specifies the frequency at which the Lo/Mid bands will be divided.
XOVER_Hi	50 – 16000	Specifies the frequency at which the Mid/Hi bands will be divided.
SNS_HIGH	0 – 15	Specifies the sensitivity of the compressor applied to the high range.
SENS_MID	0 – 15	Specifies the sensitivity of the compressor applied to the mid range.
SENS_LOW	0 – 15	Specifies the sensitivity of the compressor applied to the low range.
MIX_HIGH	OFF, -24 – 6	Specifies the mix amount of the high range.
MIX_MID	OFF, -24 – 6	Specifies the mix amount of the mid range.
MIX_LOW	OFF, -24 – 6	Specifies the mix amount of the low range.
CHARA	0 – 10	Specifies the character of the filter.
COLOR	1 – 10	Specifies the color.
DIST	0 – 10	Specifies the degree of distortion.
STONE	0 – 10	Adjusts the tone.
EFX_LVL	0 – 30	Adjusts the mix amount of the effect sound.
DRY_LVL	0 – 30	Adjusts the mix amount of the direct sound.

NORMALIZE MODULE

TYPE	PARAMETER 1
NORMLZR	GAIN
	A module that lets you set the input level of the comp module

Explanation of NORMALIZE MODULE parameters

Parameter name	Range	Explanation of parameter
GAIN	-12 – 12	Specifies the gain.

EQ MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4
3BandEQ	HIGH	MID	LOW	LEVEL
	Three-band equalizer.			

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

ZNR MODULE

TYPE	PARAMETER 1
ZNR	THRSHOLD
	Zoom's proprietary noise reduction that minimizes noise when you are not playing.

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

VOL PDL MODULE

TYPE	PARAMETER 1
VOL PDL	MIN VOL
	You can use an expression pedal to control the volume.

*For an explanation of the parameters, refer to the GUITAR/BASS algorithm.

DIMENSION/RESONANCE MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6	PARAMETER 7
DIMENSN	RISE_1	RISE_2	--	--	--	--	--
	DIMENSN An effect that produces spatial width.						
RESONNC	DEPTH	FreqOFST	RATE	TYPE	RESO	EFX LVL	DRY LVL
	RESONNC A resonance filter with LFO.						

Explanation of DIMENSION/RESONANCE MODULE parameters

Parameter name	Range	Explanation of parameter
RISE_1	0 – 30	Specifies the degree to which the stereo component is emphasized.
RISE_2	0 – 30	Specifies the spaciousness that includes the mono component.
DEPTH	0 – 10	Specifies the depth of the effect.
FreqOFST	1 – 30	Specifies the LFO offset.
RATE	1 – 30	Specifies the speed of the effect.
TYPE	HPF /LPF /bPF	Specifies the type of filter.
RESO	1 – 30	Adds character to the effect.
EFX LVL	0 – 30	Adjusts the mix amount of the effect sound.
DRY LVL	0 – 30	Adjusts the mix amount of the direct sound.

Send Return effect

CHORUS/DELAY MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5
CHORUS	LFO TYPE	DEPTH	RATE	PRE DLY	EFX LVL
	A stereo chorus that produces clear sound and a wonderfully spacious feeling.				
DELAY	TIME	FB	DAMP	EFX LVL	REV_SEND
	A delay effect of up to 1000 mSec.				
DOUBLE	TIME	TONE	EFX LVL	--	--
	A doubling effect of up to 100 mSec.				

Explanation of CHORUS/DELAY MODULE parameters

Parameter name	Range	Explanation of parameter
LFO TYPE	Mn /St	Selects the LFO phrase; Mn (mono) or St (stereo).
DEPTH	0 – 10	Sets the depth of the effect.
RATE	1 – 30	Sets the speed of the effect.
PRE DLY	1 – 30	Sets the pre-delay time.
EFX LVL	0 – 30	Adjusts the mix amount of the effect sound.
TIME	TYPE=DELAY:1 – 1000 TYPE=DOUBLE:1 – 100	Sets the delay time. (TIME= setting value x 1mSec)
FB	0 – 10	Adjusts the amount of feedback.
DAMP	0 – 10	Sets the amount of high-frequency decay for the delay sound.
REV_SEND	0 – 30	Sets the amount of delay sound that is sent to reverb.
TONE	0 – 10	Adjusts the tone.

REVERB MODULE

TYPE	PARAMETER 1	PARAMETER 2	PARAMETER 3	PARAMETER 4	PARAMETER 5	PARAMETER 6
HALL	PRE DLY	REV TIME	EQ_HIGH	EQ_LOW	E/R MIX	EFX LVL
	A reverb effect that produces the reverberation characteristic of a concert hall.					
ROOM	PRE DLY	REV TIME	EQ_HIGH	EQ_LOW	E/R MIX	EFX LVL
	A reverb effect that simulates the reverberation of a room.					

Explanation of REVERB MODULE parameters

Parameter name	Range	Explanation of parameter
PRE DLY	1 – 100	Specifies the pre-delay time.
REV TIME	1 – 30	Specifies the reverb time.
EQ_HIGH	-12 – 6	Specifies the high-frequency volume of the reverb sound.
EQ_LOW	-12 – 6	Specifies the low-frequency volume of the reverb sound.
E/R MIX	0 – 30	Specifies the volume of early reflections.
EFX LVL	0 – 30	Adjusts the mix amount of the effect sound.

Effect patch list

■ GUITAR/BASS ALGORITHM

No.	PATCH NAME	Comment	Application
00	Standard	Clean sound touched up for recording	Guitar
01	MRS-Drv	Full distortion + rich sound	
02	RCT-BG	The high-gain amp sound of the American-made "Rectifier" series	
03	CrnchCmp	Crunch sound subtly tuned with a touch of compression	
04	9002Lead	The original 9002 sound	
05	F-Tweed	The sound of a small, American-made vintage tube amp	
06	J-Chorus	JC clean sound	
07	Phaser	Clean sound that simulates a vintage phase effect	
08	BlackPnl	The heavy metal sound of the "5100 series" of American-made stack amp	
09	MatchCru	Crunch sound of a modern class-A amp	
10	Arpeggio	Clean sound suitable for arpeggios	
11	JetSound	Versatile jet sound	
12	Combo-BG	Sound characterized by detailed overdrive and long sustain	
13	FDR-Twin	Drive channel sound of an American-made vintage tube amp	
14	Beatle	Class-A type Mersey Beat sound	
15	CleanCH	Clean channel sound of an American-made vintage tube amp	
16	WildFuzz	Vintage fuzzbox sound	
17	JB.Style	Octaver simulation. An indispensable effect for Gt&Bs unison riffs	
18	Pitch-5	Even single notes sound like power chords. Also great as a variation for solo sounds.	
19	BRT-Drv	The great sound of the British "900 series" of stack amps	
20	Soldan	High-gain amp sound ideal for single coil half-tone settings	
21	MatchDrv	Drive sound of a modern class-A amp	
22	Snake	Heavy metal sound with a solid bottom	
23	Crunch	"800 series" crunch sound ensemble	
24	Ballad	Warm lead sound	
25	Metal-X	Good metal sound with subtle overtones produced by effect	
26	DP-Drv	70's hard rock sound	
27	WetDrive	Simple overdrive sound with a wet feel	
28	Mellow	Lead sound with a sweet tone	
29	MultiDst	Strong all-around sound for backing or melody	
30	Bright	Crisp sound for a wide range of uses	
31	Melody	Tastefully seasoned sound, ideal for melodies	
32	V-Blues	Vintage blues sound	
33	BlueFngr	Bluesy sound suitable for finger picking	
34	StrmBeat	Basic sound suitable for strummed backing	
35	CompCln	Natural comp sound	
36	JazzTone	Clean sound suitable for jazz	
37	Funky	Funky cutting sound	
38	FDR-Cln	Clean sound of American-made vintage tube amp	
39	Rockbily	Rockabilly sound with short delay	
40	NYFusion	Clean sound suitable for direct-line recording	
41	Wet-Rhy	Cutting sound suitable for ballades	
42	LA-Std	LA studio-style big chorus sound	
43	50sRNB	Tremolo sound suitable for rhythm & blues	
44	DeepFLG	Clean flanged sound	
45	HDR-Drv	Wet new hard rock sound	
46	12-Clean	Clean sound suitable for arpeggios, with octave pitch	
47	Cry-Lead	"Cry effect" -style sound	
48	ZakWah	Lead sound with auto-wah	
49	TheRing	Ring modulator also usable as a sound effect for recording	

No.	PATCH NAME	Comment	Application
50	BS-Pick	Tight sound for playing with a pick	Bass
51	BS-Od	Rock sound with retro-feeling distortion	
52	BS-Drv	Bass sound with hard distortion	
53	BS-Fingr	All-around sound for finger picking	
54	BS-Slap	Crisp slap sound	
55	BS-Comp	Nice-feeling sound with attack controlled by picking dynamics	
56	BS-Edge	Tight sound with an edge	
57	BS-Solo	Sound suitable for melody, with chorus	
58	BS-Octve	Sound with an upper octave mixed in, useful in an ensemble	
59	BS-Wah	Funky bass with auto-wah	
60	AG-Fingr	Sound suitable for finger-style playing	Electro-acoustic
61	AG-Cho	Chorus sound for electro-acoustic. Use with strumming, arpeggios, or solos.	
62	AG-12	Simulation of 12 string sound	
63	AG-Flang	Flanging sound tuned for acoustic guitar	Acoustic guitar simulations
64	AcoSIM 1	Simulation of unadorned acoustic guitar sound	
65	AcoSIM 2	Acoustic simulation with beautiful chorus effect	
66	AcoSIM 3	Shimmering detuned sound with no modulation	Bass simulations
67	BsSIM1	Simulates a tight picked bass Bass simulations	
68	BsSIM2	Chorus bass simulation, effective with melody lines	
69	BsSIM3	Simulation of an auto-wah bass	
70 } 99	EMPTY		

■ MIC ALGORITHM

No.	PATCH NAME	Comment	Application
00	Vo-Stnd	Standard vocal effect	Vocal (single)
01	Vo-Rock	Rock vocal effect	
02	Vo-Balld	Ballade vocal effect with depth created by detuned chorus	
03	Vo-Echo	Vocal echo effect	
04	Vo-PreC1	For condenser mics: smooth, listenable sound recommended during recording	
05	Vo-PreC2	For condenser mics: doubling sound that adds depth to a voice, recommended during recording	
06	Vo-PreD1	For dynamic mics: an effect that improves the definition of the sound, recommended during recording	
07	Vo-PreD2	For dynamic mics: makes the sound fatter and wetter, recommended during recording	
08	Vo-Robot	Robot voice as in SF movies	Acoustic guitar
09	AG-Live	Sound for mic recording, with a live feel. Broadly usable, not only for guitar.	
10	AG-Brght	Sound for mic recording; bright and crisp	
11	AG-Solo	Gorgeous solo sound	
12	AG-Edge	Patch for acoustic guitar, useable during recording (enhances the edge)	Wind instruments Brass instruments Piano
13	AG-Strum	Patch for acoustic guitar, usable during recording (suitable for strumming)	
14	ForWind	Sound with good presence and distinctive mid-range	Vocal (dual)
15	ForBrass	Overall crisp-sounding short delay	
16	ForPiano	Sound with enhanced depth and definition Piano	
17	Vo/Vo 1	Patch suitable for duets	Sing-along
18	Vo/Vo 2	Patch for chorus opposed to a main vocal	
19	Vo/Vo 3	Patch suitable for harmony	
20	AG/Vo 1	Patch that creates a street-like character	Acoustic guitar
21	AG/Vo 2	Patch with differing vocal character than Street	
22	AG/Vo 3	Patch that applies effects to aggressively modify the vocal character	
23	AG-Mix 1	Enhanced sound effective for mixdown (strumming)	Acoustic guitar
24	AG-Mix 2	Enhanced sound effective for mixdown (arpeggios)	
25 } 49	EMPTY		

■ LINE ALGORITHM

No.	PATCH NAME	Comment	Application
00	Syn-Lead	Effect for single-note synth leads	Keyboard
01	OrganPha	Phaser effect for synth/organ	
02	OrgaRock	Sound for rock organ	
03	EP-Chor	Beautiful resonance and chorus, effective for electric piano	
04	ClavFlg	Sound for clavinet	
05	Concert	Concert hall effect for piano	Piano
06	Honkey	Honky-tonk piano simulation	
07	PowerBD	An effect that gives a bass drum more power	Rhythm
08	DrumFing	Conventional flanger for drums	
09	LiveDrum	Simulation of outdoor live doubling	
10	JetDrum	Phaser sound effective on 16-beat hi-hat	
11	AsianKit	Transforms a standard kit into an Asian kit	
12	BassBost	Boost patch that emphasizes the low range	Audio
13	Mono->St	An effect that gives spaciousness to a mono source	
14	AM Radio	Simulation of an AM radio	
15 49	EMPTY		

■ MASTERING ALGORITHM

No.	PATCH NAME	Comment	Application
00	PlusAlfa	Mastering that enhances the overall power	Mastering
01	All-Pops	Conventional mastering	
02	StWide	Wide-range mastering	
03	DiscoMst	Mastering for club sound	
04	Boost	Mixdown effect for a hi-fi finish	
05	Power	For mixes with a big and powerful low range	
06	Live	Add a live feel to the overall mix	
07	WarmMst	Mastering that adds an overall warm feeling	
08	TightUp	Mastering with an overall hard feel	
09	1930Mst	Mastering to a 1930's sound	
10	LoFi Mst	For lo-fi mastering	
11	BGM	Mastering for background music	
12 19	EMPTY		

■ CHORUS /DELAY

No.	PATCH NAME	Comment
00	Vocal	Chorus effective for adding color to a vocal
01	GtChorus	Chorus effect useful for lackluster guitar sound
02	Doubling	Versatile doubling effect
03	Echo	Flamboyant analog-style delay for guitar or vocal
04	Delay375	Delay that matches the commonly-used tempo of 120
05	LongDLY	Long delay ideal for ballades, etc.
06	FastCho	Fast chorus (effective for adding depth to the sound)
07	DeepCho	Versatile deep chorus effect
08	ShortDLY	Versatile short delay
09	DeepDBL	Deep doubling effect
10 19	EMPTY	

■ REVERB

No.	PATCH NAME	Comment
00	TightHal	Hall reverb with a hard tonal quality
01	BrgtRoom	Room reverb with a hard tonal quality
02	SoftHall	Hall reverb with a mild tonal quality
03	LargeHal	Simulates the reverberation of a large hall
04	SmallHal	Simulates the reverberation of a small hall
05	LiveHous	Simulates the reverb of a live house
06	TrStudio	Simulates the reverberation of a rehearsal studio (garage)
07	DarkRoom	Room reverb with a mild tonal quality
08	VcxRev	Reverb tuned to enhance the vocal
09	Tunnel	Simulates the reverberation of a tunnel
10 19	EMPTY	

Pattern list

Basic set

Pattern number	Pattern name	Chord
000	08Beat01	Em
001	08Beat02	Em
002	08Beat03	Em
003	08Beat04	Em
004	08Beat05	Em
005	08Beat06	Em
006	08Beat07	Em
007	08Beat08	Em
008	08Beat09	Em
009	08Beat10	Em
010	08Beat11	Em
011	08Beat12	Em
012	16Beat01	Em
013	16Beat02	Em
014	16Beat03	Em
015	16Beat04	EM
016	16Beat05	Em
017	16Beat06	Em
018	16Beat07	Em
019	16Beat08	Em
020	16FUS 01	Em
021	16FUS 02	Em
022	04JAZZ01	EM
023	04JAZZ02	EM
024	04JAZZ03	EM
025	04JAZZ04	Em
026	BOSSA	Em
027	CNTRY	Em
028	68BLUS	Em
029	DANCE	Em
030	ROCK01	Em
031	ROCK02	Em
032	ROCK03	Em
033	ROCK04	Em
034	ROCK05	Em
035	ROCK06	Em
036	ROCK07	Em
037	ROCK08	Em
038	ROCK09	Em
039	ROCK10	Em
040	ROCK11	Em
041	ROCK13	Em
042	ROCK15	Em
043	ROCK17	Em
044	ROCK19	Em
045	ROCK21	Em
046	ROCK23	Em
047	ROCK25	Em
048	ROCK27	Em
049	ROCK28T	Em
050	HRK 01	Em
051	HRK 02	Em

Pattern number	Pattern name	Chord
052	HRK 03	Em
053	HRK 04	Em
054	HRK 05	Em
055	HRK 06	Em
056	HRK 07	Em
057	MTL 01	Em
058	MTL 02	Em
059	MTL 03	Em
060	MTL 04	Em
061	THRS01	Em
062	THRS02	Em
063	PUNK01	Em
064	PUNK02	Em
065	FUS 01	Em
066	FUS 02	Em
067	FUS 05	Em
068	FUS 06	Em
069	POP 01	Em
070	POP 03	Em
071	POP 05	EM
072	POP 07	Em
073	POP 09	EM
074	POP 11	Em
075	RnB 01	Em
076	RnB 03	Em
077	RnB 05	Em
078	RnB 07	EM
079	RnB 09	EM
080	FUNK01	Em
081	FUNK03	Em
082	FUNK05	Em
083	FUNK07	Em
084	FUNK09	Em
085	FUNK11	Em
086	HIP 01	Em
087	HIP 03	Em
088	HIP 05	Em
089	HIP 07	Em
090	HIP 09	Em
091	HIP 11	Em
092	HIP 13	Em
093	HIP 15	Em
094	HIP 17	Em
095	HIP 19	Em
096	HIP 21	Em
097	HIP 23	Em
098	DANC01	Em
099	DANC03	Em
100	DANC05	Em
101	HOUS01	Em
102	HOUS03	Em
103	HOUS04	Em

Pattern number	Pattern name	Chord
104	TECH01	Em
105	TECH03	Em
106	TECH05	Em
107	TECH07	Em
108	TECH09	Em
109	DnB 01	Em
110	DnB 03	Em
111	DnB 05	Em
112	DnB 06	Em
113	TRIP01	Em
114	TRIP02	Em
115	TRIP04	Em
116	AMB 01	Em
117	AMB 02	Em
118	AMB 04	Em
119	BALD01	EM
120	BALD03	Em
121	BALD05T	Em
122	BALD07	Em
123	BALD09	Em
124	BALD11T	Em
125	BLUS01	Em
126	BLUS02	EM
127	BLUS04	EM
128	CNTR01	EM
129	CNTR02	Em
130	CNTR04	Em
131	JAZZ01	Em
132	JAZZ03	Em
133	JAZZ05	Em
134	JAZZ07P	Em
135	SHFL01	Em
136	SHFL03	Em
137	SHFL05	Em
138	SKA 01	Em
139	SKA 02	Em
140	SKA 04	Em
141	REGG01	Em
142	REGG02	Em
143	REGG03	Em
144	AFRO01	Em
145	AFRO03	Em
146	AFRO05	Em
147	AFRO07	Em
148	LATN01	Em
149	LATN03	Em
150	LATN05	Em
151	LATN07	Em
152	LATN09	Em
153	LATN11	Em
154	MidE01	Em
155	MidE03	Em

Pattern number	Pattern name	Chord
156	MidEs1VA	Em
157	Grv Dm1	Em
158	Grv Dm2	Em
159	Grv Dm3	Em
160	Grv Dm4	Em
161	GrvSnrFI	Em
162	INTRO01	Em
163	INTRO02	Em
164	INTRO03	Em
165	INTRO04	Em
166	INTRO05	Em
167	INTRO06	Em
168	INTRO07	Em
169	INTRO08	Em
170	INTRO09	Em
171	INTRO10	EM
172	INTRO11	Em
173	INTRO12	Em
174	INTRO13	Em
175	INTRO14	Em
176	INTRO15	Em
177	INTRO16	Em
178	INTRO17	EM
179	INTRO18	EM
180	COUNT	EM
181	ENDING01	Em
182	ENDING02	Em
183	ENDING03	Em
184	ENDING04	Em
185	ENDING05	Em
186	ENDING06	Em
187	ENDING07	Em
188	METRO4/4	Em
189	METRO3/4	Em
190	All Mute	Em
191 } 254	EMPTY	

* When a new project is created, the Basic set will be placed in the rhythm patterns.

* With the factory settings, project number 999 contains the Basic set, and drum kit 08GENERL and bass program 10PICKED are selected.

* Select the drum kit / bass program and tempo as desired. (With the factory settings, project number 999 is protected. If you want to change the drum kit or bass program, you must first defeat the Protect setting. See p.87.)

* If you want to use these patterns in another project, execute the Rhythm Import operation (see p.72).

■ Rock set

Pattern number	Pattern name	Chord
000	ROCK01	Em
001	ROCK02	Em
002	ROCK03	Em
003	ROCK04	Em
004	ROCK05	Em
005	ROCK06	Em
006	ROCK07	Em
007	ROCK08	Em
008	ROCK09	Em
009	ROCK10	Em
010	ROCK11	Em
011	ROCK12	Em
012	ROCK13	Em
013	ROCK14	Em
014	ROCK15	Em
015	ROCK16	Em
016	ROCK17	Em
017	ROCK18	Em
018	ROCK19	Em
019	ROCK20	EM
020	ROCK21	Em
021	ROCK22	Em
022	ROCK23	Em
023	ROCK24	Em
024	ROCK25	Em
025	ROCK26	Em
026	ROCK27	Em
027	ROCK28T	Em
028	ROCKs1VA	Em
029	ROCKs1FA	Em
030	ROCKs1VB	Em
031	ROCKs1FB	Em
032	ROCKs2VA	Em
033	ROCKs2FA	Em
034	ROCKs2VB	Em
035	ROCKs2FB	Em
036	ROCKs3VA	Em
037	ROCKs3FA	Em
038	ROCKs3VB	Em
039	ROCKs3FB	Em
040	ROCKs4VA	Em
041	ROCKs4FA	EM
042	ROCKs4VB	EM
043	ROCKs4FB	EM
044	ROCKs4BR	Em
045	HRK 01	Em
046	HRK 02	Em
047	HRK 03	Em
048	HRK 04	Em
049	HRK 05	Em
050	HRK 06	Em
051	HRK 07	Em
052	HRK s1VA	Em
053	HRK s1FA	Em
054	HRK s1VB	Em
055	HRK s1FB	Em
056	HRK s2VA	Em

Pattern number	Pattern name	Chord
057	HRK s2FA	Em
058	HRK s2VB	Em
059	HRK s2FB	Em
060	MTL 01	Em
061	MTL 02	Em
062	MTL 03	Em
063	MTL 04	Em
064	MTL s1VA	Em
065	MTL s1FA	Em
066	MTL s1VB	Em
067	MTL s1FB	Em
068	THRS01	Em
069	THRS02	Em
070	PUNK01	Em
071	PUNK02	Em
072	TP s1VA	Em
073	TP s1FA	Em
074	TP s1VB	Em
075	TP s1FB	Em
076	FUS 01	Em
077	FUS 02	Em
078	FUS 03	Em
079	FUS 04	Em
080	FUS 05	Em
081	FUS 06	Em
082	FUS 07	EM
083	FUS 08	Em
084	FUS s1VA	Em
085	FUS s1FA	Em
086	FUS s1VB	Em
087	FUS s1FB	Em
088	FUS s2VA	Em
089	FUS s2FA	Em
090	FUS s2VB	Em
091	FUS s2FB	Em
092	FUS s3VA	Em
093	FUS s3FA	Em
094	FUS s3VB	Em
095	FUS s3FB	Em
096	16FUS 03	Em
097	16FUS 04	Em
098	INDTs1VA	Em
099	INDTs1FA	Em
100	INDTs1VB	Em
101	INDTs1VC	Em
102	POP 01	Em
103	POP 02	EM
104	POP 03	Em
105	POP 04	Em
106	POP 05	EM
107	POP 06	Em
108	POP 07	Em
109	POP 08	Em
110	POP 09	EM
111	POP 10	EM
112	POP 11	Em
113	POP 12T	Em

Pattern number	Pattern name	Chord
114	POP s1VA	Em
115	POP s1FA	Em
116	POP s1VB	Em
117	POP s1FB	EM
118	POP s2VA	EM
119	POP s2FA	EM
120	POP s2VB	EM
121	POP s2FB	EM
122	POP s3VA	Em
123	POP s3FA	Em
124	POP s3VB	Em
125	POP s3FB	Em
126	RnB 01	Em
127	RnB 02	Em
128	RnB 03	Em
129	RnB 04	Em
130	RnB 05	Em
131	RnB 06	Em
132	RnB 07	EM
133	RnB 08	EM
134	RnB 09	EM
135	RnB 10	EM
136	RnB s1VA	Em
137	RnB s1FA	Em
138	RnB s1VB	Em
139	RnB s1FB	Em
140	FUNK01	Em
141	FUNK02	Em
142	FUNK03	Em
143	FUNK04	Em
144	FUNK05	Em
145	FUNK06	Em
146	FUNK07	Em
147	FUNK08	EM
148	FUNK09	Em
149	FUNK10	Em
150	FUNK11	Em
151	FUNK12	Em
152	FUNKs1VA	Em
153	FUNKs1FA	Em
154	FUNKs1VB	Em
155	FUNKs1FB	EM
156	FUNKs2VA	Em
157	FUNKs2FA	Em
158	FUNKs2VB	Em
159	FUNKs2FB	Em
160	16Beat09	Em
161	16Beat10	Em
162	16Beat11	Em
163	16Beat12	Em
164	08Beat01	Em
165	08Beat02	Em
166	08Beat03	Em
167	08Beat04	Em
168	08Beat05	Em
169	08Beat06	Em
170	08Beat07	Em

Pattern number	Pattern name	Chord
171	08Beat08	Em
172	08Beat09	Em
173	08Beat10	Em
174	08Beat11	Em
175	08Beat12	Em
176	16Beat01	Em
177	16Beat02	Em
178	16Beat03	Em
179	16Beat04	Em
180	16Beat05	EM
181	16Beat06	Em
182	16Beat07	Em
183	16Beat08	Em
184	16FUS 01	Em
185	16FUS 02	Em
186	04JAZZ01	Em
187	04JAZZ02	EM
188	04JAZZ03	EM
189	04JAZZ04	EM
190	BOSSA	Em
191	CNTRY	Em
192	68BLUS	Em
193	DANCE	Em
194	INTRO01	Em
195	INTRO02	Em
196	INTRO03	Em
197	INTRO04	Em
198	INTRO05	Em
199	INTRO06	Em
200	INTRO07	Em
201	INTRO08	Em
202	INTRO09	Em
203	INTRO10	Em
204	INTRO11	Em
205	INTRO12	Em
206	INTRO13	Em
207	INTRO14	Em
208	INTRO15	Em
209	INTRO16	Em
210	INTRO17	Em
211	INTRO18	Em
212	COUNT	Em
213	ENDING01	Em
214	ENDING02	Em
215	ENDING03	Em
216	ENDING04	Em
217	ENDING05	Em
218	ENDING06	Em
219	ENDING07	Em
220	METRO4/4	Em
221	METRO3/4	Em
222	All Mute	Em
223 254	EMPTY	

* With the factory settings, project number 996 contains the Rock set, and drum kit 00LIVE1 and bass program 00LIVEBS are selected.

* Select the drum kit / bass program and tempo as desired. (With the factory settings, project number 996 is protected. If you want to change the drum kit or bass program, you must first defeat the Protect setting. See p.87.)

* If you want to use these patterns in another project, execute the Rhythm Import operation (see p.72).

■ HipHop/Techno set

Pattern number	Pattern name	Chord
000	HIP 01	Em
001	HIP 02	Em
002	HIP 03	Em
003	HIP 04	Em
004	HIP 05	Em
005	HIP 06	Em
006	HIP 07	Em
007	HIP 08	Em
008	HIP 09	Em
009	HIP 10	Em
010	HIP 11	Em
011	HIP 12	EM
012	HIP 13	Em
013	HIP 14	Em
014	HIP 15	Em
015	HIP 16	Em
016	HIP 17	Em
017	HIP 18	Em
018	HIP 19	Em
019	HIP 20	Em
020	HIP 21	Em
021	HIP 22	Em
022	HIP 23	Em
023	HIP s1VA	Em
024	HIP s1FA	Em
025	HIP s1VB	Em
026	HIP s1FB	Em
027	HIP s1VC	Em
028	HIP s1VD	Em
029	HIP s2VA	Em
030	HIP s2VB	Em
031	HIP s2FB	Em
032	HIP s2VC	Em
033	HIP s2VD	Em
034	HIP s3VA	Em
035	HIP s3VB	Em
036	Hip Funk	Em
037	DANC01	Em
038	DANC02	Em
039	DANC03	Em
040	DANC04	Em
041	DANC05	Em
042	DANC06	Em
043	DANCs1VA	Em
044	DANCs1FA	Em
045	DANCs1VB	Em
046	DANCs1FB	Em
047	DANCs2VA	Em
048	DANCs2FA	Em
049	DANCs2VB	Em
050	DANCs2FB	EM
051	HOUS01	Em

Pattern number	Pattern name	Chord
052	HOUS02	Em
053	HOUS03	Em
054	HOUS04	Em
055	HOUSs1VA	Em
056	HOUSs1FA	Em
057	HOUSs1VB	Em
058	HOUSs1FB	Em
059	TECH01	Em
060	TECH02	Em
061	TECH03	Em
062	TECH04	Em
063	TECH05	Em
064	TECH06	Em
065	TECH07	Em
066	TECH08	Em
067	TECH09	Em
068	TECH10	Em
069	TECHs1VA	Em
070	TECHs1FA	Em
071	TECHs1VB	Em
072	TECHs1FB	Em
073	DnB 01	Em
074	DnB 02	Em
075	DnB 03	Em
076	DnB 04	Em
077	DnB 05	Em
078	DnB 06	Em
079	DnB s1VA	Em
080	DnB s1FA	Em
081	DnB s1VB	Em
082	DnB s1FB	Em
083	TRIP01	Em
084	TRIP02	Em
085	TRIP03	Em
086	TRIP04	Em
087	AMB 01	Em
088	AMB 02	Em
089	AMB 03	Em
090	AMB 04	Em
091	AMB s1VA	Em
092	AMB s1FA	Em
093	AMB s1VB	Em
094	AMB s1FB	Em
095	Grv Arp1	Em
096	Grv Arp2	Em
097	Grv Drm1	Em
098	Grv Drm2	Em
099	Grv Drm3	Em
100	Grv Drm4	Em
101	Grv Perc	Em
102	Grv Bas1	Em
103	Grv Bas2	Em

Pattern number	Pattern name	Chord
104	Grv Bas3	Em
105	Grv Bas4	Em
106	Grv Pad	Em
107	GrvSnrFl	Em
108	08Beat01	Em
109	08Beat02	Em
110	08Beat03	Em
111	08Beat04	Em
112	08Beat05	Em
113	08Beat06	Em
114	08Beat07	Em
115	08Beat08	Em
116	08Beat09	Em
117	08Beat10	Em
118	08Beat11	Em
119	08Beat12	Em
120	16Beat01	Em
121	16Beat02	Em
122	16Beat03	Em
123	16Beat04	EM
124	16Beat05	Em
125	16Beat06	Em
126	16Beat07	Em
127	16Beat08	Em
128	16FUS 01	Em
129	16FUS 02	Em
130	04JAZZ01	EM
131	04JAZZ02	EM
132	04JAZZ03	EM
133	04JAZZ04	Em
134	BOSSA	Em
135	CNTRY	Em
136	68BLUS	Em
137	DANCE	Em
138	INTRO01	Em
139	INTRO02	Em
140	INTRO03	Em
141	INTRO04	Em
142	INTRO05	Em
143	INTRO06	Em
144	INTRO07	Em
145	INTRO08	Em
146	INTRO09	Em
147	INTRO10	Em
148	INTRO11	Em
149	INTRO12	Em
150	INTRO13	Em
151	INTRO14	Em
152	INTRO15	Em
153	INTRO16	Em
154	INTRO17	Em
155	INTRO18	Em

Pattern number	Pattern name	Chord
156	COUNT	Em
157	ENDING01	Em
158	ENDING02	Em
159	ENDING03	Em
160	ENDING04	Em
161	ENDING05	Em
162	ENDING06	Em
163	ENDING07	Em
164	METRO4/4	Em
165	METRO3/4	Em
166	All Mute	Em
167 } 254	EMPTY	

- * With the factory settings, project number 997 contains the HipHop/Techno set, and drum kit 20HIPHP1 and bass program 07SYNTH are selected.
- * Select the drum kit / bass program and tempo as desired. (With the factory settings, project number 997 is protected. If you want to change the drum kit or bass program, you must first defeat the Protect setting. See p.87.)
- * If you want to use these patterns in another project, execute the Rhythm Import operation (see p.72).

■ Jazz/Latin set

Pattern number	Pattern name	Chord
000	BALD01	EM
001	BALD02	Em
002	BALD03	EM
003	BALD04	EM
004	BALD05T	EM
005	BALD06	Em
006	BALD07	Em
007	BALD08	Em
008	BALD09	EM
009	BALD10	Em
010	BALD11T	Em
011	BALDs1VA	Em
012	BALDs1FA	Em
013	BALDs1VB	Em
014	BALDs1FB	Em
015	BLUS01	Em
016	BLUS02	EM
017	BLUS03	Em
018	BLUS04	Em
019	BLUS05	EM
020	BLUS06	EM
021	BLUSs1VA	EM
022	BLUSs1FA	EM
023	BLUSs1VB	EM
024	BLUSs1FB	EM
025	CNTR01	Em
026	CNTR02	Em
027	CNTR03	Em
028	CNTR04	Em
029	CNTRs1VA	Em
030	CNTRs1FA	Em
031	CNTRs1VB	Em
032	CNTRs1FB	EM
033	JAZZ01	EM
034	JAZZ02	Em
035	JAZZ03	Em
036	JAZZ04	Em
037	JAZZ05	Em
038	JAZZ06	Em
039	JAZZ07P	Em
040	JAZZs1VA	EM
041	JAZZs1FA	Em
042	JAZZs1VB	Em
043	JAZZs1FB	Em
044	SHFL01	Em
045	SHFL02	Em
046	SHFL03	Em
047	SHFL04	Em
048	SHFL05	Em
049	SHFLs1VA	Em
050	SHFLs1Va	Em
051	SHFLs1FA	Em

Pattern number	Pattern name	Chord
052	SHFLs1VB	Em
053	SHFLs1FB	EM
054	SKA 01	Em
055	SKA 02	Em
056	SKA 03	Em
057	SKA 04	Em
058	REGG01	Em
059	REGG02	Em
060	REGG03	Em
061	REGG04	Em
062	REGGs1VA	Em
063	REGGs1FA	Em
064	REGGs1VB	Em
065	REGGs1FB	Em
066	AFRO01	Em
067	AFRO02	Em
068	AFRO03	Em
069	AFRO04	Em
070	AFRO05	Em
071	AFRO06	Em
072	AFRO07	Em
073	AFRO08	Em
074	AFROs1VA	Em
075	AFROs1FA	Em
076	AFROs1VB	Em
077	AFROs1FB	Em
078	LATN01	Em
079	LATN02	EM
080	LATN03	Em
081	LATN04	Em
082	LATN05	Em
083	LATN06	Em
084	LATN07	Em
085	LATN08	EM
086	LATN09	Em
087	LATN10	Em
088	LATN11	Em
089	LATN12	Em
090	LATNs1VA	Em
091	LATNs1FA	Em
092	LATNs1VB	Em
093	LATNs1FB	Em
094	LATNs2VA	Em
095	LATNs2FA	Em
096	LATNs2VB	Em
097	LATNs2FB	Em
098	MidE01	Em
099	MidE02	Em
100	MidE03	Em
101	MidE04T	Em
102	MidEs1VA	Em
103	MidEs1FA	Em

Pattern number	Pattern name	Chord
104	MidEs1VB	Em
105	MidEs1FB	Em
106	BOSSA 01	Em
107	SAMBA 01	Em
108	SAMBA 02	Em
109	08Beat01	Em
110	08Beat02	Em
111	08Beat03	Em
112	08Beat04	Em
113	08Beat05	Em
114	08Beat06	Em
115	08Beat07	Em
116	08Beat08	Em
117	08Beat09	Em
118	08Beat10	Em
119	08Beat11	Em
120	08Beat12	Em
121	16Beat01	Em
122	16Beat02	Em
123	16Beat03	Em
124	16Beat04	EM
125	16Beat05	Em
126	16Beat06	Em
127	16Beat07	Em
128	16Beat08	Em
129	16FUS 01	Em
130	16FUS 02	Em
131	04JAZZ01	EM
132	04JAZZ02	EM
133	04JAZZ03	EM
134	04JAZZ04	Em
135	BOSSA	Em
136	CNTRY	Em
137	68BLUS	Em
138	DANCE	Em
139	INTRO01	Em
140	INTRO02	Em
141	INTRO03	Em
142	INTRO04	Em
143	INTRO05	Em
144	INTRO06	Em
145	INTRO07	Em
146	INTRO08	Em
147	INTRO09	Em
148	INTRO10	Em
149	INTRO11	Em
150	INTRO12	Em
151	INTRO13	Em
152	INTRO14	Em
153	INTRO15	Em
154	INTRO16	Em
155	INTRO17	Em

Pattern number	Pattern name	Chord
156	INTRO18	Em
157	COUNT	Em
158	ENDING01	Em
159	ENDING02	Em
160	ENDING03	Em
161	ENDING04	Em
162	ENDING05	Em
163	ENDING06	Em
164	ENDING07	Em
165	METRO4/4	Em
166	METRO3/4	Em
167	All Mute	Em
168 ? 254	EMPTY	

* With the factory settings, project 998 contains the Jazz/Latin set, and drum kit 12JAZZ and bass program 05ACOUBS are selected.

* Select the drum kit / bass program and tempo as desired. (With the factory settings, project number 998 is protected. If you want to change the drum kit or bass program, you must first defeat the Protect setting. See p.87.)

* If you want to use these patterns in another project, execute the Rhythm Import operation (see p.72).

Drum kit / bass program list

■ Drum Kit List

	No.	Display	Kit name
LIVE ROCK	0	00LIVE1	LiveRock1
	1	01LIVE2	LiveRock2
STUDIO DRUMS	2	02STDIO1	Studio Drums1
	3	03STDIO2	Studio Drums2
STANDARD KIT	4	04STNDR1	Standard KIT1
	5	05STNDR2	Standard KIT2
VARIATION	6	06ELE_DR	Electric Drums
	7	07ENHPWR	Enhanced Power
GENERAL DRUMS	8	08GENEAL	General Kit
	9	09DRUM9	Drum#9
FUNK TRAP	10	10FUNK1	FunkTrap1
	11	11FUNK2	FunkTrap2
JAZZ DRUMS	12	12JAZZ	Jazz Kit
	13	13BRUSH	Brush Kit
EPIC ROCK	14	14EPIC1	Epic Rock1
	15	15EPIC2	Epic Rock2
BALLAD SET	16	16BALAD1	Ballad Set1
	17	17BALAD2	Ballad Set2
DANCE KIT	18	18DANCE1	Dance Kit1
	19	19DANCE2	Dance Kit2
RAP/HIPHOP	20	20HIPHP1	Rap/Hiphop1
	21	21HIPHP2	Rap/Hiphop2
TECHNO BEAT	22	22TECH1	Techno Beat1
	23	23TECH2	Techno Beat2
LO-FI KIT	24	24LO_FI	Lo-Fi Kit
	25	25DIST	Distortion
PERCUSSION	26	26GNPERC	General Percussion
	27	27DRSKIN	Drum Skins
ENSEMBLE PARTS	28	28CLKSTK	Click and Sticks
	29	29LOPERC	Lo Percussion
	30	30HIPERC	Hi Percussion

■ Bass Program List

No.	Display	Program name
0	00LIVEBS	Live Bass
1	01STUDIO	Studio Bass
2	02EPICBS	Epic Bass
3	03FUNKBS	Funk Bass
4	04BALLAD	Ballad Bass
5	05ACOUBS	Acoustic Bass
6	06ROCKBS	Rock Bass
7	07SYNTH	Synth Bass
8	08TECHNO	Techno Bass
9	09NOFRET	No Frets
10	10PICKED	Picked Jazz
11	11JAZZBS	Jazz Bass
12	12DRIVE	Drive Bass
13	13FUZZ	Fuzz Bass
14	14SAW	Saw Wave
15	15SQUARE	Square Wave

Pad-Instrument/Note# correspondence table

■ Drum pad instrument name / MIDI note# correspondence table

Common to all kits (except for kits 12, 13, 26, 27, 28, 29, 30)

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Kick	36	CowBell	56	Agogo	67
PAD2	SNARE	Snare	38	Mute High Conga	62	Tambourine	54
PAD3	CLOSED HAT	Closed HiHat	42	Open High Conga	63	Hand Claps	39
PAD4	OPEN HAT	Open HiHat	46	Low Conga	64	Short Guiro	73
PAD5	TOM 1	TOM 1	50	Stick	37	High Timbales	65
PAD6	TOM 2	TOM 2	47	High Bongo	60	Low Timbales	66
PAD7	TOM 3	TOM 3	43	Low Bongo	61	Shaker	70
PAD8	CYMBAL	Crash Cymbal	49	Ride Cymbal	51	Cup	53

KIT:12JAZZ

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Kick	36	Ride Cymbal 2	56	Agogo	67
PAD2	SNARE	Snare	38	Mute High Conga	62	Tambourine	54
PAD3	CLOSED HAT	Closed HiHat	42	Open High Conga	63	Pedal HiHat	39
PAD4	OPEN HAT	Open HiHat	46	Low Conga	64	Short Guiro	73
PAD5	TOM 1	TOM 1	50	Stick	37	High Timbales	65
PAD6	TOM 2	TOM 2	47	High Bongo	60	Low Timbales	66
PAD7	TOM 3	TOM 3	43	Low Bongo	61	Shaker	70
PAD8	CYMBAL	Crash Cymbal	49	Ride Cymbal 1	51	Cup	53

KIT:13BRUSH

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Kick 1	36	Snare 2	56	Agogo	67
PAD2	SNARE	Snare 1	38	Mute High Conga	62	Tambourine	54
PAD3	CLOSED HAT	Closed HiHat	42	Open High Conga	63	Pedal HiHat	39
PAD4	OPEN HAT	Open HiHat	46	Low Conga	64	Short Guiro	73
PAD5	TOM 1	TOM 1	50	Stick	37	High Timbales	65
PAD6	TOM 2	TOM 2	47	High Bongo	60	Low Timbales	66
PAD7	TOM 3	Kick 2	43	Low Bongo	61	Shaker	70
PAD8	CYMBAL	Crash Cymbal	49	Ride Cymbal	51	Cup	53

KIT:26GNPERC

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Metronome Click	36	Short Guiro 1	56	Wood Block High	67
PAD2	SNARE	Metronome Bell	38	Long Guiro 1	62	Wood Block Low	54
PAD3	CLOSED HAT	Scratch 1	42	Agogo 1	63	Jingle Bell	39
PAD4	OPEN HAT	Scratch 2	46	Agogo 2	64	Castanet	73
PAD5	TOM 1	HighQ	50	Claves 1	37	Mute Surdo	65
PAD6	TOM 2	Square Click	47	Cabasa	60	Open Surdo	66
PAD7	TOM 3	Short Stick	43	Whistle 1	61	Muted Triangle	70
PAD8	CYMBAL	Vibraslap	49	Whistle 2	51	Open Triangle	53

KIT:27DRSKIN

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Live Conga 1	36	Hand Tom	56	Wood Block High	67
PAD2	SNARE	Live Conga 2	38	Doumbek 1	62	Wood Block Low	54
PAD3	CLOSED HAT	Timbales 1	42	Doumbek 2	63	Jingle Bell	39
PAD4	OPEN HAT	Timbales 2	46	Doumbek 3	64	Castanet	73
PAD5	TOM 1	Bongo Reverb 1	50	Latin Sell 1	37	Mute Surdo	65
PAD6	TOM 2	Bongo Reverb 2	47	Cabasa	60	Open Surdo	66
PAD7	TOM 3	Tumba 1	43	Whistle 1	61	Muted Triangle	70
PAD8	CYMBAL	Tumba 2	49	Whistle 2	51	Open Triangle	53

KIT:28CLKSTK

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Stick Reverb	36	Latin Sell	56	Wood Block High	67
PAD2	SNARE	Studio Click	38	Castanet 1	62	Wood Block Low	54
PAD3	CLOSED HAT	Cross Stick	42	Castanet 2	63	Jingle Bell	39
PAD4	OPEN HAT	Short Guiro	46	Castanet 3	64	Castanet	73
PAD5	TOM 1	Claves	50	Brush Slap	37	Mute Surdo	65
PAD6	TOM 2	Wood Click 1	47	Cabasa	60	Open Surdo	66
PAD7	TOM 3	Wood Click 2	43	Whistle 1	61	Muted Triangle	70
PAD8	CYMBAL	Wood Click 3	49	Whistle 2	51	Open Triangle	53

KIT:29LOPERC

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Doumbek 1	36	Loose Conga 1	56	Wood Block High	67
PAD2	SNARE	Doumbek 2	38	Loose Conga 2	62	Wood Block Low	54
PAD3	CLOSED HAT	Doumbek 3	42	Tabla 1	63	Jingle Bell	39
PAD4	OPEN HAT	Timbales	46	Tabla 2	64	Castanet	73
PAD5	TOM 1	Tumba 1	50	Latin Sell	37	Mute Surdo	65
PAD6	TOM 2	Tumba 2	47	Cabasa	60	Open Surdo	66
PAD7	TOM 3	Tumba 3	43	Whistle 1	61	Muted Triangle	70
PAD8	CYMBAL	Hand Tom	49	Whistle 2	51	Open Triangle	53

KIT:30HIPERC

PAD No.	PAD NAME	BANK1		BANK2		BANK3	
		Instrument name	NOTE#	Instrument name	NOTE#	Instrument name	NOTE#
PAD1	KICK	Tambourine 1	36	Long Guiro 1	56	Wood Block High	67
PAD2	SNARE	Tambourine 2	38	Long Guiro 2	62	Wood Block Low	54
PAD3	CLOSED HAT	Tambourine 3	42	Agogo 1	63	Jingle Bell	39
PAD4	OPEN HAT	Claves	46	Agogo 2	64	Castanet	73
PAD5	TOM 1	Shaker 1	50	Short Guiro	37	Mute Surdo	65
PAD6	TOM 2	Shaker 2	47	Cabasa	60	Open Surdo	66
PAD7	TOM 3	Shaker 3	43	Whistle 1	61	Muted Triangle	70
PAD8	CYMBAL	Vibraslap	49	Whistle 2	51	Open Triangle	53

* On the MRS-1044, each drum kit is independent. This means that instruments with identical names may sound different.

■ Bass pad note# correspondence table

For E min

PAD No.	PAD NAME	min-1	min-2	min-3
		NOTE#	NOTE#	NOTE#
PAD1	KICK	28	40	52
PAD2	SNARE	30	42	54
PAD3	CLOSED HAT	31	43	55
PAD4	OPEN HAT	33	45	57
PAD5	TOM 1	35	47	59
PAD6	TOM 2	36	48	60
PAD7	TOM 3	38	50	62
PAD8	CYMBAL	40	52	64

For E Maj

PAD No.	PAD NAME	Maj-1	Maj-2	Maj-3
		NOTE#	NOTE#	NOTE#
PAD1	KICK	28	40	52
PAD2	SNARE	30	42	54
PAD3	CLOSED HAT	32	44	56
PAD4	OPEN HAT	33	45	57
PAD5	TOM 1	35	47	59
PAD6	TOM 2	37	49	61
PAD7	TOM 3	39	51	36
PAD8	CYMBAL	40	52	64

* If the key is set to other than E, the NOTE# will change accordingly.

* The bass can be sounded in a range of note numbers 12 – 74.

* Note numbers 12 – 74 can be received from MIDI IN regardless of the Pad Bank setting.

MIDI implementation

MRS-1044 MIDI IMPLEMENTATION

1. Recognized Messages

Status	1st	2nd	Description
8nH	kk	vv	Note Off kk: note number vv: velocity will be ignored
9nH	kk	00H	Note Off kk: note number
9nH	kk	vv	Note On kk: note number vv: velocity
BnH	07H	vv	Channel Volume vv: volume value
BnH	78H	xx	All Sounds Off
BnH	7BH	xx	All Notes Off

2. Transmitted Messages

Status	1st	2nd	Description
8nH	kk	40H	Note Off kk: note number
9nH	kk	vv	Note On kk: note number vv: velocity
BnH	07H	vv	Channel Volume vv: volume value
BnH	7BH	00H	All Notes Off
F2H	sl	sh	Song Position Pointer shsl: song position
F8H			Timing Clock
FAH			Start
FBH			Continue
FCH			Stop

MIDI implementation chart

[HardDisk Recorder]
 Model MRS-1044 MIDI Implementation Chart

Date : 20.August,2001
 Version :1.01

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1-16,OFF 1-16,OFF	1-16,OFF 1-16,OFF	Memorized
Mode	Default Messages Altered	3 x *****	3 x	
Note Number	True voice	12-74 *****	12-74	
Velocity	Note ON Note OFF	o x	o x	
After Touch	Key's Ch's	x x	x x	
Pitch Bend		x	x	
Control Change		7	7 120	Volume All Sounds Off
Prog Change	True #	x *****	x	
System Exclusive		x	x	
System Common	Song Pos Song Sel Tune	o x x	x x x	
System Real Time	Clock Commands	o o	x x	
Aux Messages	Local ON/OFF All Notes OFF Active Sense Reset	x o x x	x o x x	
Notes				

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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ZOOM CORPORATION
NOAH Bldg., 2-10-2, Miyanishi-cho, Fuchu-shi, Tokyo 183-0022, Japan
PHONE: +81-42-369-7116 FAX: +81-42-369-7115
Web Site: <http://www.zoom.co.jp>

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