MRS-8

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:

⚠ **Warning**
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.

⚠ **Caution**
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-8.

• Power requirements

⚠ **Warning**
Since power consumption of this unit is fairly high, we recommend the use of an AC adapter whenever possible. When powering the unit from batteries, use only alkaline types.

[AC adapter operation]
- Be sure to use only an AC adapter which supplies 9 V DC, 300 mA and is equipped with a "center minus" plug (Zoom AD-0006). The use of an adapter other than the specified type may damage the unit and pose a safety hazard.
- Connect the AC adapter only to an AC outlet that supplies the rated voltage required by the adapter.
- When disconnecting the AC adapter from the AC outlet, always grasp the adapter itself and do not pull at the cable.
- During lightning or when not using the unit for an extended period, disconnect the AC adapter from the AC outlet.

[Battery operation]
- Use four conventional IEC R6 (size AA) batteries (alkaline).
- The MRS-8 cannot be used for recharging.

- Pay close attention to the labelling of the battery to make sure you choose the correct type.
- When not using the unit for an extended period, remove the batteries from the unit.
- If battery leakage has occurred, wipe the battery compartment and the battery terminals carefully to remove all remnants of battery fluid.
- While using the unit, the battery compartment cover should be closed.

• Environment

⚠ **Warning**
To prevent the risk of fire, electric shock or malfunction, avoid using your MRS-8 in environments where it will be exposed to:

- Extreme temperatures
- Heat sources such as radiators or stoves
- High humidity or moisture
- Excessive dust or sand
- Excessive vibration or shock

• Handling

⚠ **Warning**
- Never place objects filled with liquids, such as vases, on the MRS-8 since this can cause electric shock.
- Do not place naked flame sources, such as lighted candles, on the MRS-8 since this can cause fire.

⚠ **Caution**
The MRS-8 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.

• Connecting cables and input and output jacks

⚠ **Caution**
You should always turn off the power to the MRS-8 and all other equipment before connecting or disconnecting any cables. Also make sure to disconnect all connection cables and the power cord before moving the MRS-8.

• Alterations

⚠ **Warning**
Never open the case of the MRS-8 or attempt to modify the product in any way since this can result in damage to the unit.

• Volume

⚠ **Caution**
Do not use the MRS-8 at a loud volume for a long time since this can cause hearing impairment.

Usage Precautions

• Electrical interference

For safety considerations, the MRS-8 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-8, as the possibility of interference cannot be ruled out entirely.

With any type of digital control device, the MRS-8 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-8. 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.

• Backup

The data of MRS-8 can be lost because of malfunction or incorrect operation. Backup your data.

• Copyrights

Except for personal use, unauthorized recording from copyrighted sources(CDs, records, tapes, video clips, broadcast material and so on) is prohibited.
ZOOM Corporation does not bear any liability for injunctions regarding the copyright law infringement.

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

* **MIDI is a registered trademark of Association of Musical Electronics Industry(AMEI).**

* **SD Logo is a trademark.**

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Contents

Introduction

Thank you for selecting the ***ZOOM MRS-8 MultiTrak Recording Studio*** (simply called the "***MRS-8***" in this manual). The MRS-8 is a fascinating product with the following features.

- **Four major functions in a compact unit**

  The MRS-8 combines an 8-track SD card recorder, effect device, digital mixer, and drum/bass machine in a single unit of amazingly compact dimensions. Everything you need to create music is right there. Use it to pre-produce a song at home or take it into the studio for some serious recording work. The MRS-8 is a great tool that will go anywhere.

- **Versatile input configuration handles a wide variety of sources**

  In addition to the standard phone type jack, the MRS-8 features a combo type connector that can handle XLR plug leads (balanced) as well as phone plug leads (balanced and unbalanced). Guitar, bass, synthesizer and various other sources as well as microphones and direct boxes can be connected easily. A high-performance microphone is also built in, which is great for recording acoustic guitar or vocals.

- **Recorder with 8 tracks x 10 virtual takes**

  The recorder section provides four mono tracks and two stereo tracks, resulting in a total of eight tracks. Each track has ten virtual tracks (V-takes). A bounce function lets you play all tracks and record the result on an empty V-take.

- **Dedicated master track for mixdown**

  The master track is separate from the regular recording tracks and is optimized for mixdown with a minimum of fuss. A sequence play function lets you play the master tracks of multiple songs in succession, which is convenient for moving mixed-down songs onto an external recorder in one go.

- **Full-function mixer**

  The built-in digital mixer handles the audio tracks and drum/bass sounds and allows adjusting parameters such as level, panning, EQ, and effect intensity. The result is a full-fledged stereo mix to which the input signal can also be added.

- **Two versatile effects**

  The MRS-8 provides an insert effect for processing the input signal and/or any track, and a send/return effect that is used via the mixer send/return loop. The insert effect can be used as mastering effect for the stereo mix, for adjusting the sound pressure and tonal quality during mixdown.

- **Rhythm section can be used to provide guide rhythm or accompaniment**

  Realistic PCM sources produce drum and bass sounds that can be played in more than 500 rhythm patterns. By programming a combination of patterns and setting a chord progression, you can build the rhythm accompaniment to an entire song.

- **Compatible with system-wide synchronization**

  The MIDI OUT connector can supply synchronization messages such as MIDI time code information and MIDI clock information. In combination with a computer, MIDI sequencer or similar device, this lets you create a system with professional-level synchronization.

- **Built-in tuner with support for various tuning methods**

  Besides the standard chromatic type, the tuner function of the MRS-8 also caters for 7-string guitar, 5-string bass, and other special tuning needs.

In order to take full advantage of the MRS-8's versatile functions 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-8

The MRS-8 is internally divided into the following four sections.

● **Recorder**
Records and plays back audio signals.

● **Rhythm section**
Uses the internal drum/bass sound source to play rhythms.

● **Mixer**
Mixes the signals from the recorder and the drum/bass sound source into a stereo signal, for output via the output jacks and for mixdown on dedicated master tracks.

● **Effects**
Process input signals, recorder playback signals, or drum/bass sound source signals in various ways, to achieve various sound characteristics.

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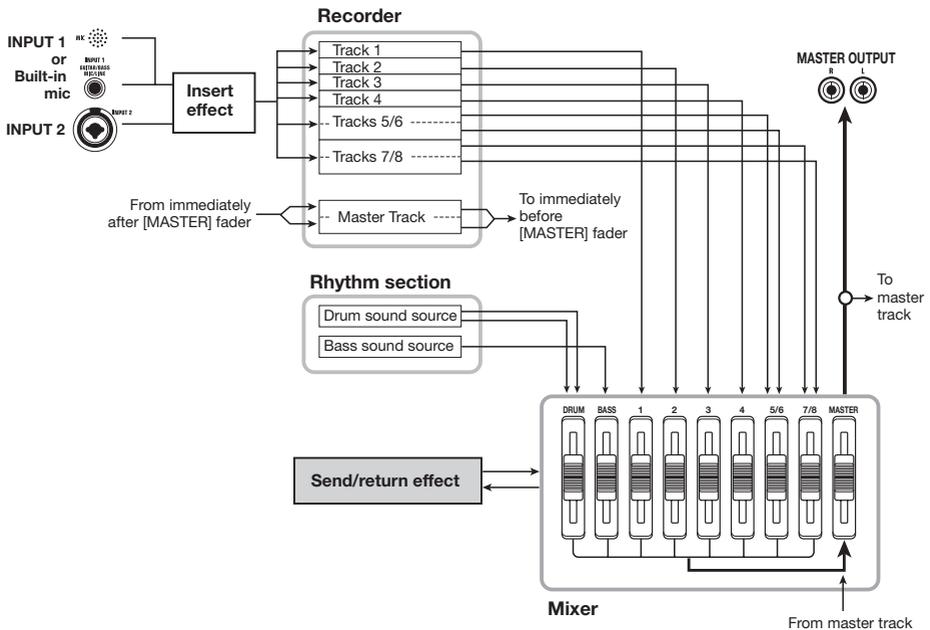
Recorder

The recorder section of the MRS-8 has eight audio tracks. (A "track" is a separate section for recording audio data.) There are four mono tracks (track 1 – 4) and two stereo tracks (tracks 5/6 and 7/8). Up to 2 tracks can be recorded simultaneously and up to 8 tracks can be played back simultaneously.

Each of the tracks has ten switchable virtual tracks (called "V-takes"). For each track, one V-take can be selected for recording/playback.

Currently selected V-take on tracks 1 – 8 and master track

V-take
1 2 3 4 5 6 7 8 9 10

1 2 3 4 5/6 7/8
Tracks
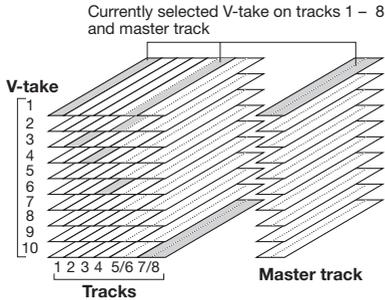
Master track

The recorder section also provides a set of stereo tracks which are separate from the normal audio tracks. This is called the master track. The master track is reserved for use in mixdown.

Rhythm section

The MRS-8 contains a rhythm section that operates in sync with the recorder. It offers 511 accompaniment patterns (called "rhythm patterns") that use the internal drum/bass sound generator. You can use the preprogrammed patterns, modify them in part, or create entirely new patterns from scratch.

Recorder
Track 1
Track 2
Track 3

Rhythm section

Rhythm pattern | Rhythm pattern | Rhythm pattern --- Drum sound → To mixer
--- Bass sound → To mixer
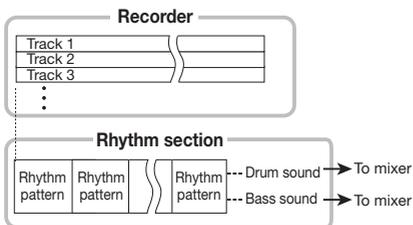
HINT
The drum/bass sound sources can be also played with the pads on the top panel.

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".) Up to 10 rhythm songs can be created, among which one is selected for editing/playback.

Mixer

The playback signals from the audio tracks and the drum/ bass sounds are sent to the built-in digital mixer to create a stereo mix. For each track/sound, parameters such as volume, panning, and 2-band EQ (Hi and Lo) can be controlled independently.

The resulting stereo mix is sent to the output jacks and can be sent to an empty V-take of the master track or any other tracks, for mixdown and bounce operation.

Effects

The MRS-8 provides two types of effects: insert effect and send/return effect. These effects have the characteristics described below.

■ Insert effect

This effect can be inserted at one of the following three points in the signal path.

(1) **Immediately after the input**
(2) **In the output of any audio track or drum track/bass sound**
(3) **Immediately before the [MASTER] fader**

In the default condition, position (1) (immediately after input) is selected. When the setting is changed to (2), only a selected track or drum/bass sound is processed by the effect. When the setting is changed to (3), the final stereo mix can be processed.

■ Send/return effect

This effect is internally connected to the send/return loop of the mixer section. The effect includes reverb, chorus and other processing types.

The level of the signal supplied to the send/return effect (send level) for each track/sound adjusts the depth of the effect. Raising the send level will produce a deeper effect for that track or sound.

Names of Parts

Front panel
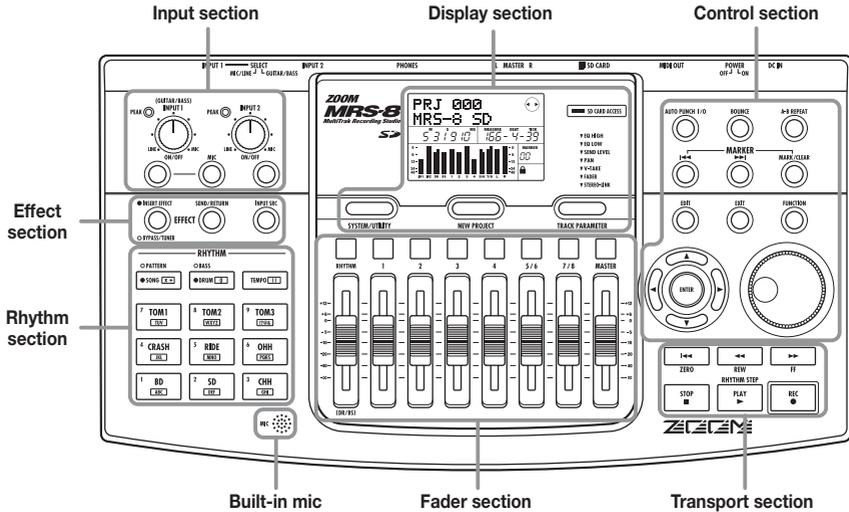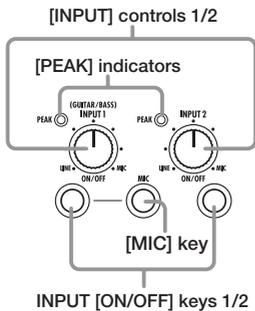
Input section

Effect section

Rhythm section
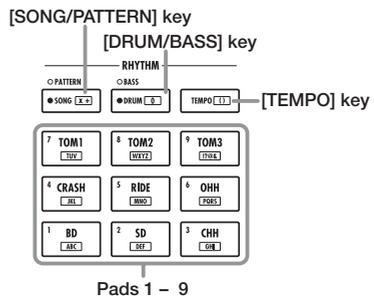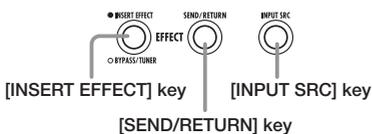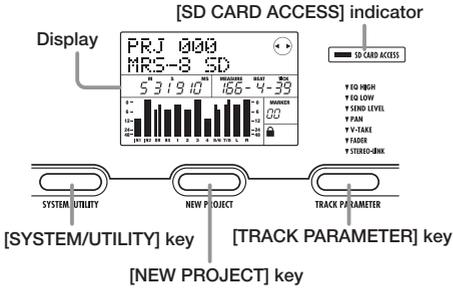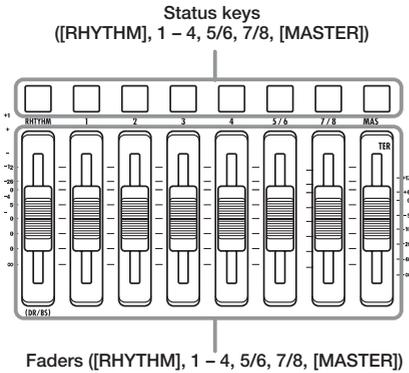
Built-in mic   Fader section   Transport section

Input section

[INPUT] controls 1/2

[PEAK] indicators

[MIC] key

INPUT [ON/OFF] keys 1/2

Effect section

[INSERT EFFECT] key   [INPUT SRC] key

[SEND/RETURN] key

Rhythm section

[SONG/PATTERN] key

[DRUM/BASS] key

[TEMPO] key

Pads 1 – 9

Display section

Display

[SD CARD ACCESS] indicator

```
PRJ 000
MRS-8 SD
```

SD CARD ACCESS

▼ EQ HIGH
▼ EQ LOW
▼ SEND LEVEL
▼ PAN
▼ V-TAKE
▼ FADER
▼ STEREO-LINK

[SYSTEM/UTILITY] key

[NEW PROJECT] key

[TRACK PARAMETER] key

Fader section

Status keys
([RHYTHM], 1 – 4, 5/6, 7/8, [MASTER])

Faders ([RHYTHM], 1 – 4, 5/6, 7/8, [MASTER])

Control section

MARKER [|◄◄] / [►►|] keys

[AUTO PUNCH I/O] key

[BOUNCE] key

[A-B REPEAT] key

[MARK/CLEAR] key

[EDIT] key

[FUNCTION] key

[EXIT] key

Cursor keys

Dial

[ENTER] key

Transport section

REW [◄◄] key

ZERO [|◄◄] key

FF [►►] key

STOP [■] key

REC [●] key

PLAY [►] key

Rear panel

DC 9V jack

MIDI OUT
connector

MASTER
OUTPUT jacks

PHONES jack

INPUT 1/2
connectors

[POWER ON/OFF]
switch

Card slot

[PHONES]
volume control

[INPUT 1 SELECT]
switch

Connections

The INPUT 1 connector accepts a standard phone plug cable (unbalanced). The INPUT 2 connector accepts an XLR plug cable (balanced) or a phone plug cable (balanced or unbalanced).

MIDI sequencer (computer etc.)

Guitar

When a passive electric guitar/bass or other instrument with high output impedance is connected to INPUT 1, set the [INPUT 1 SELECT] switch to GUITAR/BASS.
When an active electric guitar/bass, a dynamic microphone, synthesizer or other device with low output impedance is connected to INPUT 1, set the [INPUT 1 SELECT] switch to MIC/LINE.

MIDI interface

MIDI IN

Bass
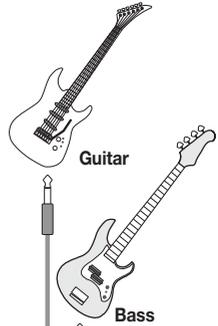
Rear panel

Dynamic or condenser microphone
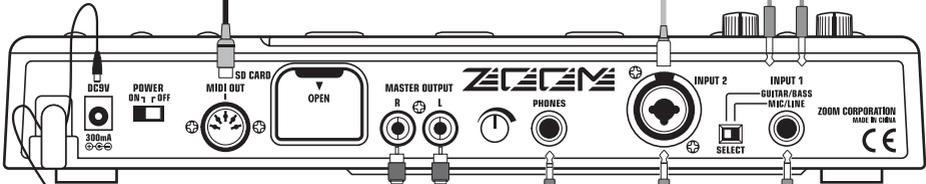
To power the MRS-8 from an AC outlet, be sure to use only the ZOOM AD-0006 (available separately). Using another AC adapter can lead to malfunction and damage.

AC adapter

Loop the cable of the AC adapter 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.

Synthesizer or sampler etc.

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

To monitor the sound with headphones, connect a pair of headphones to the PHONES jack. The listening volume can be adjusted with the PHONES control.

Headphones

To prevent damage to the speakers of your monitor system, turn off the power of the system connected to the output jacks (or turn the volume all the way down) before you make connections.
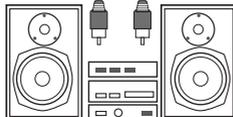
Monitor system (audio components or amplified speakers etc.)

Inserting SD Card and Batteries

Inserting an SD card

For operating the MRS-8, an SD card or a miniSD card with adapter (capacity 16 MB or more) must be inserted as storage media. Before inserting a card, verify that the write protect feature is turned off. Make sure that power to the MRS-8 is turned off, and then insert the card as shown below.

SD card
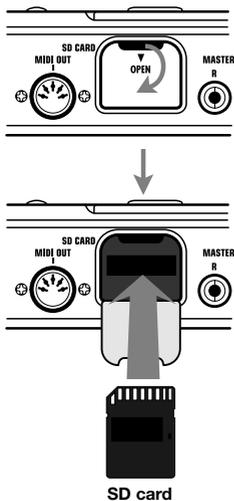
When inserting the card, push it all the way into the slot. To remove the card, turn power off and then pull the card out.

To remove or insert a card with the power turned on, be sure to follow the procedure described on page 117. Otherwise data may be permanently destroyed.

NOTE

- If the card is inserted with wrong orientation, it will not go all the way in. Never try to force the card, as this may damage it.

Inserting the batteries

The MRS-8 can be powered from batteries. Purchase the correct batteries and insert them as described below.

1. **Turn the unit over and open the battery compartment cover.**

MRS-8 bottom view

IEC R6 (size AA) battery x 4

Battery compartment
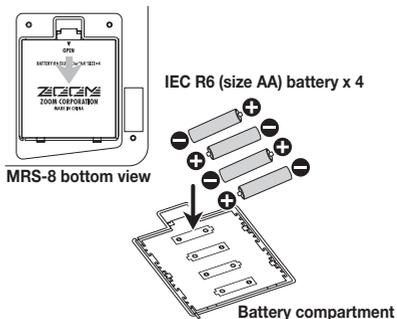
2. **Insert four IEC R6 (size AA) batteries into the compartment. (Use alkaline batteries.)**

3. **Close the battery compartment cover.**

NOTE

If you are operating the unit on battery power and the indication [**BATT**] appears in the bottom right of the display, the batteries are almost exhausted. Replace all four batteries with fresh ones as soon as possible.

Power On/Off

To turn the MRS-8 on and off, follow the steps described below.

Power-on

1. **Make sure that the MRS-8 and peripheral equipment is turned off.**

Turn down the volume controls of connected equipment, the MRS-8, and the monitor system.

2. **Insert an SD card into the card slot.**

3. **Set the [POWER ON/OFF] switch of the MRS-8 to ON.**
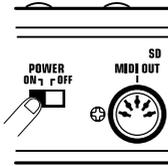
Data loading for the inserted SD card starts. During this interval, the [SD CARD ACCESS] indicator lights up.

After a while, the following screen appears.
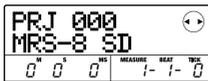
This is called the main screen. From this screen, you can access various recording and playback functions.

HINT
To return to the main screen from other screens, press the [EXIT] key repeatedly.

If an SD card that is not ready for use in the MRS-8 is inserted, the indication "FORMAT?" appears when you turn the MRS-8 on. If you press the [ENTER] key at this point, the SD card will be formatted. When formatting is complete, the main screen appears.

HINT
• You can also format an SD card after the MRS-8 has started up, as described on page 118.
• Changing the SD card while the MRS-8 is operating is possible by following the procedure described on page 117.

4. **Turn on the connected instrument and the monitor system in that order.**

Power-off

1. **Turn down the volume at the monitor system.**

2. **Turn off the monitor system and the connected instrument in that order.**

3. **Set the [POWER ON/OFF] switch of the MRS-8 to OFF.**

The indication "GoodBye See You!" appears on the display and the unit is turned off. Any settings and other information are stored automatically on the SD card.

⚠ Caution

• **Never turn power on or off by connecting or disconnecting the AC adapter. Otherwise data may be destroyed.**

• **In particular, if you disconnect the AC adapter while the [SD CARD ACCESS] indicator is lit, all data may be permanently destroyed.**

Let's Record

This section demonstrates the basics of recording and playback with the MRS-8. As an example, we explain how to record an electric guitar connected to the INPUT 1 connector.

1. Connect the guitar to the INPUT 1 connector and set the [INPUT 1 SELECT] switch to GUITAR/BASS (for a passive guitar) or MIC/LINE (for an active guitar).

2. Press the [NEW PROJECT] key in the display section. Verify that the indication "PRJNOxxx (where xxx is the project number) is shown on the first line of the display. Then press the [ENTER] key.
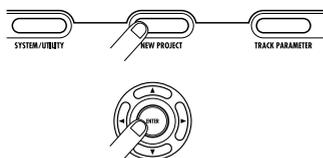
A new project is created, and the unit goes into recording standby mode. If necessary, you can edit the project name in this condition (→ p. 105).

3. Verify that the [MIC] key is flashing or out. Then press the INPUT [ON/OFF] key 1 so that the key is lit.

In this condition, the INPUT 1 connector is active.
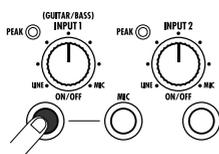
HINT
If the [MIC] key is lit, the built-in microphone is active instead of the INPUT 1 connector. In such a case, press the [MIC] key once to switch the key to flashing status.

4. While playing your guitar, use the [INPUT] control 1 to adjust the input sensitivity.

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

Flickers occasionally
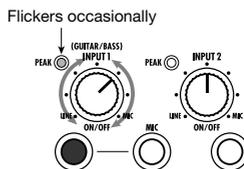
5. Press the [TRACK PARAMETER] key in the display section, and use the cursor left/right keys to bring up the indication "INPUT" on the first line of the display.
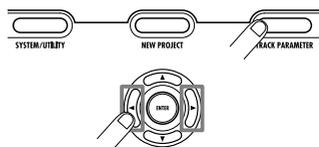
NOTE
If "INPUT" is not shown on the first line of the display, check whether the INPUT [ON/OFF] key is lit.

6. Use the cursor up/down keys to bring up the following indication on the display.

From this screen, you can adjust the input signal recording level (the signal level sent to the track).

```
INPUT
REC LVL      100
```
Recording level setting

7. Turn the dial to adjust the recording level.

The current signal level can be checked using the meter

in the lower part of the display. Adjust the recording level so that the 0 (dB) segment for IN 1 flashes slightly when the guitar is at maximum volume.

0 (dB) segment

Input 1 recording level
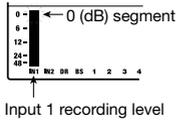
8. Press the [EXIT] key repeatedly to return to the main screen.

9. Press status key 1 repeatedly until the key is lit in red.

When a status key is lit in red, the respective audio track (track 1 in this example) is selected as recording destination.

Lit in red
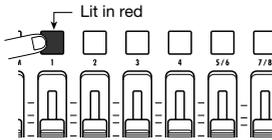
10. Operate fader 1 and the [MASTER] fader to adjust the input signal monitor level.

Faders 1 – 4, 5/6, and 7/8 adjust the volume for the respective track. When the input signal is sent to a track, the monitor level can be adjusted. The [MASTER] fader can be used to adjust the final output level.
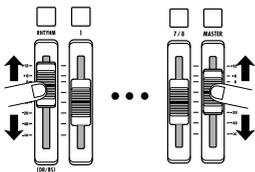
11. To start recording, press the PLAY [►] key while holding down the REC [●] key.

A four-beat pre-count is heard, and recording starts. In the default condition of a project, an 8-beat rhythm pattern is played during recording and playback. Play

your instrument along with the rhythm pattern.

Lit in green   Lit in red
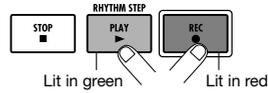
HINT

- If you do not want a rhythm pattern, select an empty rhythm pattern (→ p. 18) or mute the drum/bass sound (→ p. 19).
- In the default condition of a project, the insert effect processes the input signal. You can bypass the effect (→ p. 22) or select another effect patch (→ p. 21).

12. When recording is complete, press the STOP [■] key.

The REC [●] key and PLAY [►] key go out, and recording stops.

13. To check the recorded contents, press the ZERO [◄◄] key and then press the PLAY [►] key.
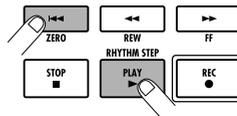
By operating the [MASTER] fader you can adjust the volume of the entire song (stereo mix signal level).

14. To cancel the recording condition, press the status key 1 so that the key is lit in green.

Lit in green
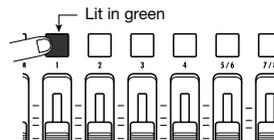
Quick Tour

Now let's use your MRS-8 to do some actual recording. This Quick Tour describes the five steps that cover the entire process from preparation until the completion of a song.

• Step 1: Preparations
Shows how to create a new project, select a guide rhythm, and perform other steps necessary for recording.

• Step 2: Recording the first track
Shows how to record the first track while using the insert effect on the input signal.

• Step 3: Overdubbing
Shows how to record further tracks while listening to a track already recorded (overdubbing).

• Step 4: Mixing
Shows how to adjust the level, panning, and EQ of each track, apply the send/return effect, and mix the recorded material to a pair of stereo tracks.

• Step 5: Mixdown
Finally the completed stereo mix is recorded on the master track to create the finished song.

Step 1: Preparations

1.1 Creating a new project

On the MRS-8, song data are managed in units called "projects". A project comprises recorded audio data as well as various rhythm and effect settings. By loading a project, the same condition as when the song was last saved can be recreated.

To start recording with the MRS-8, you must first create a project.

1. Connect the instrument to record and the monitor system to the MRS-8 (→ p. 12).

2. Insert the SD card to use for recording (→ p. 13).

3. Turn power on in the order MRS-8 → monitor system.
When the MRS-8 starts up, the last handled project is automatically loaded.

4. Press the [NEW PROJECT] key in the display section.
When you press the [NEW PROJECT] key from the main screen, the display changes as follows.


```
PRJNo001
PRJ001        -A-
```
— Cursor keys that be used
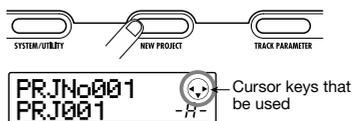
In this condition, a new project can be created.

The top right of the display shows the cursor keys that can be used on this screen.

HINT

- When creating a new project, the lowest free project number is automatically selected.
- It is also possible to create a new project from the project menu (→ p. 105).

5. Press the [ENTER] key.

A new project is created, and the main screen for audio track recording/playback appears.

```
PRJ 001
PRJ001
```

HINT

- When selecting a different project or creating a new project, the project you were working on up to that point is automatically saved.
- When performing the power-off procedure for the MRS-8 (→ p. 14), the last project is automatically saved.
- When creating a new project, you can edit the project name (→ p. 105).

NOTE

While the MRS-8 is operating, do not remove the SD card. Otherwise data may be destroyed and malfunction may occur. If you want to remove the SD card while the MRS-8 is on, be sure to follow the correct procedure (→ p. 117).

1.2 Selecting the rhythm pattern to use

The MRS-8 has a built-in rhythm function that operates in sync with the recorder. This lets you use drum sounds (drum kits) and bass sounds (bass programs) to create repeated rhythm patterns of several measures. By combining various patterns, you can create the rhythm accompaniment for an entire song (rhythm song).

This section explains how to select a rhythm pattern for use as guide rhythm during recording.

1. From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key goes out.

The rhythm pattern selection screen appears.

Rhythm pattern number

```
001♯117
MTNs1Vb
```

Rhythm pattern name
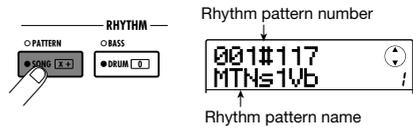
HINT

To return to the main screen from other screens, press the [EXIT] key repeatedly. The [EXIT] key always serves to return to the previous screen.

2. Turn the dial to select a pattern to use as guide rhythm.

Up to 511 types of rhythm pattern can be used in a project. (More than 450 of these are preprogrammed.) You select a pattern by turning the dial.

When you turn the dial to select another rhythm pattern while a pattern is playing, the new pattern will start after the current pattern has finished. When you select a new pattern with the cursor up/down keys, the new pattern begins playing immediately.

In this example, we will select a simple rhythm pattern as guide rhythm for use during recording. If you select for example the rhythm pattern number 510, a 4/4-beat metronome sound is heard.

3. Set the [MASTER] fader to 0 (dB) and press the PLAY [▶] key in the transport section.

0dB
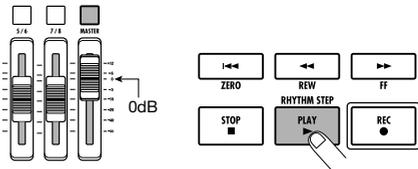
The selected rhythm pattern is played in sync with the recorder operation. The [TEMPO] key flashes according to the current tempo setting.

In the default condition of a project, the sound the bass program (bass track) is muted. Therefore only the drum kit (drum track) is heard when the rhythm pattern plays.

HINT

During rhythm pattern play, the pads corresponding to the currently produced sound of the drum kit (or pitch of the bass program) are flashing. You can also tap the pads to play the drum sounds/bass notes.

4. To change the tempo, press the [TEMPO] key in the rhythm section and then turn the dial to change the tempo value shown on the display.
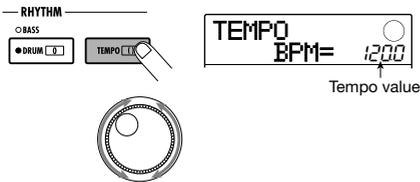
Tempo value

The tempo value can be set in 0.1 BPM steps. When the setting is complete, press the [EXIT] key to return to the previous screen.

HINT

You can also set the tempo by hitting the [TEMPO] key repeatedly.

5. To adjust the volume of the drum/bass track, use the [DRUM/BASS] key in the rhythm section to select the sound (drum or bass), and then operate the [RHYTHM] fader.

The [RHYTHM] fader serves for controlling either the drum track or the bass track. When the key is lit, the drum track is selected. When the key is out, the bass track is selected. The [RHYTHM] fader then controls the respective level.

• **When drum track is selected**

Lit
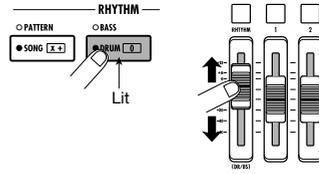
• **When bass track is selected**

Out
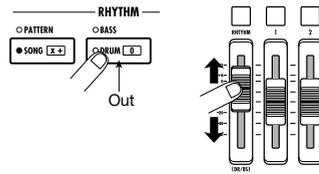
The signal level of the respective channel can be checked with the level meter in the lower part of the display.

Bass track signal level
Drum track signal level
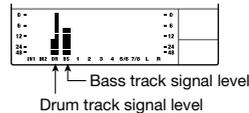
In the same way, the [DRUM/BASS] key can be used to select the sound (drum or bass), and then the [RHYTHM] status key can be used to control muting on/off for the drum track/bass track.

6. To stop playback, press the STOP [■] key in the transport section.
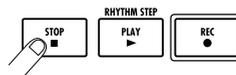
7. To return to the main screen, press the [EXIT] key.

Step 2: Recording the first track

In this step, we explain how to select an audio track for recording, how to record while listening to the guide rhythm of the rhythm section, and how to use the insert effect on the input signal.

2.1 Adjusting input sensitivity

1. **Connect an instrument to the INPUT 1/2 connector.**

The MRS-8 can handle up to two input sources at a time, from INPUT 1, INPUT 2, and the built-in mic.
INPUT 1 and the built-in mic are mutually exclusive. A switch selects one of these for use as input source.

2. **To use the built-in mic, press the [MIC] key in the input section so that the key is lit.**
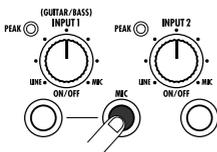
When the unit is in a mode where the built-in mic can be used, the [MIC] key in the input section flashes. If you press the key so that it is lit, the built-in mic will be active instead of INPUT 1.
Depending on the insert effect settings, the built-in mic may not be available. In this case, the [MIC] key is out.

[MIC] key lit	[MIC] key flashing	[MIC] key out
Built-in mic is active (INPUT 1 is inactive)	Built-in mic is available (INPUT 1 is active)	Built-in mic is not available (INPUT 1 is active)

3. **Use the INPUT [ON/OFF] keys 1/2 to select the input source.**

The INPUT [ON/OFF] keys 1/2 control the INPUT 1 connector (or built-in mic) and INPUT 2 connector respectively. When a key is lit, the signal from that input

is selected as input source.
To use two input sources simultaneously, hold down one INPUT [ON/OFF] key while pressing the other one.
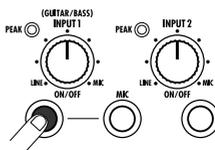
The INPUT [ON/OFF] keys 1/2 and [MIC] key lighting status with various input selections is shown below.

• **Input source = INPUT 1 connector**

Lit	Flashing or out	Out
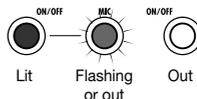
• **Input source = INPUT 2 connector**

Out	Flashing or out	Lit

• **Input source = Built-in mic**

Lit	Lit	Out
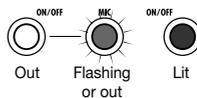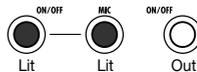
• **Input source = INPUT 1 connector + INPUT 2 connector**

Lit	Flashing or out	Lit
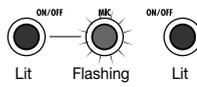
• **Input source = Built-in mic + INPUT 2 connector**

Lit	Lit	Lit

4. **While playing your instrument, adjust the [INPUT] control for the input(s) selected in step 2, to adjust the input sensitivity.**

The sensitivity of INPUT 1 and the built-in mic is adjusted with the [INPUT] 1 control. The sensitivity of INPUT 2 is adjusted with the [INPUT] 2 control.

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

Input 1 recording level
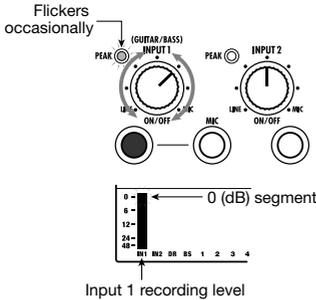
The input signal level can be checked with the level meter IN 1/IN 2 bars in the display.

2.2 Applying the insert effect

The insert effect can be applied to a point immediately after the input, to the output of any track, or immediately before the [MASTER] fader. The insert effect actually is a multi-effect unit that contains a number of single effects (effect modules) such as compressor, distortion, and delay, connected in series.

When you apply the insert effect to the input signal, you can record the processed signal on a track. The following steps show how to apply an insert effect suitable for guitar/bass.

1. **Press the [INPUT SRC] key in the effect section.**

The indication "IN" (input) appears on the second line of the display. In this condition, you can select the insert effect position.

In the default condition of a patch, "IN" is selected. If

another setting is currently displayed, turn the dial to select "IN".

2. **Press the [INSERT EFFECT] key in the effect section.**

The display changes as follows. From this screen, you can select the insert effect algorithm (combination of effect modules used simultaneously) and patch (effect program).

The MRS-8 has eight algorithms with multiple patch selections for each algorithm. To use the insert effect, select the algorithm first and then call up one of the patches in that algorithm.

3. **Use the cursor up/down keys to select the algorithm.**

The following algorithms are available.

- **CLEAN**
- **DIST**
- **ACO/BASS SIM (shown on the display as "Ac/BsSIM")**
- **BASS**

These algorithms are suitable for recording guitar/bass.

- **MIC**

An algorithm suitable for vocals and other microphone recordings.

• LINE

An algorithm suitable mainly for recording line-level output instruments such as synthesizer or electric piano.

• Dual MIC

An algorithm for two entirely separate mono input and mono output channels, for use with two microphones.

• MASTERING (shown on the display as "MASTRING")

An algorithm suitable for processing the final stereo mixdown signal.

HINT

In the default condition of a project, the CLEAN algorithm is selected for the insert effect.

NOTE

When a patch of the CLEAN, DIST, ACO/BASS SIM, or BASS algorithms is selected, the built-in mic cannot be used. But when the insert effect is temporarily bypassed, when "CABINET" is selected on the PRE AMP/DRIVE module, or when the module is turned off, you can use the built-in mic.

4. Set the [MASTER] fader to 0 (dB). While playing your instrument to check the sound, use the dial to select the patch.

0 dB
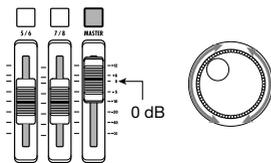
300 patches can be used with the insert effect. The effect type and intensity for a patch can be adjusted as needed. The patches available with the different algorithms are listed below.

Algorithm	Patch number
CLEAN	0 – 29
DIST	0 – 49
ACO/BASS SIM	0 – 19
BASS	0 – 19
MIC	0 – 49
LINE	0 – 49
DUAL MIC	0 – 49
MASTERING	0 – 29

HINT

When "EMPTY" is shown as the patch name, the patch is empty. Selecting such a patch will have no effect.

NOTE

Depending on the selected algorithm, the input/output signal routing will change (→ p. 94).

5. To adjust the signal level recorded on a track, press the [TRACK PARAMETER] key in the control section and then press the INPUT [ON/OFF] key.
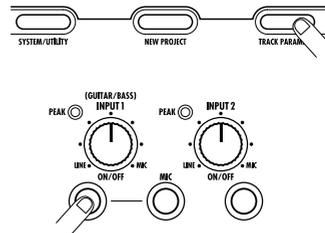
The insert effect output level may change according to the selected patch. When recording with the insert effect applied, you will have to adjust the recording level according to the selected patch.

6. Press the cursor down key repeatedly to bring up the indication "REC LVL" on the second line of the display.

The display changes as follows. The REC LVL parameter shown on this screen indicates the signal level after passing the insert effect, which will be recorded on the track.

7. Turn the dial to adjust the recording level.

8. To return to the main screen, press the [EXIT] key.

HINT

• To record without using the insert effect, press the [INSERT EFFECT] key in the effect section repeatedly until the key goes out. While the key is out, the insert effect is bypassed.

• When the insert effect is bypassed for recording, setting the REC LVL parameter to 100 (default) results in unity gain (the recording level same as the input level).

2.3 Selecting a track and recording

Now we will select a track and record the input sound (with the insert effect applied) on that track.

1. **From the main screen, repeatedly press the status key of the recording track until the key is lit in red.**

Lit in red
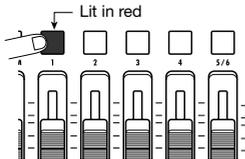
The audio track status keys are used to select the recording track and to switch muting for each track on and off. Each time you press a status key, the key will cycle through the following states.

Status key

Lit in green	Out	Lit in red
Mute off	Mute on	Selected as recording track
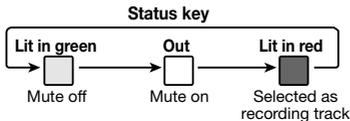
When all status keys are green, the input signal will not be sent to the tracks and will go directly to the [MASTER] fader. (Panning and send/return effect depth can be adjusted in this case.)

Recording track not selected

One Input source

Two Input sources
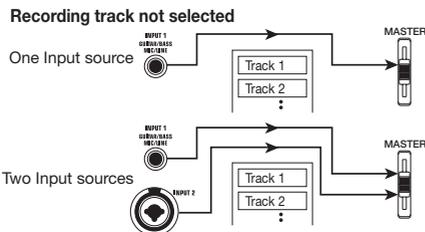
When a status key is red, the track is in the recording standby condition and the input signal is assigned to that track.

If a mono track (1 – 4) has been selected as recording track, the signal routing will be as follows.

Mono track selected

One Input source

Two Input sources
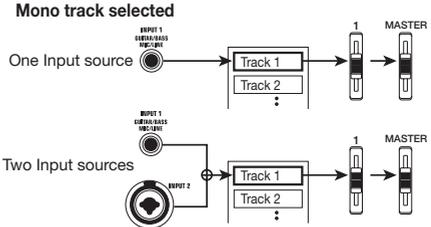
If a stereo track has been selected as recording track, the signal routing will change as shown below. Except for the V-take selection, the parameters for left/right stereo tracks are set to the same values. This is useful for recording from a stereo source such as a synthesizer or CD player.

Stereo track selected

Two Input sources
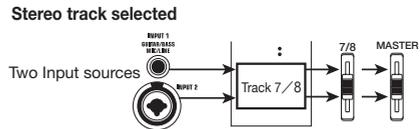
HINT

• You can select up to two tracks for recording, either one stereo track or two mono tracks. To select two mono tracks, press the first status key of an odd/even-numbered pair so that it is lit in red, and then hold down that key and press the other key so that it also is lit in red.

• If the input signal is mono, selecting a pair of stereo tracks as target will ensure that the left/right spread added by certain insert effect settings is preserved in recording.

2. **Set the fader for the recording track and the [MASTER] fader to 0 (dB). Then adjust the volume of the monitor system while playing your instrument.**

3. **To begin recording, press the ZERO [◄◄] key to return to the beginning of the song. Then hold down the REC [●] key and press the PLAY [►] key.**
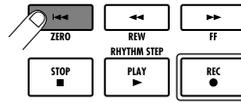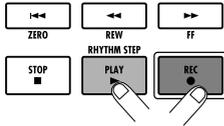
Both keys light up, and a pre-count of 4 beats is heard. Then recording will begin. Record the first instrument track while listening to the guide rhythm from the rhythm section.

HINT

- The number and the sound of the pre-count clicks can be changed (→ p. 43).
- If the input signal is distorted, refer to steps 2.1 and 2.2 to readjust the input sensitivity and recording level.

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

The REC [●] key and PLAY [►] key go out, and recording will stop. The indication "wait..." is briefly shown on the display, and then the main screen reappears.

HINT

The duration of the "wait..." period may differ. Never turn power to the unit off while "wait..." is being shown on the display. Otherwise recorded data may be lost and damage to the unit may occur.

5. To listen to the recorded content, press the ZERO [◄◄] key to return to the beginning of the song (counter zero position), and then press the PLAY [►] key.

The track will be played back together with the selected guide rhythm from the rhythm section.

HINT

- You can specify a position in minutes/seconds/milliseconds or measures/beats/ticks and move directly to that point (→ p. 35).
- By setting marks at the desired points, you can quickly jump to these points (→ p. 35).

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

To redo the recording, repeat steps 3 – 5.

7. When you are satisfied with the recorded content, press the status key of the recording track until it is lit in green.

The recording standby condition of the track is canceled.

HINT

- A recorded track can be copied, deleted, or edited (→ p. 44).
- By switching the V-take for the track on which you have recorded, you can record again on the track without erasing the current recording.

Basic operation of transport keys

REW [◄◄] key
Moves the current position back in 1-second steps. Movement speed can be increased by holding down the REW [◄◄] key and pressing the FF [►►] key.

ZERO [◄◄] key
Returns the recorder to the start position (counter zero position).

FF [►►] key
Moves the current position forward in 1-second steps. Movement speed can be increased by holding down the FF [►►] key and pressing the REW [◄◄] key.

STOP [■] key
Stops the recorder.

REC [●] key
If you press the PLAY [►] key while holding down this key, recording starts. Pressing the key during playback causes punch-in and pressing the key during recording causes punch-out (→p. 37).

PLAY [►] key
Starts recorder playback from the current position.

Step 3: Overdubbing

In this step, you will learn how to record another instrument on another track, while listening to the content you recorded in step 2. Adding parts in this way is called "overdubbing".

3.1 Making settings for input sensitivity and insert effect

As in step 2, select the input source, adjust input sensitivity and recording level, and make settings for the insert effect.

1. **Connect the next instrument you want to record, and adjust input sensitivity in the same way as in step 2.1.**

2. **Select the algorithm and patch for the insert effect in the same way as in step 2.2.**

3. **When the setting is complete, press the [EXIT] key to return to the main screen.**

3.2 Selecting a track and recording

Now you're ready to record the second instrument on another track, while listening to the content of the first track and the guide rhythm.

1. **Repeatedly press the status key of the track on which to record, until the key is lit in red.**

This track is now in the recording standby condition. Verify that the status key of the recorded track and the [RHYTHM] status key are lit in green.

2. **Set the [MASTER] fader to 0 (dB) and use the fader of the recording track to adjust the monitoring level.**

If necessary, set the recorder to playback and operate the faders to adjust the monitor level balance between the recorded track and the track to record.

3. **To begin recording, press the ZERO [◄◄] key to return to the beginning of the song.**

Then hold down the REC [●] key and press the PLAY [►] key.

After the pre-count, recording on the new track will begin. Record your instrument while listening to the guide rhythm and the recorded track.

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

The indication "wait..." is briefly shown on the display, and then the main screen reappears.

5. **To check the recorded content, press the ZERO [◄◄] key once more to return to the beginning of the song, and press the PLAY [►] key.**

The guide rhythm of the rhythm section and the previously recorded track will be played back along with the newly recorded track. Use the faders as necessary to adjust the level balance.

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

HINT
To redo the recording, repeat steps 3 – 5. You can also start rerecording from partly into the track and use the punch-in/punch-out function (→ p. 37) to redo a limited passage only.

**7.** **When you are satisfied with the recorded content, press the status key of the recording track until it is lit in green.**

The recording condition for that track is turned off. You can now record more tracks in the same way.

HINT
The maximum number of tracks that can be recorded is 8. But even when all 8 tracks have been filled, you can still use the bounce function (also called ping-pong recording) to move the contents from multiple tracks onto 1 or 2 tracks. Then you can select another V-take for the bounce source tracks and record more (→ p. 40).

Step 4: Mixing

When you have finished recording all tracks, you can use the built-in mixer to adjust parameters such as volume level, EQ (equalizer), and panning (stereo left/right positioning) to create the stereo mix.

4.1 Adjusting volume, panning, and EQ

Adjust the volume, panning, and equalization for each track by controlling the track parameters of the built-in mixer.

1. To adjust the volume balance between tracks, operate the faders in the fader section.

By operating the faders of a pair of stereo tracks, you can adjust the left/right level together.
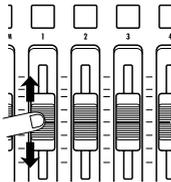
To add the drum/bass track to the mix, operate the [RHYTHM] fader after switching the [DRUM/BASS] key between lit (drum track selected) and out (bass track selected). This will adjust the drum/bass track mixing balance.

To control the mute/on status, select the drum or bass track with the [DRUM/BASS] key and then press the [RHYTHM] status key.

The signal level for each track can be checked with the respective bars in the display.
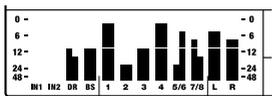
Track 1 – 8 signal level

In some cases, the current fader position may not match the volume setting value for a track stored in a project (such as when the fader was moved for another project and then the previous project was called again). In such a case, the volume may not change until the fader setting has been changed to a certain extent.

2. If an input signal is not required, press the lit INPUT [ON/OFF] key so that the key goes out.

While the INPUT [ON/OFF] key is lit, the signal from that input will be added to the stereo mix. If the input signal is not required, the key should be turned off.

3. To adjust EQ and panning for each track, press the [TRACK PARAMETER] key in the display section.

You now can adjust various track parameters such as equalization and panning for each track.

4. Use the cursor left/right keys or the status keys to select the track for which you want to make a setting.

The status key for the currently selected track is lit in orange.
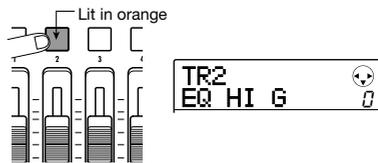
While a track parameter is shown, you can use the status keys and cursor left/right keys to switch tracks. The cursor left/right keys cycle through the following selections: drum track → bass track → audio track 1 – 8.

5. Use the cursor up/down keys to bring up the parameter that you want to adjust.

The parameters that can be selected for tracks 1 – 8 and for drum/bass track are listed in the table below.

■ **Track parameter list**

Parameter	Display	Setting range	Description
EQ HI GAIN	EQ HI G	-12 – +12dB	Adjusts high frequency EQ boost/cut.
EQ HI FREQUENCY	EQ HI F	500 – 18000(Hz)	Selects turnover frequency for high frequency EQ.
EQ LOW GAIN	EQ LO G	-12 – +12dB	Adjusts low frequency EQ boost/cut.
EQ LOW FREQUENCY	EQ LO F	40 – 1600(Hz)	Selects turnover frequency for low frequency EQ.
EFX SEND LEVEL	EFX SEND	0 – 100	Adjusts signal level sent to send/return effect.
PAN	PAN	L100 – 0 – R100	Adjusts panning (left/right positioning) for the track. For tracks 5/6, 7/8, and the drum track, this adjusts the left/right balance.
V-TAKE (tracks 1 – 8 only)	TR x-y	x=1 – 8, y=1 – 10	Selects the V-take to use for the track (→p. 32). x is the track number and y is the V-take number.
FADER	FADER	0 – 127	Adjusts the fader setting.
STEREO LINK (tracks 1 – 4 only)	ST LINK	ON/OFF	Links the parameters for tracks 1/2 or 3/4 (→p. 60).

6. **Turn the dial to select the setting value.**

HINT

By pressing the [ENTER] key while an EQ parameter or the EFX SEND LEVEL parameter is displayed, you can switch that parameter (EQ HI, EQ LO, effect send) on and off.

7. **Repeat steps 4 – 6 to adjust other parameters.**

By using the cursor left/right keys or the status keys to select other tracks, you can adjust the parameters for these tracks.

8. **To return to the main screen, press the [EXIT] key.**

HINT

Some track parameters (EQ, panning etc.) can also be used for the drum/bass track and input signals.

4.2 Applying the send/return effect

The track signals sent to the internal mixer can be individually processed by an effect that is connected internally to the send/return loop of the mixer. (This is called the send/return effect.)
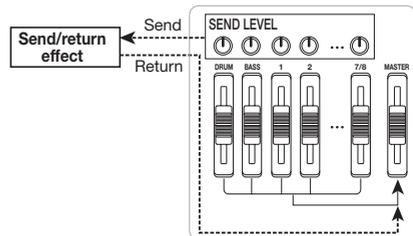
The intensity of the send/return effect can be adjusted for each track by using the send level parameter (which controls the signal level that is sent to the effect). Increasing this parameter will result in stronger effect action.

This section describes how to adjust the send level for each track.

■ **Selecting the send/return effect patch**

1. **From the main screen, press the [SEND/RETURN] key in the effect section.**

The display changes as follows. From this screen, you can select the send/return effect patch.

Patch name   Patch number

2. **Turn the dial to select the patch.**

The send/return effect has 60 patches (of which 40 are preprogrammed).

HINT

In the default condition of a project, the send level for the send/return effect is set to zero for each track. Therefore you need to raise the setting to verify the sound produced by the effect.

3. **To return to the main screen, press the [EXIT] key.**

■ **Adjusting the send/return effect intensity**

4. **From the main screen, press the [TRACK PARAMETER] key in the display section, and then use the cursor left/right keys or the status keys to select the track for which you want to adjust the send level.**

5. **Use the cursor up/down keys to bring up the indication "EFX SEND" onto the second line of the display.**

In this condition, you can adjust the send level for the track.

Send level value

6. **While playing the song, turn the dial to adjust the send level value for the track.**

7. **Adjust the send level for other tracks in the same way.**

8. **To return to the main screen, press the [EXIT] key.**

HINT

If no recording track is selected, you can apply the insert effect to the input signal.

4.3 Applying the insert effect to a track

You can apply the insert effect to the output of any track (audio track or drum/bass track), so that it post-processes the output signal of the track.

1. **From the main screen, press the [INPUT SRC] key in the effect section.**

The currently selected insert location appears on the display.

2. **Use the status keys or turn the dial to bring up the track to which you want to apply the insert effect on the second line of the display.**

The status key of the selected track lights up.
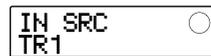
HINT

If required, you can use the effect on two mono tracks. To do this, press the status keys for an odd-numbered and even-numbered track together, or turn the dial to select a mono track x 2 as insert target (TR 1/2, TR 3/4).

3. **Press the [INSERT EFFECT] key in the effect section.**

The screen for selecting the insert effect algorithm/patch appears.

```
CLEAN          ⊕
Standard    PATCH   0
```

4. **Use the cursor up/down keys to select the algorithm, and turn the dial to select the patch.**

The currently selected algorithm/patch is shown on the display.

If required, switch the patch while playing the song to check the sound. When you finish checking it, stop the song and press the [EXIT] key to return to the main screen.

HINT

By using the bounce function (→ p. 40), you can record the processed track on an empty V-take. This lets you retain the processed sound and then apply the insert effect at another position.

Step 5: Mixdown

When the mix is ready, you can transfer it onto two tracks to create the finished song. This procedure is called "mixdown".

For mixdown, you can either use the MASTER OUTPUT connectors and record the song on an external recorder, or you can record the song on the internal master track of the MRS-8.

The master track is a dedicated pair of stereo tracks that is separate from the normal audio tracks. When you select the master track as recording track, the signal immediately after the [MASTER] fader is recorded.
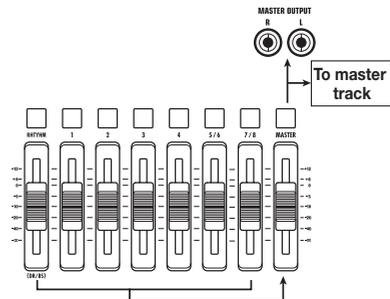
This section explains the mixdown procedure for recording on the master track.

5.1 Using the mastering effect

By applying the insert effect immediately before the [MASTER] fader, you can process the stereo mix signal for mixdown. If you select a patch of the MASTERING algorithm, you can adjust the sound pressure and tonal quality of the final mix during mastering.

NOTE

While the insert effect is inserted immediately before the [MASTER] fader, you cannot use the effect for processing the input signal or for post-processing a recorded track.

1. **Press the [INPUT SRC] key.**

The current insert effect position is shown on the display.

2. **Turn the dial to bring up the indication "MASTER" on the second line of the display.**

```
IN SRC        ◯
MASTER
```
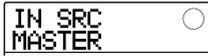
The insert effect is now inserted immediately before the [MASTER] fader.

3. **When the setting is complete, press the [EXIT] key to return to the main screen.**

4. **Press the [INSERT EFFECT] key and use the cursor up/down keys to bring up the indication "MASTRING" on the first line of the display.**

The insert effect algorithm is switched to MASTERING. The second line of the display shows the currently selected patch.

```
MASTRING PATCH  ✦
PlusAlfa      0
```

5. **While playing the song, turn the dial to select the patch.**

If desired, you can edit the patch to modify the effect further (→ p. 95).

If the sound is distorted when you apply the mastering effect, verify that the sound of each track is not distorted and then lower the overall fader setting.

6. **When you have checked the sound, stop the song and press the [EXIT] key.**

The main screen returns.

5.2 Mixdown onto the master track

After the mastering effect settings have been made, record the final mix on the master track.

1. **From the main screen, press the ZERO [◄◄] key to return to the beginning of the song.**

2. **Press the PLAY [►] key to play the song, and operate the [MASTER] fader to adjust the volume of the stereo mix.**

The signal level after the [MASTER] fader can be checked by observing the rightmost bars of the level meter in the display. If the 0 dB segment lights up during play, fine-tune the signal level by turning down the [MASTER] fader.

After checking the level, press the STOP [■] key.
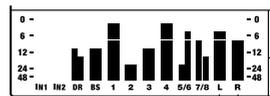
Left channel signal level ────┘ └──── Right channel signal level

3. **Repeatedly press the [MASTER] status key until the key lights up in red.**

Lit in red ──┐
Press repeatedly
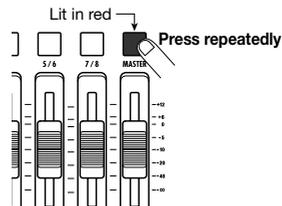
The master track is now selected for recording.

HINT

While the [MASTER] status key is lit in red, the other tracks can be operated normally. This lets you fine-tune the mixing balance also at this stage.

4. **Press the ZERO [◄◄] key to return to the beginning of the song. Then hold down the REC [●] key and press the PLAY [►] key.**

Recording on the master track starts.

5. When recording is completed, press the STOP [■] key.

6. To play the master track, repeatedly press the [MASTER] status key until it is lit in green.

Lit in green

Press repeatedly
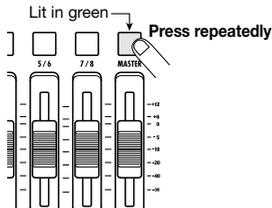
While the [MASTER] status key is lit in green, the master track can be played. During this period, the signals from all other tracks are muted. The insert and send/return effects are also disabled.

7. Return to the beginning of the song, and press the PLAY [▶] key.

The master track is played back. The playback volume can be adjusted with the [MASTER] fader.

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

9. To return the tracks and effects to normal operation, press the [MASTER] status key so that the key goes out.

Muting of the tracks and the effect bypass condition is canceled, and the unit reverts to the original condition.

HINT
- Like the other tracks, the master track also has 10 V-takes. This lets you switch the V-take and create different versions with different mixing balance (→ p. 32).
- The contents of the master track can be edited later (→ p. 44).
- You can play the master tracks of multiple projects in succession (→ p. 111).

Reference [Recorder]

This chapter explains the various audio recording and playback functions.

V-takes

Each audio track (1 – 8) and the master track contains ten virtual tracks, called "V-takes". For each track, you can select one such 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.

V-takes selected for tracks 1 - 8 and master track
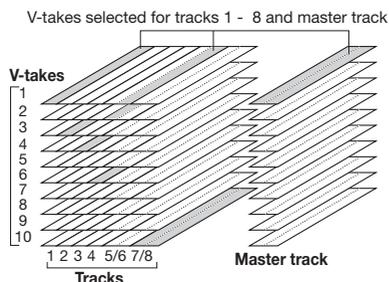
HINT
For stereo tracks (tracks 5/6, 7/8), you can select a separate V-take for the odd-numbered and even-numbered track.

Switching V-takes

Here's how to switch the V-take used by the audio tracks or the master track.

**1.** **From the main screen, press the [TRACK PARAMETER] key in the display section.**
You can now select various track parameters.

2. **Use the cursor up/down keys to bring up the indication "TR x-yy" on the display (where x is the track number and yy is the V-take number).**
The V-take name is shown on the second line of the display.

Track number ─────┐   ┌───── V-take number

V-take name ─→

```
TR  1- 1        (+)
GTR 1- 1
```
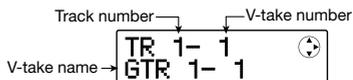
HINT
- If you select a V-take on which nothing is recorded, the indication "NO DATA" appears.
- If you select the master track, "M" is shown as the track number.

3. **Use the cursor left/right keys or the status keys to select the track for which to switch the V-take.**

```
TR  3- 1        (+)
GTR 3- 1
```
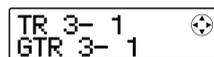
HINT
When you select a stereo track with a status key, each push of the key toggles between the odd-numbered track and even-numbered track.

4. **Turn the dial to select the V-take.**

5. **Repeat steps 3 – 4 as necessary, to select a V-take for each track.**

6. **To finish, press the [EXIT] key.**
The main screen appears again.

Changing the V-take name

A V-take that has been recorded will be automatically assigned an 8-character name, according to the following pattern. (x denotes the track number, and yy the V-take number.)

- **GTR x-yy**
V-take recorded through CLEAN, DIST, or ACO/BS SIM algorithm of insert effect

• BAS x-yy

V-take recorded through BASS algorithm of insert effect

• MIC x-yy

V-take recorded through MIC algorithm of insert effect

• LIN x-yy

V-take recorded through LINE algorithm of insert effect

• DUL x-yy

V-take recorded through DUAL MIC algorithm of insert effect

• MAS x-yy

V-take recorded through MASTERING algorithm of insert effect

• BYP x-yy

V-take recorded without passing through insert effect

• BOU x-yy

V-take recorded using the bounce function or rhythm recording function

You can change the assigned name of a V-take as follows.

**1.** **From the main screen, press the [TRACK PARAMETER] key in the display section.**

2. **Use the cursor up/down keys to bring up the indication "TR x-yy" on the display (where x is the track number and yy is the V-take number).**
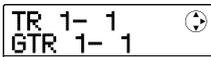
3. **Use the cursor left/right keys or the status keys to select the track for which to change the V-take name.**

NOTE

If you select a V-take on which nothing is recorded, the indication "NO DATA" appears and the name cannot be edited.

4. **Press the [EDIT] key.**

The cursor (flashing box) appears on the first character of the V-take name. This indicates that you can change the V-take name.

Cursor →

5. **Use the cursor left/right keys to move the cursor to the character to change, and use the dial or the pads and keys in the rhythm section to select the character.**

During character input, you can use the cursor left/right keys to move the input position. Characters can be input either by turning the dial or pressing the pads and keys of the rhythm section, as described below.

• Deleting a character

Move the cursor to the character to delete, and press the [EDIT] key. The character is deleted and subsequent characters move one position to the left.

• Entering a character with the dial

The dial changes the character under the cursor. Turn the dial until the desired character is shown. The following characters can be selected.

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

• Entering a character with the rhythm section pads and keys

Move the cursor to the input position and repeatedly press the respective pad or key to enter a numeral, letter, or symbol. The pad/key assignments are shown below.
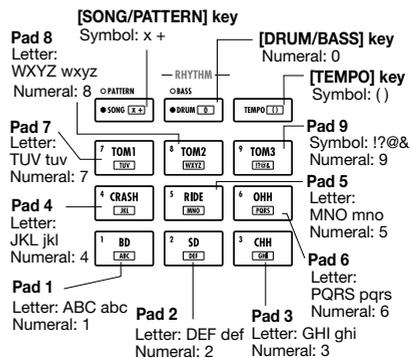
When you press a pad or key, the character is inserted and

subsequent characters move one position to the right. To clear the old name first, press the [EDIT] key repeatedly until all characters are erased, and then start the input procedure.

When all characters are cleared and you press pad 1 repeatedly, the character under the cursor changes in the order A → B → C → 1 → A → B ...

[EDIT] key

Press repeatedly

Pad 1
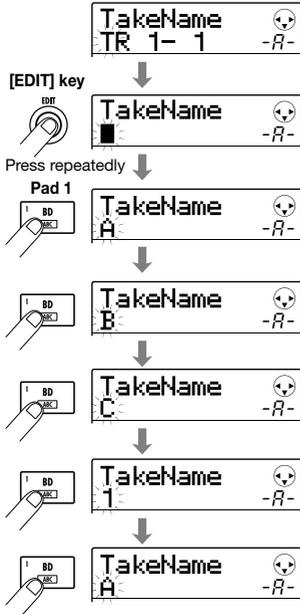
To switch between upper and lower case, press the cursor down key. The currently selected case is indicated by the "A" or "a" shown on the second line of the display. You can change the case of a letter after you have already input it by pressing the cursor down key immediately afterwards.

Upper case character

Case indication

Cursor down key

Lower case character

Case indication
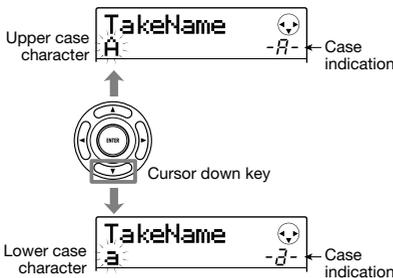
By pressing another pad or key after entering a character, the cursor will move to the next position, without the need for pressing the cursor key. If the next character to input is assigned to the same pad, you must first press the cursor right key once to move the cursor, and then enter the character. An example for entering "BASS" from scratch is shown below.

Pad 1
Press x2

Cursor [▶] key

Pad 1
Press x1

Pad6
Press x4

Cursor [▶] key

Pad 6
Press x4
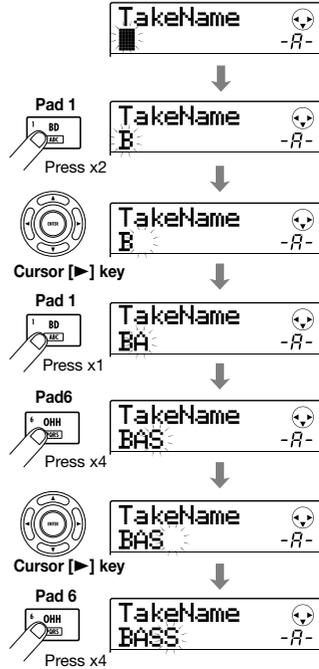
NOTE

The space character and some symbols (" # $ % ', – . / : ; < > = [ ] ^ _ ` { } ¦ \ ¯) cannot be entered with the pads and keys of the rhythm section.

6. Repeat step 5 to complete the desired name.

7. To finish, press the [EXIT] key.
The main screen appears again.

HINT

If the contents of a V-take are erased, the name reverts to "NO DATA".

Moving to a desired point in the song (locate function)

Using the counter indication on the display, you can specify a location within the song in time units (minutes/seconds/milliseconds) or in measure units (measures/beats/ticks), and move to that location.

Seconds   Measures   Ticks

```
 M  S   MS   MEASURE  BEAT  TICK
0 13 240     6- 2-  8
```

Minutes Milliseconds   Beats
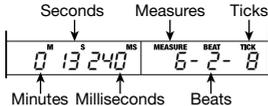
1. **Verify that the transport is stopped and the main screen is shown.**

The locate function can only be used when the transport is stopped.

2. **Use the cursor left/right keys to move the flashing part to the unit to change.**

The unit that can be changed is indicated by the flashing value.

```
 M  S   MS   MEASURE  BEAT  TICK
0 13 240     6- 2-  8
```

3. **Turn the dial to change the value.**

When you change the displayed value, the recorder immediately moves to the new location. Pressing the PLAY [▶] key starts playback from that point.

HINT
- While the transport is stopped, the REW [◀◀] / FF [▶▶] keys can be used to move backward or forward in 1-second steps.
- If you have set marks using the marker function, you can use the locate function to move among marks. For details, see the next section.

Setting marks in a song (marker function)

This function lets you set index information (marks) at any position in a song. Up to 100 marks can be set in one project. When you have specified marks, it is easy to jump to them at any time. This is useful to quickly repeat playback from a certain point during a mixing operation.

Setting a mark

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

1. **Locate the point where you want to assign a mark.**

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

2. **Press the [MARK/CLEAR] key in the control section.**

A mark is assigned to the current location. The mark number appears in the MARKER field at the bottom right of the display.

When the current position matches the mark, a marker icon appears to the right of the mark number.

```
MEASURE  BEAT  TICK
10 6- 2-  8
     6      MARKER
     6
    12    0 1
    24
    48
7/8  L  R
```

Marker icon
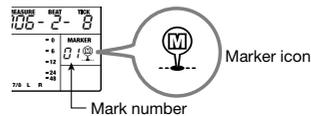
Mark number

Mark numbers (01 – 99) are 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.

Add a mark

Mark number   00   01 02   03   04
Song

⬇

Mark number   00   01 02 03   04   05
Song
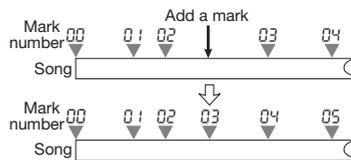
HINT
Mark number 00 is already set at the beginning of the song (the counter zero location).

Locating a mark

This section explains how to select a mark and move to its position. This can be done in two ways: you can use dedicated keys to jump to marks in the vicinity, or you can specify the mark number directly.

■ Locating the next or previous mark

1. **From the main screen, press either the MARKER [◄◄] or [►►] key in the control section.**

Each time you press the key, the unit jumps to the next mark before or after the current location.
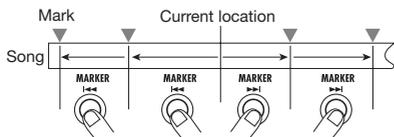
■ Specifying the mark number to locate

1. **From the main screen, use the cursor left/right keys to cause the mark number to flash.**

In this condition, the mark number can be changed.

Mark number flashes
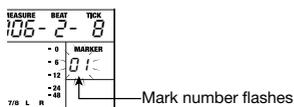
2. **Turn the dial to select the desired mark number.**

As soon as the number is changed, the recorder jumps to that number.

Deleting a mark

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

1. **Locate the mark to delete.**

The mark whose number is shown in the MARKER field can be deleted. A mark can only be deleted when it exactly matches the current location. Make sure that the mark icon is shown. If not, use the MARKER [◄◄] / [►►] keys to jump to the exact marker point.

2. **Press the [MARK/CLEAR] key in the control section.**

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

HINT

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

Playing back the same passage repeatedly (A-B repeat function)

A-B repeat is a function that automatically plays only a specified section of a song. This is useful to listen to the same passage repeatedly.

1. **Move to the point where repeat playback should start, and press the [A-B REPEAT] key in the control section.**

The key flashes, and the repeat start location (point A) is set.

HINT

The A/B point can be specified either during playback or when the MRS-8 is stopped.

2. **Move to the point where repeat playback should end, and press the [A-B REPEAT] key once more.**

The [A-B REPEAT] key changes from flashing to constantly lit, and the repeat end location (point B) is set.

NOTE

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

3. **To redo the A/B point setting, press the [A-B REPEAT] key so that it goes out, and then repeat the procedure from step 1.**

4. **To begin repeat playback, press the PLAY [►] key.**

When point B is reached, the recorder jumps to point A, and playback resumes.

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

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

The key goes out, and repeat playback is turned off. The A/B point 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-8 provides two ways to do this. You can use the panel keys to punch-in/out manually ("manual punch-in/out"), or you can cause punch-in/out to occur automatically at previously specified points ("auto punch-in/out").

Manual punch-in/out

To re-record a part of a track using the panel keys, proceed as follows.

1. Raise the fader of the track on which to perform punch-in/out to a suitable position.

2. Press the status key of that track repeatedly, until the key is lit in red.

3. Play your instrument connected to the INPUT jack and adjust the input sensitivity and recording level as required.

For information on how to adjust input sensitivity and recording level, see page 15.

4. Locate a point shortly before the intended punch-in point, and press the PLAY [▶] key to begin playback.

5. When you come to the punch-in point, press the REC [●] key.

The REC [●] key lights up, and the MRS-8 switches from playback to recording.

6. When you come to the intended punch-out point, press the REC [●] key once more.

The REC [●] key goes out, and the MRS-8 switches from recording to playback.

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

8. To check the newly recorded content, locate to a point before the punch-in point, and press the PLAY [▶] key.

Auto punch-in/out

Auto punch-in/out is a function that lets you specify beforehand the region to be re-recorded. This is convenient when you cannot operate the MRS-8 because you are playing the instrument yourself, or when very fast playback/record switching is required.

In order to perform auto punch-in/out, you must first specify the In point (the point where the recorder switches from playback to record) and Out point (the point where the recorder switches from record to playback), and then perform the recording operation.

1. Raise the fader of the track on which to perform punch-in/out to a suitable position.

2. Play your instrument connected to the INPUT jack and adjust the input sensitivity and recording level as required.

For information on how to adjust input sensitivity and recording level, see page 15.

3. Locate the point where punch-in should occur, and press the [AUTO PUNCH I/O] key.

The key flashes. This sets the "In point" at which recording will begin.

4. Locate the point where punch-out should occur, and press the [AUTO PUNCH I/O] key once more.

The key changes from flashing to solidly lit. This sets the "Out point" at which recording will end.

While the key is lit, auto punch-in/out is active.

5. Repeatedly press the status key for the track on which to perform punch-in/out, until the key is lit in red.

6. Use the Locate function to go to a spot before the In point.

If the current location is outside the region between the In and Out points, the status key flashes in red. When the current location is between the In point and Out points, the status key is lit in red. In this case, use the locate function once again to go to a point that is earlier than the In point.

7. To rehearse the auto punch-in/out process, press the PLAY [▶] key.

The MRS-8 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 is defeated. (You are always able to monitor the input signal during this time.) Performing this action does not delete or record anything on the track.

To change the positions of the In point or Out point, press the [AUTO PUNCH I/O] key so that the key goes out, and then repeat steps 3 – 4.

When you are finished rehearsing, move 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.

The MRS-8 will begin playing. When you reach the In point, recording begins automatically (punch-in). When you reach the Out point, recording ends automatically and playback resumes (punch-out).

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

10. To listen to the recorded result, repeatedly press the status key for the track on which you recorded, until the key is lit green. Then move to a location earlier than the In point, and press the PLAY [▶] key.

To re-do the punch-in/punch-out recording, repeat steps 5 – 9.

11. When you are satisfied with the recording, press the [AUTO PUNCH I/O] key so that the key goes out.

The auto punch-in/out function is canceled, and the In point and Out point settings are discarded.

# Recording several tracks on a master track (mixdown function)

This section explains how to play recorded audio tracks as well as drum/bass track sounds and record them as a stereo mix on a master track (mixdown).

About the master track

The master track is a set of stereo tracks that is separate from the normal audio tracks. The most common use of the master track is as a track on which the end result of a mixdown process is recorded.

The MRS-8 offers one master track for each project. Similar to the regular audio tracks, the master track also has ten virtual tracks (V-takes). This allows you to record different mixes on several V-takes and select the optimum take later.

When you switch the master track to the recording condition, the signal after passing the [MASTER] fader (the same signal as available from the MASTER OUTPUT jacks) is recorded on the master track.
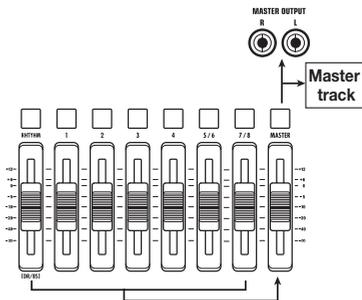

HINT
It is possible to play the master tracks of several projects in succession (→ p. 111).

Master track mixdown steps

Here's how to mix audio tracks and the drum/bass track sound onto two stereo channels and record these on the master track.

1. **Press the [TRACK PARAMETER] key in the display section and use the cursor up/down keys to bring up the indication "TR x-yy" on the display (where x is the track number and yy is the V-take number).**

```
TR 4- 1       ⊕
GTR 4- 1
```
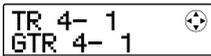
2. **Use the [MASTER] status key or the cursor left/right keys to select the master track.**

The name of the V-take selected for the master track is shown. (If there is noting recorded on the V-take, the indication "NO DATA" is shown.)

```
TR M- 1       ⊙
NO DATA
```
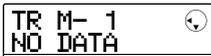
3. **Use the dial to select the V-take.**

When you have selected the V-take, press the [EXIT] key to return to the main screen.

4. **From the main screen, press the [MASTER] status key so that the key is lit in red.**

The master track is now ready for recording. The signal after passing the [MASTER] fader will be sent to the master track.
The other tracks operate normally, also while the [MASTER] status key is lit in red.

5. **Press the PLAY [▶] key to start playback and adjust the mixing balance.**

The individual track level settings as well as panning, insert effect, and send/return effect settings all have an influence on the signal that is sent to the master track.
Adjust levels while watching the L/R level meter, and make sure that no signal clipping occurs.

6. **To carry out the mixdown operation, press the ZERO [◀◀] key to return to the beginning of the song, and then press the PLAY [▶] key while holding down the REC [●] key.**

Recording on the master track starts.

7. **When recording is complete, press the STOP [■] key.**

Playing the master track

To play the recorded master track, proceed as follows.

1. **From the main screen, press the [MASTER] status key repeatedly until the key is lit in green.**

The master track is now ready for playback. In this mode, all other status keys are out and the audio tracks and drum/bass track are muted. The insert and send/return effects are also switched off.
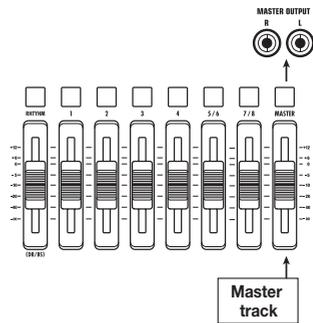
2. **Press the ZERO [◀◀] key to return to the beginning of the song, and then press the PLAY [▶] key.**

Playback of the master track starts. To adjust the playback volume, use the [MASTER] fader.

3. **To stop recorder playback, press the STOP [■] key.**

4. **To cancel the master track playback mode, press the [MASTER] status key so that the key goes out.**

Muting for the audio tracks and drum/bass track is canceled, and the unit returns to the previous condition.

Combining multiple tracks on one or two tracks (bounce function)

"Bounce" is a function that mixes the sound from the audio tracks and drum/bass track, and records them on a mono or stereo audio track. (This is sometimes called "ping-pong recording".)

You might bounce the contents of tracks 1 – 6 onto tracks 7/8 and then switch the V-takes of tracks 1 – 6 to record new versions of your performance.

If necessary, you can play back all tracks 1 – 8, and bounce the signal onto an empty V-take of a selected track.

HINT

- You can mix the signals from the [INPUT] jacks into the bounce recording.
- You can bounce the drum/bass track only, while playing back all other tracks (→ p. 42). This lets you record a drum fill-in by hitting the pads while listening to the audio tracks.

Making bounce settings

Before using the bounce function, make the required settings as follows.

■ Selecting operation status of bounce destination track(s)

By default, the bounce destination recording track(s) will be automatically muted. This is to prevent the content of the track being mixed to the bounced signal.

To play back the V-take of a track while you bounce-record onto another V-take of that track, use the following procedure to change the internal setting so that the recording track(s) will also play back.

1. From the main screen, press the [SYSTEM/UTILITY] key.

The indication "SYSTEM PROJECT" appears on the display.

2. Use the cursor left/right keys to bring up the indication "SYSTEM BOUNCE" on the display, and press the [ENTER] key.

3. Use the cursor left/right keys to bring up the indication "BOUNCE RECTRACK" on the display, and press the [ENTER] key.

The current setting is shown.

```
RECTRACK    ○
MUTE
```

The indications have the following meaning.

- **MUTE:**
The recording track(s) will be muted (default setting).

- **PLAY:**
The recording track(s) will play back.

4. To play the bounce destination track, turn the dial to change the setting to "PLAY".

5. To return to the main screen, press the [EXIT] key repeatedly.

■ 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). To play back a track while bouncing onto another V-take of that track, you can use the following procedure to change the recording destination V-take.

1. From the main screen, press the [SYSTEM/UTILITY] key.

The indication "SYSTEM PROJECT" appears on the display.

2. Use the cursor left/right keys to bring up the indication "SYSTEM BOUNCE" on the display, and press the [ENTER] key.

3. Verify that the indication "BOUNCE REC TAKE" is shown on the display, and press the [ENTER] key.

The V-take currently selected as bounce destination is shown.

```
REC TAKE        ◯
CURRENT
```

The following settings are available.

• **CURRENT (default)**
The bounce result will be recorded on the V-take currently selected for the recording track.

• **1 – 10**
Regardless of the V-take currently selected for the track, the bounce result will be recorded on the specified V-take.

4. **Turn the dial to specify the recording destination V-take.**

5. **To return to the main screen, press the [EXIT] key repeatedly.**

HINT
By setting the operation for the bounce destination track(s) to "PLAY" and selecting an unused V-take as recording destination, you can play all tracks and bounce the result as an entire song onto the V-take.

Executing bounce recording

This example explains how to bounce the contents of all tracks onto V-take 10 of tracks 7/8.

1. **Refer to "Making bounce settings" and set the BOUNCE RECTRACK parameter to "PLAY".**

2. **Refer to "Making bounce settings" and set the BOUNCE REC TAKE parameter to "10".**

3. **Press the status key of tracks 7/8 repeatedly, until the key is lit in red.**
In this condition, V-takes 10 of tracks 7/8 are selected as bounce destination.

HINT
• When a single mono audio track is selected as bounce destination, the bounce signal is mixed to mono for recording.
• When a pair of mono tracks with odd/even numbers is selected as bounce destination, the bounce signal is recorded in stereo. To achieve correct left/right positioning of the

bounced result, set the Pan parameter for the odd-numbered and even-numbered tracks to separate left and right settings.

4. **Press the [BOUNCE] key.**
The key lights up and the bounce function for the destination tracks is turned on. While the key is lit, the track(s)/V-take(s) selected in steps 2 and 3 are used as recording destination. Other tracks and effects are unchanged.

5. **Play the song from the beginning and adjust the mixing balance of the various tracks.**
The individual track level and panning settings as well as the insert effect and send/return effect settings all have an influence on the mixed signal that is sent to the bounce destination tracks. Adjust levels while watching the L/R level meter, and make sure that no signal clipping occurs.

6. **Press the ZERO [◄◄] key to return to the counter zero position, and press the PLAY [►] key while holding down the REC [●] key.**
Bounce recording starts.

7. **When recording is complete, press the STOP [■] key.**

HINT
It is also possible to combine the bounce function and the auto punch-in/out function (→ p. 37).

# Recording drum/bass sound on audio tracks (rhythm recording)

The MRS-8 allows you to bounce only the drum track or bass track onto any track, while playing all tracks. This function is called "rhythm recording".

This lets you record a drum fill-in by hitting the pads while listening to the audio tracks.

Selecting the recording source

In the default condition of a project, the signal immediately after the [MASTER] fader is selected as recording source for bouncing. To record the drum/bass track, you must switch the recording source to the drum track or bass track.

1. **From the main screen, press the [SYSTEM/UTILITY] key in the display section.**

```
SYSTEM      ⊙
PROJECT
```

2. **Use the cursor left/right keys to bring up the indication "SYSTEM BOUNCE" on the display, and press the [ENTER] key.**

3. **Use the cursor left/right keys to bring up the indication "BOUNCE REC SRC" on the display, and press the [ENTER] key.**

The currently selected bounce recording source is shown.

```
REC SRC     ◯
MASTER
```

The following settings are available.

• **MASTER**
Signal immediately after [MASTER] fader

• **DRUM TR**
Drum track

• **BASS TR**
Bass track

4. **Turn the dial to select "DRUM TR" or "BASS TR" as recording source.**

5. **Press the [EXIT] key repeatedly to return to the main screen.**

Rhythm recording procedure

While playing the audio tracks, you can now record the drum/bass track on any audio track.

1. **From the main screen, press the [BOUNCE] key.**

The key lights up, and bounce recording is active.

2. **Repeatedly press the status key for the track on which to record, until the key is lit in red.**

In this condition, the signal of the track selected in step 4 of "Selecting the recording source" will be recorded.

HINT

To record the drum track in stereo, select a pair of stereo tracks (or two mono tracks) as recording destination. If only one mono track is selected, the left/right signals will be mixed to mono.

3. **Press the [SONG/PATTERN] key in the rhythm section, and turn the dial to select the rhythm pattern/rhythm song.**

To record your pad play, select an empty rhythm pattern/rhythm song. Check that the sounds to play are assigned to the pads.

4. **Press the PLAY [▶] key and adjust the drum/bass track output level.**

Adjust levels while watching the level meter, and make sure that no signal clipping occurs.

5. **Press the ZERO [◀◀] key to return to the counter zero position, and start recording.**

The rhythm pattern/rhythm song play is recorded on the audio track. If you hit the pads during recording, this sound will also be captured.

**6.** **When play is complete, press the STOP [■] key.**

7. **Press the [BOUNCE] key.**

The key goes out, and bounce recording is canceled. To return to the normal condition, switch the recording source back to "MASTER", as described in "Selecting the recording source".

Making settings for pre-count operation

In the default condition of a project, a pre-count of four beats is heard before the start of recording. The number of beats and the pre-count volume can be changed as follows.

1. **From the main screen, press the [SYSTEM/UTILITY] key in the display section.**

```
SYSTEM        ⊙
PROJECT
```

2. **Use the cursor left/right keys to bring up the indication "SYSTEM PreCount" on the display, and press the [ENTER] key.**

The display changes as follows.

```
PreCount      ⊙
COUNT
```

3. **To change the number of pre-count beats, press the [ENTER] key.**

The current setting is shown. Turn the dial to make the selection from the following choices.

• **OFF**
The pre-count is turned off.

• **1 – 8**
A pre-count of 1 – 8 beats is heard.

• **SPECIAL**
A special pre-count as follows is heard.



```
COUNT         ○
4
```
Number of pre-count beats

When the setting is complete, press the [EXIT] key to return to the screen of step 2.

4. **To change the volume of the pre-count sound, use the cursor left/right keys to bring up the indication "PreCount VOLUME" on the display, and press the [ENTER] key.**

The display changes as follows. Turn the dial to set the volume (0 – 15).
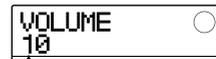
```
VOLUME        ○
10
```
Pre-count volume

5. **When the setting is complete, press the [EXIT] key repeatedly to return to the main screen.**

When you initiate a recording, the selected number of pre-count beats will be heard at the selected volume.

Reference [Track Editing]

This section explains how to edit audio data contained on tracks 1 – 8 of the recorder section. There are two major types of editing functions: specifying a range within a track for editing, or editing an entire V-take.

Editing a range of data

The procedure for specifying a range within a track and then performing an editing action is explained below.

Basic steps for range editing

When performing editing for a specified range of data, some steps are similar for each action. These are as follows.

1. From the main screen, press the [SYSTEM/ UTILITY] key in the display section.

The indication "SYSTEM PROJECT" appears on the display.

```
SYSTEM       ⊙↔
PROJECT
```

2. Use the cursor left/right keys to bring up the indication "SYSTEM TR EDIT" on the display.

```
SYSTEM       ⊙↔
TR EDIT
```

3. Press the [ENTER] key.

The track edit menu for operating on a range of data appears.

```
TR EDIT      ⊙↔
Copy
```
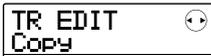
4. Use the cursor left/right keys to select one of the following editing commands.

• **Copy**

Copy a specified range of audio data.

• **Move**

Move a specified range of audio data.

• **Erase**

Erase a specified range of audio data.

• **Trim**

Retain only a specified range of audio data and erase the rest.

• **Fade I/O (Fade-in/out)**

Perform fade-in/fade-out over a specified audio data interval.

• **Reverse**

Reverse a specified range of audio data.

5. Press the [ENTER] key.

The screen for selecting the track and V-take for editing appears. The display shown below is an example for selecting the Copy command in step 4.

```
Copy Src      ◯
TR 1- 1
```
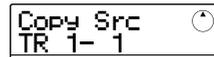
6. Use the dial or the status keys to select the track (1 – 8, MASTER), and use the cursor up/down keys to select the V-take number (1 – 10).

```
Copy Src      ◯
TR 3- 1
```
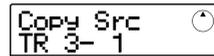
A V-take that is not currently selected for the track can also be selected for editing. When track 8 is selected, turning the dial clockwise lets you select odd/even track pairs (track 1/2, track 7/8 etc.) or the master track.

```
Copy Src      ◯
TR1/2
```
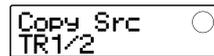
NOTE

- You can press the status keys for two adjacent odd/even-numbered mono tracks together to select these tracks.
- Repeatedly pressing the status keys for stereo tracks selects the odd-numbered track, even-numbered track, and stereo track in sequence.
- When two tracks or the master track have been selected as editing source, the editing destination must also be two tracks or the master track. The currently selected V-take for each track will be the destination.

7. **Press the [ENTER] key.**

The subsequent steps will differ, depending on which command was selected in step 4. See the sections for the respective commands.

8. **When the editing command has been carried out, press the [EXIT] key repeatedly to return to the main screen.**

NOTE

After executing an edit command for rewriting audio data, the original data cannot be restored. To retain the condition before editing, use the capture and swap function (→ p. 53).

Copying a specified range of data

You can copy the audio data of a specified range to a specified position on a specified track/V-take. This action will overwrite the existing data at the destination location. The copy source data will be unchanged.

Copy source track

Copy

Copy destination track
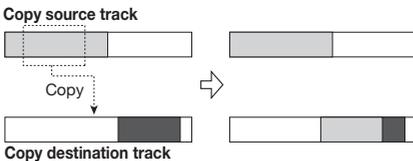
1. **Refer to steps 1 – 6 of "Basic steps for range editing" to select the copy source track/V-take, and press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the copy start point.

```
Copy Src
START
 M  S  MS   MEASURE BEAT TICK
 0  0  0    1- 1- 0
                    MARKER
                    00
```

The copy range start point is shown on the counter in minutes, seconds, milliseconds, and in measures, beats, and ticks.

2. **Use the cursor left/right keys to move the flashing section of the counter, and turn the dial to specify the copy start point.**

The point can be specified in minutes/seconds/milliseconds, or in measures/beats/ticks. You can also use the MARKER [◄◄] / [►►] keys to jump to a mark (→ p. 36) and use this as starting point.

HINT

If you specify a point where no audio data exist, the second line of the display shows *.

3. **Press the [ENTER] key.**

The display changes to "Copy Src END". This screen lets you specify the copy range end point.

```
Copy Src
END
 M   S  MS   MEASURE BEAT TICK
 3  15  0    15- 4- 0
                    MARKER
                    00
```

HINT

The specified range is memorized until another entry is made. This lets you keep using the setting for editing the same range on a number of tracks.

4. **Specify the copy end point in the same way as described in step 2.**

If you press the PLAY [►] key at this point, the specified range will be played.

5. **Press the [ENTER] key.**

The display now shows "Copy Dst TR x-yy" (where x is the track number and yy the V-take number). From this screen, you can specify the copy destination track/V-take.

```
Copy Dst
TR 1- 1
```

HINT

You can select the same track as copy source and copy destination, and the copy destination range may overlap the copy source range.

6. **Select the copy destination track/V-take in the same way as for the copy source, and press the [ENTER] key.**

The display changes as follows. From this screen, you can specify the copy destination start point.

```
Copy Dst
TO
   M  S   MS  MEASURE BEAT TICK
   3 15   0    75- 4- 0
                      MARKER
                       00
```
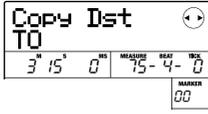
7. **Specify the copy destination start point in the same way as in step 2, and press the [ENTER] key.**

The indication "Copy SURE?" appears on the display.

8. **To carry out the copy operation, press the [ENTER] key.**

When the copy operation is completed, the unit returns to the track edit menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Moving a specified range of data

You can move the audio data of a specified range to a specified position on a specified track/V-take. This action will overwrite the existing data at the destination location. The move source data will be erased.

Move source track

Move

Move destination track
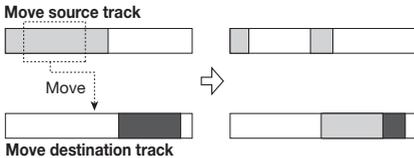
1. **Refer to steps 1 – 6 of "Basic steps for range editing" to select the move source track/V-take, and press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the move start point.

```
Move Src
START
   M  S   MS  MEASURE BEAT TICK
   0  0   0    1- 1- 0
                      MARKER
                       00
```

2. **Use the cursor left/right keys to move the flashing section of the counter, and turn the dial to specify the move start point.**

The point can be specified in minutes/seconds/milliseconds, or in measures/beats/ticks.

HINT

If you specify a point where no audio data exist, the second line of the display shows *.

3. **Press the [ENTER] key.**

The display changes to "Move Src END". This screen lets you specify the move range end point.

```
Move Src
END
   M  S   MS  MEASURE BEAT TICK
   4 28   0    103- 3- 44
                       MARKER
                        00
```
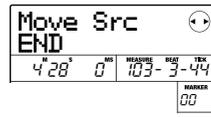
4. **Specify the move end point in the same way as described in step 2.**

If you press the PLAY [▶] key at this point, the specified range will be played.

5. **Press the [ENTER] key.**

The display now shows "Move Dst TR x-yy" (where x is the track number and yy the V-take number). From this screen, you can specify the move destination track/V-take.

```
Move Dst
TR 1- 1
```
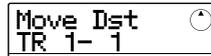
HINT

You can select the same track as move source and move destination.

6. **Select the move destination track/V-take in the same way as for the move source, and press the [ENTER] key.**

The display changes as follows. From this screen, you can specify the move destination start point.

```
Move Dst
TO
   M  S   MS  MEASURE BEAT TICK
   4 28   0    103- 3- 44
                       MARKER
                        00
```

7. **Specify the move destination start point in the same way as for the move source, and press the [ENTER] key.**

The indication "Move SURE?" appears on the display.

8. **To carry out the move operation, press the [ENTER] key once more.**

When the move operation is completed, the unit returns to the track edit menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Erasing a specified range of data

You can erase the audio data of a specified range and return the range to the mute (non-recorded) condition.

1. **Refer to steps 1 – 6 of "Basic steps for range editing" to select the track/V-take for erasing, and press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the erase start point.
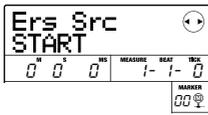
2. **Use the cursor left/right keys to move the flashing section of the counter, and turn the dial to specify the erase start point.**

The point can be specified in minutes/seconds/milliseconds, or in measures/beats/ticks.

HINT
If you specify a point where no audio data exist, the second line of the display shows *.

3. **Press the [ENTER] key.**

The display changes to "Ers Src END". This screen lets you specify the erase range end point.

4. **Specify the erase end point in the same way as described in step 2.**

If you press the PLAY [▶] key at this point, the specified range will be played.

5. **Press the [ENTER] key.**

The indication "Erase SURE?" appears on the display.

6. **To carry out the erase operation, press the [ENTER] key.**

When the erase operation is completed, the unit returns to the track edit menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Trimming a specified range of data

You can erase the audio data outside of a specified range and adjust the data start/end point (trimming). This is useful to eliminate unnecessary portions from a completed master track.
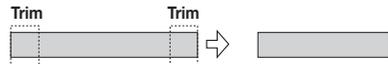
NOTE
When data before a specified section are erased (trimmed), the remaining audio data will move up by that amount. Therefore the timing may become mismatched with regard to other tracks.

1. **Refer to "Basic steps for range editing" to select the track/V-take from which to trim data, and press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the start point of the range that you want to keep.
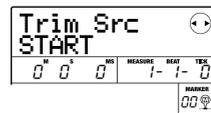
2. Use the cursor left/right keys to move the flashing section of the counter, and turn the dial to specify the start point.

The point can be specified in minutes/seconds/milliseconds, or in measures/beats/ticks.

HINT

If you specify a point where no audio data exist, the second line of the display shows *.

3. Press the [ENTER] key.

The display changes to "Trim Src END". This screen lets you specify the end point of the range that you want to keep.
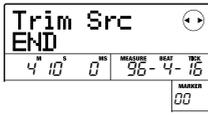
4. Specify the end point in the same way as described in step 2.

If you press the PLAY [▶] key at this point, the specified range will be played.

5. Press the [ENTER] key.

The indication "Trim SURE?" appears on the display.

6. To carry out the trimming operation, press the [ENTER] key.

When the trimming operation is completed, the unit returns to the track edit menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Fade-in/fade-out of specified data range

You can fade in or fade out the audio data over a specified range.
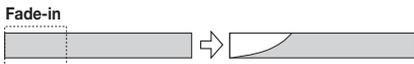
Fade-in

1. Refer to steps 1 – 6 of "Basic steps for range editing" to select the track for fade-in or fade-out, and press the [ENTER] key.

The display changes as follows. In this condition, you can specify the fade-in/out start point.

2. Use the cursor left/right keys to move the flashing section of the counter, and turn the dial to specify the fade-in/out start point.

The point can be specified in minutes/seconds/milliseconds, or in measures/beats/ticks.

HINT

If you specify a point where no audio data exist, the second line of the display shows *.

3. Press the [ENTER] key.

The display changes to "Fade Src END". This screen lets you specify the fade-in/out end point.

4. Specify the fade-in/out end point in the same way as described in step 2.

If you press the PLAY [▶] key at this point, the specified range will be played.

5. Press the [ENTER] key.

The display changes as follows.

Volume change curve
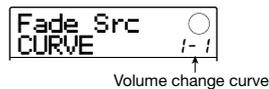
6. Turn the dial to select the fade-in or fade-out curve.

Curves I-1 to I-3 are for fade-in, and curves o-1 to o-3 are for fade-out. The different kinds of curves look as follows.

Fade-in

I-1　　　　　　I-2　　　　　　I-3

Fade-out

o-1　　　　　　o-2　　　　　　o-3
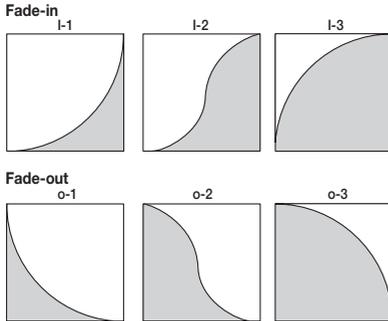
7. Press the [ENTER] key.

The indication "Fade SURE?" appears on the display.

8. To carry out the fade-in/fade-out operation, press the [ENTER] key once more.

When the fade-in/fade-out operation is completed, the unit returns to the track edit menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Reversing a specified range of audio data

You can reverse the order of a specified range of audio data.

Reverse

| A | B | C | D | E | ⇨ | E | D | C | B | A |

1. Refer to steps 1 – 6 of "Basic steps for range editing" to select the track/V-take for reversing, and press the [ENTER] key.

The display changes as follows. In this condition, you can specify the reverse start point.

```
Rvrs Src      ⊙
START
 M  S  MS   MEASURE BEAT TICK
 0  0  0    1- 1- 0
                MARKER
                00
```

2. Use the cursor left/right keys to move the flashing section of the counter, and turn the dial to specify the reverse start point.

The point can be specified in minutes/seconds/milliseconds, or in measures/beats/ticks.

HINT

If you specify a point where no audio data exist, the second line of the display shows *.

3. Press the [ENTER] key.

The display changes to "Rvrs Src END". This screen lets you specify the reverse end point.

```
Rvrs Src      ⊙
END
 M  S  MS   MEASURE BEAT TICK
 1 18  0    42- 2- 0
                MARKER
                00
```

4. Specify the reverse end point in the same way as described in step 2.

If you press the PLAY [▶] key at this point, the specified range will be played.

5. Press the [ENTER] key.

The indication "Reverse SURE?" appears on the display.

6. To carry out the reversing operation, press the [ENTER] key.

When the reverse operation is completed, the unit returns to the track edit menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Editing using V-takes

Recorded audio data can also be edited in V-take units. This is convenient to exchange the data on two V-takes or delete a V-take that is no longer needed. The procedure is explained in this section.

Basic steps for V-take editing

When editing audio data in V-take units, some steps are similar for each action. These are as follows.

1. **From the main screen, press the [TRACK PARAMETER] key in the display section.**

2. **Use the cursor up/down keys to bring up the following indication on the display.**

Track number ────┐   ┌── V-take number

```
TR 1- 1      ⊕
V-take name → GTR 1- 1
```
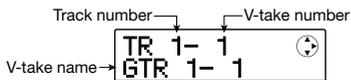
This screen lets you select the V-take. While the screen is shown, the V-take for the audio tracks (1 – 8, master track) can be switched.

HINT
If you select a V-take on which nothing is recorded, the indication "NO DATA" is shown.

3. **Use the cursor left/right keys or the status keys and the dial to select the track and V-take.**

The status key for the currently selected track is lit in orange. It is also possible to select the master track. In this case, the track number indication shows "M".

HINT
Pressing the status key for a stereo track repeatedly selects the odd-numbered track and even-numbered track in sequence.

4. **Press the [FUNCTION] key in the control section.**

Commands for editing audio data in V-take units appear on the display.

```
ERASE        ⊕
TR 1- 2
```

5. **Repeatedly press the [FUNCTION] key to call up the command to use. The following editing commands are available.**

- **Erase**
Erase the audio data on a specified V-take.

- **Copy**
Copy the audio data of a specified V-take to another V-take.

- **Move**
Move the audio data of a specified V-take to another V-take.

- **Exchg (Exchange)**
Exchange the audio data of a specified V-take with the data of another V-take.

- **Import**
Import any V-take from another project saved on SD card.

HINT
You can still change your track and V-take selection while selecting an editing command.

6. **Press the [ENTER] key.**
The subsequent steps will differ, depending on which command was selected in step 5. See the sections for the respective commands.

7. **When the editing command has been carried out, press the [EXIT] key repeatedly to return to the main screen.**

NOTE
After executing an edit command for rewriting audio data, the original data cannot be restored. To retain the condition before editing, use the capture and swap function (→ p. 53).

Erasing a V-take

You can erase the audio data on a specified V-take. The V-take is returned to the non-recorded condition.

Erase

1. **Refer to steps 1 – 5 of "Basic steps for V-take editing" to select the track/V-take to erase and to bring up the indication "ERASE" on the display. Then press the [ENTER] key.**

The indication "ERASE SURE?" appears on the display.

2. **To carry out the erase operation, press the [ENTER] key once more.**

The V-take name changes to "NO DATA" and the V-take reverts to the non-recorded condition. When the erase operation is completed, the V-take selection screen appears again.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Copying a V-take

You can copy the audio data of a specified V-take to any other V-take. This action will overwrite any existing data on the destination V-take. The data on the copy source V-take will be unchanged.

Copy source track

Copy

Copy destination track
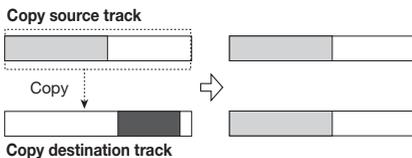
1. **Refer to steps 1 – 5 of "Basic steps for V-take editing" to select the track/V-take to copy and to bring up the indication "COPY" on the display. Then press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the copy destination track/V-take.

COPY TO
TR 1- 2E
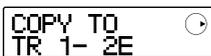
HINT

If nothing is recorded on the V-take selected as editing destination, the indication "E" is shown next to the V-take number.

2. **Use the cursor left/right keys or the status keys and the dial to select the destination track/V-take, and press the [ENTER] key.**

If no audio data exist at the copy destination, the indication "COPY SURE?" appears on the display. If audio data exist, the indication "OverWrt?" is shown. When the copy operation is performed, these data will be overwritten.

**3.** **To carry out the copy operation, press the [ENTER] key once more.**

When the copy operation is completed, the unit returns to the V-take selection menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Moving a V-take

You can move the audio data of a specified V-take to any other track/V-take. This action will overwrite any existing data on the destination V-take. The data on the move source V-take will be erased.

Move source track

Move

Move destination track
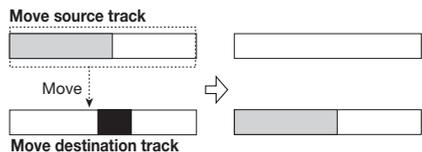
1. **Refer to steps 1 – 5 of "Basic steps for V-take editing" to select the track/V-take to move and to bring up the indication "MOVE" on the display. Then press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the move destination track/V-take.

MOVE TO
TR 1- 2E
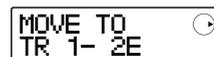
HINT

If nothing is recorded on the V-take selected as editing

destination, the indication "E" is shown next to the V-take number.

2. **Use the cursor left/right keys or the status keys and the dial to select the destination track/V-take, and press the [ENTER] key.**

If no audio data exist at the move destination, the indication "MOVE SURE?" appears on the display. If audio data exist, the indication "OverWrt?" is shown. When the move operation is performed, these data will be overwritten.

**3.** **To carry out the move operation, press the [ENTER] key once more.**

When the move operation is completed, the unit returns to the V-take selection menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Exchanging V-takes

You can exchange the audio data of two specified V-takes.
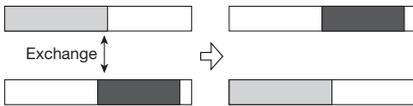
NOTE
You cannot exchange V-takes of the master track.

1. **Refer to steps 1 – 5 of "Basic steps for V-take editing" to select the track/V-take to exchange and to bring up the indication "EXCHG" on the display. Then press the [ENTER] key.**

You can now select the other track/V-take.
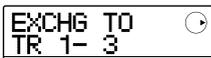
2. **Use the cursor left/right keys or the status keys and the dial to select the exchange destination track/V-take, and press the [ENTER] key.**

The indication "EXCHG SURE?" appears on the display.

3. **To carry out the exchange operation, press the [ENTER] key once more.**

When the exchange operation is completed, the unit returns to the V-take selection menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Importing a V-take from another project

You can import any V-take from another project into a specified track/V-take of the current project. Any audio data on the destination V-take are overwritten by the imported V-take.

Track of import source project

Import destination track
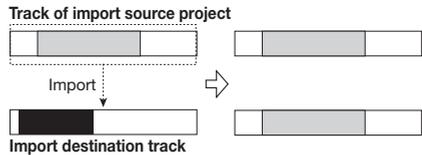
NOTE
The master track cannot be specified as import destination or import source.

1. **Refer to steps 1 – 5 of "Basic steps for V-take editing" to select the import destination track/V-take and to bring up the indication "IMPORT" on the display. Then press the [ENTER] key.**

The name of the import source project is shown on the display.
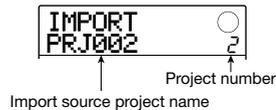
Import source project name — Project number

2. **Turn the dial to select the import source project, and press the [ENTER] key.**

The display changes as follows. In this condition, you can specify the import source track/V-take.

Track/V-take number

```
TR 6- 1      ⊙▸
T06-LdVo      2
```
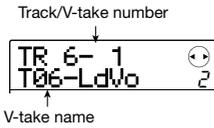
V-take name

3. Use the cursor left/right keys and the dial to select the track/V-take to import, and press the [ENTER] key.

When an unrecorded track/V-take is selected, the indication "NO DATA" is shown instead of the V-take name.

4. Press the [ENTER] key.

The indication "IMPORT SURE?" appears on the display. If audio data exist at the import destination, the indication "OverWrt?" is shown. When the import operation is performed, these data will be overwritten.

5. To carry out the import operation, press the [ENTER] key once more.

When the import operation is completed, the unit returns to the V-take selection menu.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Track capture and swap

You can capture the audio data of any track and temporarily store them. Later you can swap the captured data with the current data of the track. This lets you save the state of a track before an editing operation. If the result of the operation is not as desired, you can then easily restore the track to its previous state.
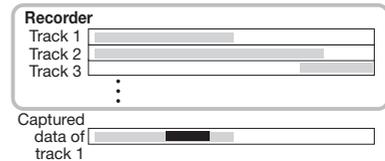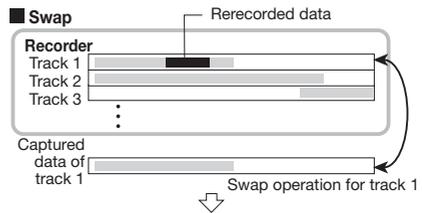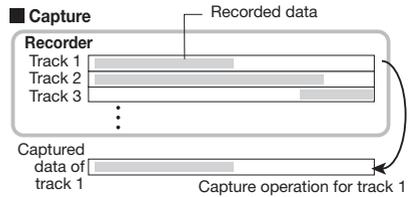
Capture/swap is performed on a track basis. If required, you can capture all audio tracks.

Captured audio data will be retained on the SD card until another project is loaded or the power is turned off.

Capturing a track

You can capture the audio data of any specified track.

1. From the main screen, press the [SYSTEM/UTILITY] key in the display section.

The indication "SYSTEM PROJECT" appears on the display.

```
SYSTEM          ⊙
PROJECT
```

2. **Use the cursor left/right keys to bring up the indication "SYSTEM CAP/SWAP" on the display, and press the [ENTER] key.**

The display changes as follows.

```
CAPTURE         ○
TR1
```

3. **Use the status keys or the dial to select a track for capture.**

The status key for the currently selected track is lit in orange. It is also possible to select the master track. In this case, the indication shows "MASTER" and the [MASTER] status key is lit.

HINT

• Tracks for which stereo link is active, stereo tracks, and the master track can only be captured in stereo.

• A track for which an unrecorded V-take is selected cannot be captured.

4. **Press the [ENTER] key.**

The indication "CAPTURE SURE?" appears on the display.

5. **To carry out the capture operation, press the [ENTER] key once more.**

When capture is completed, the indication "SWAP TR x" (where x is the track number) appears on the display. This indicates that the track has been captured and can be swapped if necessary.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

6. **To return to the main screen, press the [EXIT] key repeatedly.**

Swapping track data

You can swap the current data of a track with the captured data.

1. **From the main screen, press the [SYSTEM/ UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

2. **Use the cursor left/right keys to bring up the indication "SYSTEM CAP/SWAP" on the display, and press the [ENTER] key.**

3. **Use the status keys or the dial to select a track that was previously captured.**

When you select a captured track, the indication "SWAP" appears on the display.

```
SWAP            ○
TR1
```

HINT

If you select a track that was not captured, the indication "CAPTURE" appears.

NOTE

Captured audio data can only be swapped with the original track.

4. **Press the [ENTER] key.**

The indication "SWAP SURE?" appears on the display.

5. **To carry out the swap operation, press the [ENTER] key once more.**

When the operation is completed, the audio data of the selected track will have been replaced by the previously captured audio data.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

HINT

By performing the swap operation once more, you can return the track contents to the previous condition.

6. **To return to the main screen, press the [EXIT] key repeatedly.**

Reference [Mixer]

This section explains the functions and operation of the mixer built into the MRS-8.

About the mixer

The MRS-8 incorporates a mixer that processes the audio track output signals as well as the drum kit/bass program output signals (the drum track/bass track) into a stereo mix that is supplied to the MASTER OUTPUT jacks.
The mixer adjusts parameters such as level, panning, EQ, and send/return effect intensity for each track.

The level for the audio tracks is adjusted with the corresponding faders in the fader section.
The [MASTER] fader adjusts the stereo mix/master track volume.
The level of the drum track and bass track is adjusted with the [RHYTHM] fader after selecting either drum track or bass track with the [DRUM/BASS] key.

Similarly, mute on/off for the audio tracks is switched using the status keys (1 – 4, 5/6, 7/8), and mute on/off for the drum/bass track is switched using the [RHYTHM] status key.
The [MASTER] status key switches the master track between recording and playback.

Control of drum track/bass track
Control of tracks 1 - 8
Control of stereo mix or master track
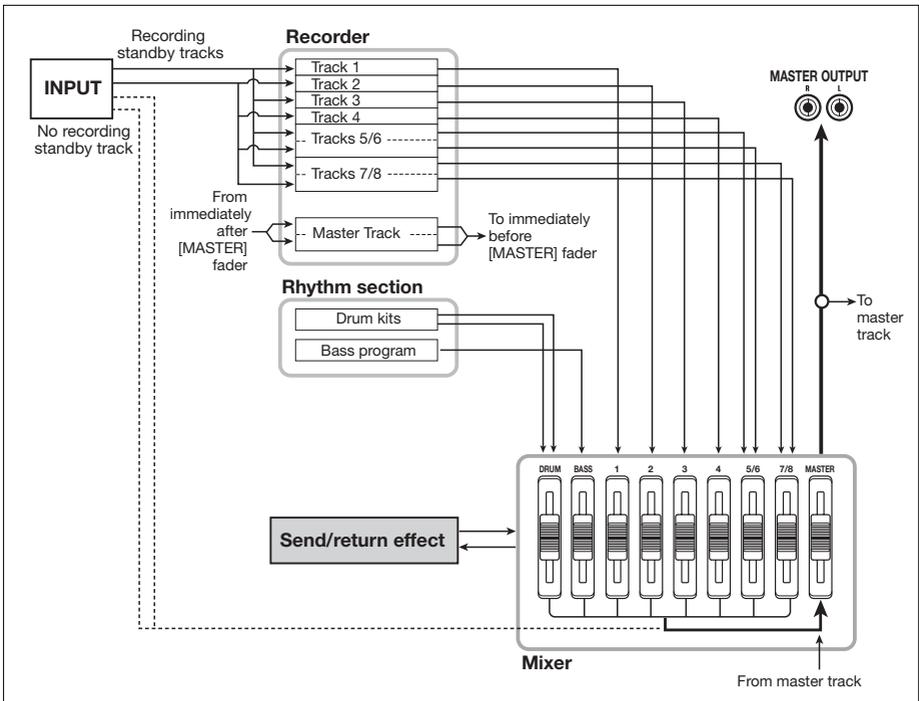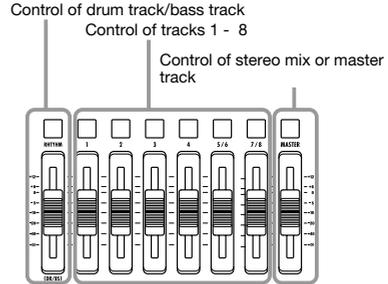
If no recording track is selected, the signal from the inputs can be sent to the mixer and mixed to the output signal during bounce and mixdown. In this case, track parameters such as panning and send/return effect depth can be set for the input signal.

Assigning input signals to recording tracks

This section explains how to select the input source signal from the INPUT 1/2 connectors and the built-in microphone, and how to send it to the audio tracks for recording.

The MRS-8 allows you to select up to two signals from the INPUT 1/2 connectors and the built-in mic. The INPUT 1 connector and the built-in mic are switchable, and one of these can be used at a time. The following combinations are possible.

Input source	Signal type
INPUT 1 connector	Mono
INPUT 2 connector	Mono
Built-in mic	Mono
INPUT 1/2 connectors	Stereo
Built-in mic + INPUT 2 connector	Stereo

NOTE

• The built-in mic can normally only be used when an algorithm other than CLEAN, DIST, or ACO/BS SIM is selected for the insert effect.

• When the PRE AMP/DRIVE module is set to CABINET or OFF, the built-in mic can be used also when one of the above algorithms is selected for the insert effect.

• The status of the [MIC] key indicates whether the built-in mic can be used. When the key is flashing, the mic can be used. When the key is out, the mic cannot be used.

1. When using the INPUT 1/2 connectors, make sure that the instrument or mic that is to be recorded is connected to the respective input.

NOTE

When using the INPUT 1 connector, the [INPUT1 SELECT] switch on the rear panel must be set to the correct position for the instrument.

2. Select the input source as follows.

The input source selection is made using the INPUT [ON/OFF] 1/2 keys and the [MIC] key. Repeatedly pressing a key toggles between the lit/out (or flashing) conditions.

• Selecting one INPUT connector

Verify that the [MIC] key is flashing or out. Then press the INPUT [ON/OFF] key for the connector to which the instrument is connected, so that the key is lit.
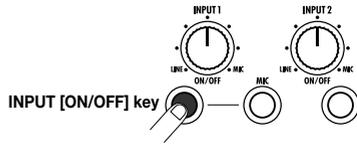
• Selecting two INPUT connectors

Verify that the [MIC] key is not lit. Then press one INPUT [ON/OFF] key so that the key is lit. Next, hold down the lit INPUT [ON/OFF] key and press the other INPUT [ON/OFF] key.
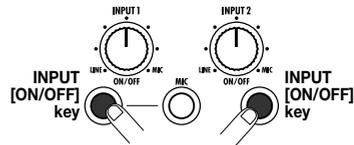
• Selecting only the built-in mic

Press the [MIC] key so that the key is lit. Then press the INPUT [ON/OFF] 1 key so that the key is lit.
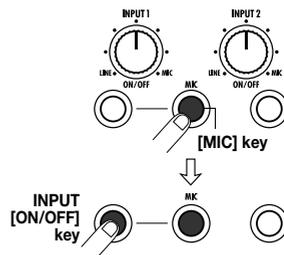
• **Selecting the built-in mic and INPUT 2**

Press the [MIC] key so that the key is lit. Then hold the INPUT [ON/OFF] 1 key and press the INPUT [ON/OFF] 2 key so that both keys are lit.
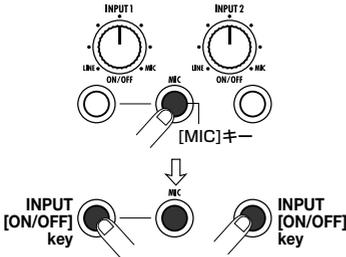
3. **While playing your instrument, adjust the [INPUT] control for the input(s) selected in step 2, to adjust the input sensitivity.**

The sensitivity of the built-in mic can be adjusted using [INPUT] control 1. Make adjustments so that the [PEAK] indicator flickers slightly when you play your instrument at its loudest volume.

4. **To record the sound through the insert effect, press the [INPUT SRC] key in the effect section and turn the dial to set the insert position for the effect to IN.**

The insert effect will be applied to the input source. To record without the insert effect, press the [INSERT EFFECT] key in the effect section repeatedly until the key is out. (While the key is out, the insert effect will be bypassed.)

When the setting is complete, press the [EXIT] key to return to the main screen.

HINT

In the default condition of a project, the insert effect is inserted into the input, and a patch suitable for guitar/bass recording is selected.

5. **To select the patch for the insert effect, press the [INSERT EFFECT] key in the effect section.**

The display changes as follows. In this condition, the cursor up/down keys select the insert effect algorithm, and the dial selects the effect patch for the algorithm.

6. **Use the cursor up/down keys and the dial to select the effect patch, and press the [EXIT] key.**

The main screen returns.

The level of the signal sent to the recording track(s) changes according to the insert effect setting. After switching a patch or changing an effect setting, you should readjust the recording level as described in steps 7 – 9.

7. **From the main screen, press the [TRACK PARAMETER] key in the display section, and then press the INPUT [ON/OFF] key 1 or 2.**

The indication "INPUT" appears on the first line of the display. This indicates that the track parameters for the input signal are being called up.

8. **Press the cursor down key repeatedly, until "REC LVL" is shown on the second line of the display.**

The input signal recording level can now be adjusted.

9. **While playing your instrument at its loudest volume, turn the dial to adjust the recording level.**

The REC LVL parameter determines the level of the signal sent to the recording track via the insert effect. The level after adjustment can be checked on the level meter. At the highest volume, the 0 (dB) segment of the level meter should flicker slightly.

0 (dB) segment

Input 2 recording level

Input 1 recording level
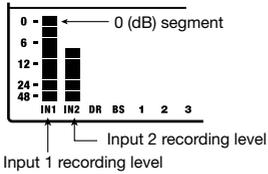
After setting the recording level, press the [EXIT] key to return to the main screen.

HINT

When the insert effect is bypassed for recording, setting the REC LVL parameter to 100 results in unity gain (recording level same as input level).

**10.** **Press the status key for the track to be used for recording until the key is lit in red.**

The signal of the selected input source will be sent to the track(s). Up to two mono tracks or one stereo track can be selected.

When selecting two mono tracks, only odd/even-numbered pairs can be selected (tracks 1/2 or 3/4). To select two tracks, repeatedly press the status key for one track until the key is lit in red, and then hold the key while pressing the status key for the other track so that it is also lit in red.

The signal flow will change as follows, depending on the destination track selection.

• One mono track selected

One Input source

INPUT 1 (built-in mic)
or
INPUT 2

Recorder

Track

Two Input sources

INPUT 1 (built-in mic)

INPUT 2
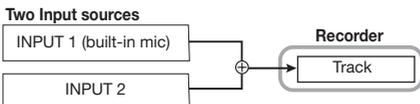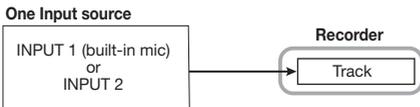
Recorder

Track

• Stereo track or two mono tracks selected

One Input source

INPUT 1 (built-in mic)
or
INPUT 2

Recorder

Odd-numbered track

Even-numbered track

Two Input sources

INPUT 1 (built-in mic)

INPUT 2

Recorder

Odd-numbered track

Even-numbered track
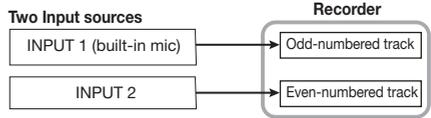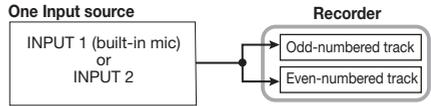
• Recording destination not selected

One Input source

INPUT 1 (built-in mic)
or
INPUT 2

PAN

Tracks 1 - 8
Drum/bass track

MASTER

MASTER OUTPUT

Two Input sources

INPUT 1 (built-in mic)

INPUT 2

PAN

Tracks 1 - 8
Drum/bass track

MASTER

MASTER OUTPUT
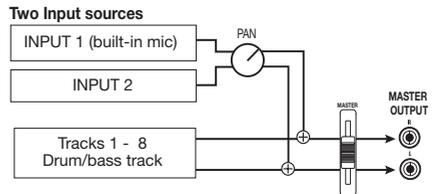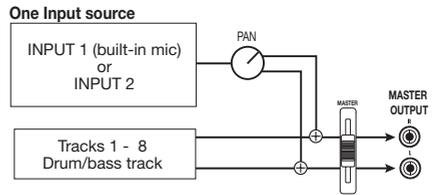
HINT

You can link two mono tracks and use them as a stereo track (→ p. 60). In this case, the track parameter PAN functions as a BALANCE parameter that adjusts the left/right level balance.

Adjusting the signal for each track (track parameters)

The mixer of the MRS-8 lets you adjust various aspects for each track (called track parameters), such as level, panning, EQ, and send/return effect intensity.

NOTE

The audio tracks 5/6 and 7/8 and the drum track are stereo tracks. Except for the V-take selection (audio tracks only), the track parameters for these tracks are the same for left and right.

1. From the main screen, press the [TRACK PARAMETER] key in the display section.

2. Use the cursor left/right keys or the status keys to select the track/input to be set.

```
TR 3        VALUE
EQ HI G        0
```
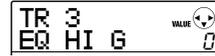
HINT

• When selecting the V-take of stereo tracks (5/6, 7/8), the track is toggled between odd-numbered track and even-numbered track with each push of the key.

• When selecting the drum track/bass track with the [RHYTHM] status key, each push of the key toggles the track. The track operated with pads or faders is also switched.

3. Use the cursor up/down keys to select the track parameter to adjust.

The selectable parameters for the respective tracks and inputs are listed below.

■ Track parameter list

Parameter	Display	Setting range	Description	Track 1 - 4	Track 5 - 8	Master track	Drum/ bass track	Input
EQ HI GAIN (*)	EQ HI G	-12 – +12dB	Adjusts high-frequency boost or cut in the range from -12 to +12 dB. This parameter is only shown when HI EQ is on.	O	O	---	O	---
EQ HI FREQUENCY (*)	EQ HI F	500 – 18000 (Hz)	Adjusts turnover frequency for high-frequency boost/cut. This parameter is only shown when HI EQ is on.	O	O	---	O	---
EQ LOW GAIN (*)	EQ LO G	-12 – +12dB	Adjusts low-frequency boost or cut in the range from -12 to +12 dB. This parameter is only shown when LOW EQ is on.	O	O	---	O	---
EQ LOW FREQUENCY (*)	EQ LO F	40 – 1600 (Hz)	Adjusts turnover frequency for low-frequency boost/cut. This parameter is only shown when LOW EQ is on.	O	O	---	O	---
EFX SEND LEVEL (*)	EFX SEND	0 – 100	Adjusts the level of the signal sent to the send/return effect.	O	O	---	O	O
PAN	PAN	L100 – 0 –R100	Adjusts the panning value (left/ right position) of the track/input signal. For stereo tracks, the parameter adjusts the left/right level balance.	O	O	---	O	O
V-TAKE	TR x-y	x=1 – 8, y=1 – 10	Selects the V-take to use for the track (→p. 32). x stands for the track number and y for the V-take number.	O	O	O	---	---
FADER	FADER	0 – 127	Adjusts the fader setting.	O	O	O	O	---
REC LVL	REC LVL	0 – 127	Adjusts the recording level.	---	---	---	---	O
STEREO LINK	ST LINK	ON/OFF	Controls the stereo link function for linking the parameters of mono tracks 1/2 or 3/4 (→ p. 60).	O	---	---	---	---

(*) : denotes a parameter that can be switched on and off by pressing the [ENTER] key.
O: Valid parameter for this track/input

NOTE

When the recording track is selected, the input signal does not pass through the mixer but is supplied directly to the track. Therefore, if a track is in recording standby mode, the input track parameter settings will have no effect. (However, the REC LVL parameter is always active.)

4. **Turn the dial to adjust the value.**

5. **To switch EQ HI, EQ LO, or effect send between on and off, select the respective parameter (marked with an asterisk in the table on the previous page) and press the [ENTER] key.**

Each push of the [ENTER] key toggles between on and off. For example, when switching EQ HI from on to off, the display changes as follows.

• **On condition**

```
TR1              ☺
EQ HI G          4
```

• **Off condition**

```
TR1              ☺
EQ HI          oFF
```

6. **Repeat steps 3 – 5 until all desired parameters are adjusted.**

If required, you can use the cursor left/right keys or the status keys to change to another track and adjust its parameters. This is useful to adjust the same parameter for several tracks.

7. **To return to the main screen, press the [EXIT] key.**

Linking two tracks (stereo link)

In the MRS-8, the parameters of adjacent odd-numbered/even-numbered mono tracks (1/2 or 3/4) can be linked, resulting in a pair of stereo tracks. This function is referred to as "stereo link". The setting procedure is as follows.

1. **From the main screen, press the [TRACK PARAMETER] key in the display section**

2. **Use the cursor left/right keys or the status keys to select one of the two tracks to stereo-link.**

3. **Use the cursor up/down keys to bring up the following indication on the display.**

```
TR1              ◔
ST LINK        oFF
```

4. **Turn the dial to set the parameter to ON.**

Stereo linking will be enabled immediately, so that the selected track and the adjacent odd-numbered/even-numbered track are linked. To defeat stereo linking, return the setting to OFF.

```
TR1/2            ◔
ST LINK         on
```
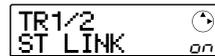
When stereo link is on, track operation will be as follows.

• To adjust the track volume, use the odd-numbered fader. (The even-numbered fader will have no effect.)

• The PAN parameter of two stereo-linked tracks will function as a balance parameter that adjusts the volume balance between the tracks.

• Except for PAN and V-TAKE, the track parameters for the odd-numbered track will also apply to the even-numbered track.

5. **To return to the main screen, press the [EXIT] key.**

Reference [Rhythm]

This section explains the functions and operation of the built-in rhythm section of the MRS-8.

About the rhythm section

The rhythm section of the MRS-8 uses internal drum sound and bass sound sources to generate rhythm accompaniment. It can be used instead of a metronome by playing simple rhythm patterns, or you can program a sequence of rhythm patterns and chord progression into the rhythm accompaniment for an entire song.

Drum kits and bass programs

The rhythm section has two different types of sound, created by a "drum kit" and a "bass program".
The drum kit is a set of 27 drum/percussion sounds such as kick, snare, and hihat. The MRS-8 contains 8 different drum kits. You can select one of these drum kits and play it manually with the pads on the top panel, or you can use it as a sound source for rhythm accompaniment.
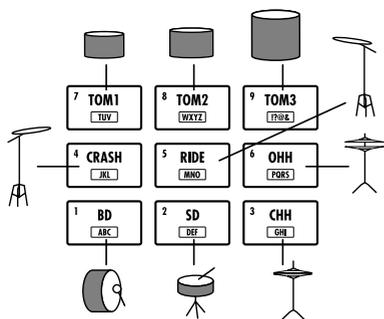
When you select a drum kit, its sounds are assigned to the nine pads. Such a combination of sounds assigned to the pads is called a "pad bank". One drum kit gives access to three pad banks. Simply by switching the pad bank you can play other sounds from the current drum kit.

A bass program is a single bass sound, such as an electric bass or acoustic bass, which can be played as a scale with the pads on the top panel. The MRS-8 has five bass programs. You can choose one of these and play a scale with the pads, or use it as a sound source for rhythm accompaniment.
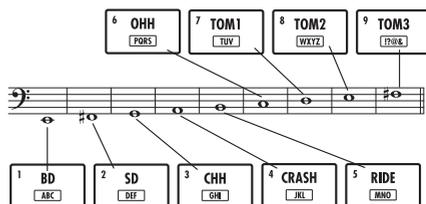
When you select a bass program, a sound of a certain pitch is assigned to each pad, and you can play it by selecting a scale. By switching the scale type, key, and range, you can cover up to four octaves.

For the rhythm section, you select either the drum kit or bass program to be played with the pads. Immediately after creating a new project, the drum kit is selected. The [DRUM/BASS] key is used to toggle between the two sound types. When the [DRUM/BASS] key is lit, the drum kit is selected. When the key is out, the bass program is selected for playing.

■ Drum kit selected

Lit

■ Bass program selected

Out
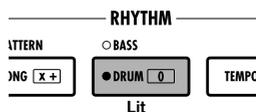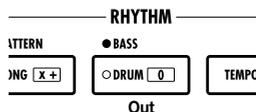
The output signal from the drum kit (drum track) and the output signal from the bass program (bass track) are sent to the internal mixer, where you can use the [RHYTHM] fader and [RHYTHM] status key to adjust the volume and switch the signal on and off. (This affects the sound type currently selected with the [DRUM/BASS] key.)

Rhythm patterns

A project can contain over 500 accompaniment patterns with drum/bass performance data for up to 99 measures each. This is called a rhythm pattern. Inside each rhythm pattern, the area that holds the drum performance data is called the "drum sequence", and the area that holds the bass performance data is called the "bass sequence".

In the default condition, a project contains preprogrammed rhythm patterns in numbers 000 – 472, 509, 510. You can edit a portion of a rhythm pattern, or use an empty slot to create an entirely original rhythm pattern. The rhythm patterns you modify or create are saved on the SD card as part of the project.
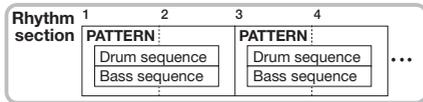
Rhythm song

Multiple rhythm patterns arranged in a desired order of playback are collectively called a "rhythm song". Besides the rhythm pattern data, a rhythm song comprises information about various aspects such as chord, tempo, and time signature to create the accompaniment for an entire song. Up to 10 rhythm songs can be programmed in one project.
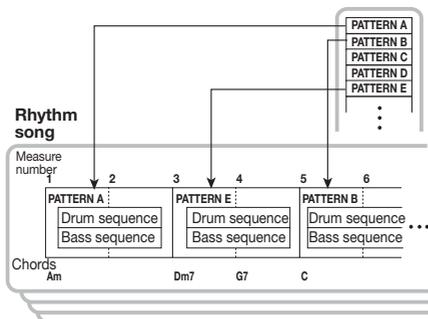
Rhythm pattern mode and rhythm song mode

The rhythm section can operate in one of two modes: "rhythm pattern mode", in which the currently selected rhythm pattern is constantly repeated, and "rhythm song mode", in which you can create and play an entire rhythm song consisting of a sequence of patterns.

Immediately after creating a new project, the rhythm pattern mode is selected. By pressing the [SONG/PATTERN] key, you can toggle between the rhythm pattern mode and rhythm song mode. When the [SONG/PATTERN] key is out, the rhythm pattern mode is selected. When the key is lit, the rhythm song mode is selected.

■ Rhythm pattern mode
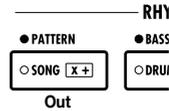
■ Rhythm song mode
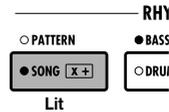
Playing rhythm patterns

This section explains how to select a rhythm pattern for playback, and how to change the tempo and sound.

Selecting a rhythm pattern

Proceed as follows to select and play one of the more than 500 rhythm patterns.

1. **From the main screen, press the [SONG/ PATTERN] key in the rhythm section repeatedly, until the key is out.**

The rhythm pattern selection screen appears. In this condition, the following information is displayed.

Number of measures of rhythm pattern
Rhythm pattern number

```
001#117      VALUE
MTNs1Vb          1
```

Rhythm pattern name
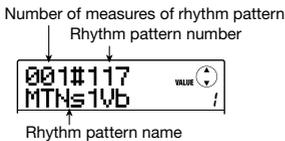
The indication to the right of the rhythm pattern name shows the pad bank (if a drum kit is selected) or the range (if a bass program is selected). These items can be changed if desired (→ p. 65).

HINT
While the display shows the rhythm section screen, the audio track status keys (1 – 8 and [MASTER]) are out and cannot be used.

2. **Turn the dial to select the rhythm pattern to play.**

In the default condition of a project, patterns are programmed in rhythm pattern numbers 000 – 472, 509, 510.

3. **Press the PLAY [▶] key.**

The selected rhythm pattern will begin playing repeatedly. If there is one or more recorded audio tracks, these will also be played back. To play the rhythm pattern only, turn down the faders of the audio tracks.

4. **To adjust the volume of the drum/bass track, use the [RHYTHM] fader.**

The [RHYTHM] fader serves to adjust the drum track or bass track level. When the [DRUM/BASS] key is lit, the fader adjusts the drum track. When the key is out, the fader adjusts the bass program.

Use the [DRUM/BASS] key to toggle the desired setting, and then operate the [RHYTHM] fader.

5. **To mute the sound of the drum track or bass track, repeatedly press the [RHYTHM] status key, until the key is flashing.**

The [RHYTHM] status key can be used to switch muting on or off for the sound that is currently selected for the rhythm section. To cancel muting, press the [RHYTHM] status key once more so that the key is lit.

6. **To stop rhythm pattern playback, press the STOP [■] key.**

7. **To return to the main screen, press the [EXIT] key.**

HINT
During rhythm pattern playback, it is also possible to play drum kit/bass program sounds by hitting the pads.

Changing the tempo

You can change the tempo of the rhythm pattern.

HINT
The tempo set here applies to all rhythm patterns. A rhythm song for which no tempo information is programmed also will use this tempo.

1. **From the main screen or the rhythm pattern screen, press the [TEMPO] key.**

The display changes as follows, and the current tempo is shown.

```
TEMPO        VALUE
     BPM=   120.0
```

HINT
You can change the tempo either in playback or stop mode.

2. **Turn the dial to adjust the tempo.**

The tempo can be adjusted over a range of 40.0 – 250.0 (BPM).

3. **To change the tempo manually, hit the [TEMPO] key repeatedly at the desired tempo.**

The average of the key press intervals is determined and set as the new tempo.

4. **To return to the main screen, press the [EXIT] key repeatedly.**

NOTE

If you record on the audio tracks while listening to the rhythm pattern, and then later change the tempo, the audio track content and the rhythm pattern will no longer be synchronized. Be sure to decide on the tempo first.

Changing the drum kit / bass program

You can change the drum kit/bass program used by the rhythm section.

1. **From the main screen, press the [SONG/ PATTERN] key.**

```
001♯117    VALUE
MTNs1Vb         ↕
```
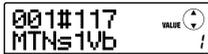
HINT

Drum kit/bass program switching can be done in rhythm pattern mode or rhythm song mode.

2. **Press the [SYSTEM/UTILITY] key.**

The RHYTHM mode utility menu appears.

```
UTILITY     ↔
DRUM KIT
```

3. **Use the cursor left/right keys to bring up the indication "UTILITY DRUM KIT" or "UTILITY BASS PRG" on the display. Then press the [ENTER] key.**

The currently selected drum kit/bass program name is shown.

```
DRUM KIT    ◯
Standard
```
    ↑
Drum kit name

```
BASS PRG    ◯
Finger
```
    ↑
Bass program name

4. **Turn the dial to select the drum kit/bass program to use.**

The change becomes active immediately.
For a list of drum kits/bass programs that can be selected, see the appendix at the end of this manual.

HINT

The drum kit/bass program selected here is saved for each rhythm pattern. For rhythm songs which do not have drum kit/bass program information programmed, the sound selected here will be used.

5. **To return to the main screen, press the [EXIT] key repeatedly.**

Using the pads to play drum/ bass sounds

Using the pads on the top panel, you can manually play a drum kit or bass program.

■ Playing a drum kit with the pads

When playing a drum kit, you can switch between pad banks, giving you a total of 27 drum/percussion sounds.

1. **From the main screen, press the [DRUM/ BASS] key repeatedly, until the key is lit.**

When the [DRUM/BASS] key is lit, the pads can be used to play a drum kit. The display changes as follows.

Sound assigned to pads

```
Pad=DRUM    VALUE
PadBank=        ↕
```

Immediately after creating a new project, the pad bank 1 is selected.

2. **Turn the dial to select the pad bank to use (1 – 3).**

The sounds assigned to the nine pads are switched immediately. For a list of drum/percussion sounds in each pad bank, see the appendix at the end of this manual.

• You can also use the cursor up/down keys to switch the pad bank.

• The currently selected pad bank number is also shown on the rhythm pattern selection screen.

3. **Hit the pads to play.**

Use the [RHYTHM] fader and [RHYTHM] status key to control the drum kit volume and switch mute on and off as necessary.

4. **To switch the pad bank during play, repeat steps 2 and 3.**

The pad bank can also be switched while a rhythm pattern or rhythm song is playing.

When you press the [EXIT] key, the rhythm pattern or rhythm song selection screen appears again.

5. **To return to the main screen, press the [EXIT] key repeatedly.**

■ **Playing a bass program with the pads**

By switching the scale and range assigned to the pads, you can play bass programs covering up to four octaves.

With a bass program, there can be no overlapping of multiple sounds. If you press another pad while holding down a pad, the sound of the first pad will stop and the sound of the other pad is heard.

1. **From the main screen, press the [DRUM/ BASS] key repeatedly, until the key is out.**

When the [DRUM/BASS] key is out, the pads can be used to play a bass program. The display changes as follows.

```
Pad=BASS    VALUE
Major        E  1
```
Scale type ←→ Scale key-note ←→ Range number
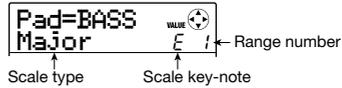
2. **To change the key-note of the scale, use the cursor up/down keys.**

The setting range is C – B in semitone steps. The key-note specified here is the note that will be played by pad 1.

The sharp symbol is shown as ♯, such as in F# = Fσ, G# = Gσ .

3. **To change the type of the scale, use the cursor left/right keys.**

The scale type can be set to Major or Minor.

For example, when the key-note of "E" is selected, the pitch of the pads changes as follows, depending on the scale type selection.

Major

D#	E	F#
A	B	C#
E	F#	G#

Minor

D	E	F#
A	B	C
E	F#	G

4. **Turn the dial to change the range to be played by the pads.**

The range of the pads can be selected in four steps (1 – 4). For example, a change from 1 to 2 will shift the pitch assigned to the pads up by 1 octave.

5. **Hit the pads to play.**

Use the [RHYTHM] fader and [RHYTHM] status key to control the bass program volume and switch mute on and off as necessary.

6. **To switch the scale type and range during play, repeat steps 2 – 4.**

The scale type and range can also be switched while a rhythm pattern or rhythm song is playing.

When you press the [EXIT] key, the rhythm pattern or rhythm song selection screen appears again.

7. **To return to the main screen, press the [EXIT] key repeatedly.**

Creating a rhythm pattern

This section explains how you can create your own rhythm patterns. There are two ways of doing this: real-time input where you record your play on the pads, and step input where play is stopped and you enter the sounds one by one.

Preparations

Before starting to record, you must make various settings for the rhythm pattern, such as bar length and time signature, and quantize value (shortest unit for recording). By default, an empty rhythm pattern has a 4/4 time signature and a length of 2 measures.

NOTE
After you have started the rhythm pattern input procedure, you can no longer change the time signature and number of measures. Be sure to make these settings beforehand.

1. **From the main screen, press the [SONG/ PATTERN] key to call up the rhythm pattern selection screen.**

If the [SONG/PATTERN] key is lit, press the key once more so that it goes out.

```
001#117      VALUE
MTNs1Vb          1
```
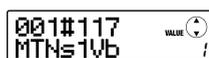
2. **Turn the dial to select an empty rhythm pattern.**

The indication "EMPTY" appears on the display when an empty pattern is selected.

```
---#500
EMPTY            1
```
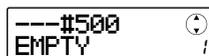
HINT
If there is no empty rhythm pattern, erase an unneeded pattern (→ p. 76).

3. **Press the [EDIT] key.**

The rhythm pattern edit menu for making various rhythm pattern settings appears.

```
PTN EDIT        ⊙
QUANTIZE
```

4. **To set the quantize value, make sure that the indication "PTN EDIT QUANTIZE" is shown on the display, and press the [ENTER] key.**

The display changes as follows.

```
QUANTIZE        ○
16
```
Quantize value

The quantize value is the smallest note unit for recording a pattern. When performing real-time input, your play is recorded using the note steps selected here.
The default setting is "16" (a sixteenth note).

5. **Turn the dial to select one of the following quantize values. Then press the [EXIT] key.**

4...........Quarter note
8...........Eighth note
12.........Eighth triplet note
16.........Sixteenth note (default)
24.........Sixteenth triplet note
32.........Thirty-second note
Hi.........1 tick (1/48 of quarter note)

When you press the [EXIT] key, the rhythm pattern edit menu appears again.

6. **To set the number of measures of the rhythm pattern, use the cursor left/right keys to bring up the indication "PTN EDIT BarLen" on the display, and press the [ENTER] key.**

The current length of the pattern is shown as number of measures.

```
BarLen          ○
2
```
Number of measures
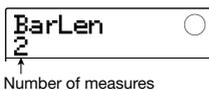
HINT
When an already created rhythm pattern is selected, the number of measures is enclosed in parenthesises. This

indicates that the setting has already been fixed and cannot be changed.

7. **Turn the dial to select the desired setting.**

The setting range is 1 – 99 measures.
When the setting is complete, press the [EXIT] key to return to the rhythm pattern edit menu.

8. **To set the rhythm pattern time signature, use the cursor left/right keys to bring up the indication "PTN EDIT TimSig" on the display, and press the [ENTER] key.**

The current time signature setting appears on the display.

```
TimSig          ○
4
```
4/4 beat
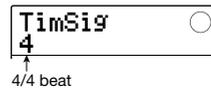
HINT
When an already created rhythm pattern is selected, the time signature is enclosed in parenthesises. This indicates that the setting has already been fixed and cannot be changed.

9. **Turn the dial to select the beat.**

The setting range is 1 – 8 (1/4 – 8/4 beats). When the setting is complete, press the [EXIT] key twice to return to the rhythm pattern selection screen.

Drum sequence real-time input

For real-time input of a drum sequence, you play the rhythm pattern on the pads of the MRS-8.

1. **At the rhythm pattern screen, select an empty rhythm pattern number.**

If necessary, select a drum kit (→ p. 64) before carrying out the following steps.

2. **Press the [DRUM/BASS] key repeatedly, until the key is lit.**

The pads can now be used to play a drum kit. Immediately after switching the sound, the pad bank selection screen is shown.

3. **If necessary, use the cursor up/down keys to switch the pad bank.**

When the setting is complete, press the [EXIT] key to return to the rhythm pattern selection screen.

4. Hold down the REC [●] key and press the PLAY [►] key.

A four-beat pre-count (one measure) is heard, and rhythm pattern recording starts. During recording, a click sound (metronome sound) is heard, according to the tempo and time signature setting. The current position is shown on the counter in measures/beats/ticks.

HINT

The number and the sound level of the pre-count clicks can be changed (→ p. 90).

5. While listening to the metronome, tap the pads.

Your performance on the pads will be recorded as a drum sequence according to the quantization setting. The intensity with which you hit the pads will also be recorded.

When you reach the end of the pattern, the unit automatically returns to the first measure, and real-time input continues.
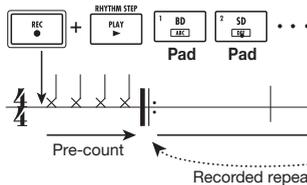
• Switching the pad bank during real-time input of a drum sequence

Press the [DRUM/BASS] key once to bring up the pad bank selection screen, and use the cursor up/down keys to select the pad bank. To return, press the [EXIT] key.

• Switching to a bass sequence during real-time input of a drum sequence

Press the [DRUM/BASS] key once to bring up the pad bank selection screen, and then press the [DRUM/BASS] key once more so that the key goes out.

• Temporarily pausing real-time input

Press the REC [●] key during recording so that the key is flashing. In this state you can tap the pads to check which sound is assigned to each pad. Recording resumes when you press the REC [●] key once more.

HINT

• You can use step input to add playing information to a rhythm pattern recorded with real-time input.

• After concluding real-time input, you can change the quantize setting and then record on top of the existing sequence. (Changing the quantize value will not affect the existing playing information.)

6. To edit the recorded contents during real-time input, proceed as follows.

### • To erase the performance of a specific pad

While holding down the [FUNCTION] key, press the pad whose sound you want erase. While you are holding down both keys, the performance of the corresponding pad is erased from the rhythm pattern.

• To erase the performance of all pads

While holding down the [FUNCTION] key, press the [RHYTHM] status key. While you are holding down both keys, the performance of all pads is erased from the drum sequence.
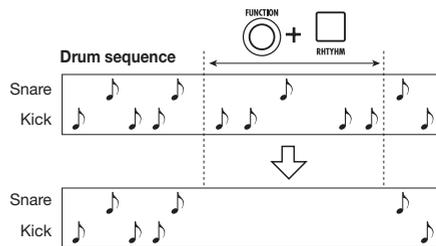
7. When you have finished real-time recording, press the STOP [■] key.

Rhythm pattern recording will stop. Press the PLAY [►] key to hear the pattern that you recorded.

Bass sequence real-time input

For real-time input of a bass sequence, you play the pads of the MRS-8.

1. **At the rhythm pattern screen, select an empty rhythm pattern number or a rhythm pattern number where only a drum sequence has been recorded.**

If necessary, select a bass program (→ p. 64) before carrying out the following steps.

2. **Press the [DRUM/BASS] key repeatedly, until the key is out.**

The pads can now be used to play a bass program. Immediately after switching the sound, the range and scale selection screen is shown.

3. **If necessary, select the scale type, key-note, and range.**

Use the cursor keys to select the scale type and key-note, and use the dial to select the range. When the setting is complete, press the [EXIT] key to return to the rhythm pattern selection screen.

4. **Hold down the REC [●] key and press the PLAY [▶] key.**

A four-beat pre-count (one measure) is heard, and rhythm pattern recording starts. (During recording, the metronome click sound is heard, according to the tempo and time signature.)
The current position is shown on the counter in measures/beats/ticks.

HINT
The number and the sound level of the pre-count clicks can be changed.

5. **While listening to the metronome, tap the pads.**

Your performance on the pads will be recorded as a bass sequence according to the quantization setting. The duration and intensity with which you hit the pads will

also be recorded.
When you reach the end of the pattern, the unit automatically returns to the first measure, and real-time input continues.

- **Switching the range and scale during real-time input of a bass sequence**

Press the [DRUM/BASS] key once to bring up the range/scale selection screen, and use the cursor keys and the dial to select the range and scale. To return, press the [EXIT] key.

- **Switching to a drum sequence during real-time input of a bass sequence**

Press the [DRUM/BASS] key once to bring up the range/scale selection screen, and then press the [DRUM/BASS] key once more so that the key is lit.

- **Temporarily pausing real-time input**

Press the REC [●] key during recording so that the key is flashing. In this state you can tap the pads to check which note is assigned to each pad. Recording resumes when you press the REC [●] key once more.

HINT
You can use step input to add playing information to a rhythm pattern recorded with real-time input.

6. **To edit the recorded contents during real-time input, proceed as follows.**

- **To erase the performance of a specific pad**

While holding down the [FUNCTION] key, press the pad whose note you want erase. While you are holding down both keys, the performance of the corresponding pad is erased from the rhythm pattern.

- **To erase the performance of all pads**

While holding down the [FUNCTION] key, press the [RHYTHM] status key. While you are holding down both

keys, the performance of all pads is erased from the bass sequence.
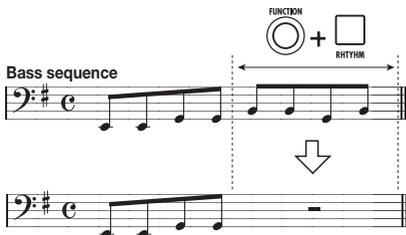
7. **When you have finished real-time recording, press the STOP [■] key.**

Rhythm pattern recording will stop. Press the PLAY [▶] key to hear the pattern that you recorded.

HINT

You can switch the drum kit/bass program during real-time recording (→ p. 64), and you can change the volume of the metronome click (→ p. 90).

Drum sequence step input

For step input, you enter each note separately, while the rhythm pattern is in the stop condition. This makes it easy to enter even complex drum patterns or bass lines that might be difficult to achieve with real-time input.

For drum sequence step input, you specify the step length (interval to next note or rest) using the quantize value. Then you enter notes and rests.

When you hit a pad and then press the PLAY [▶] (RHYTHM STEP) key, playing (note) information is entered at that point, and the step advances by an interval corresponding to the current quantize value. The intensity with which you hit the pad is also recorded.

If you only press the PLAY [▶] (RHYTHM STEP) key, no playing information is entered, but the step advances by an interval corresponding to the current quantize value. This becomes a rest (see illustration below).

1. **At the rhythm pattern screen, select an empty rhythm pattern number.**

**2.** **Press the [DRUM/BASS] key repeatedly, until the key is lit.**

The pads can now be used to play a drum kit. Immediately after switching the sound, the pad bank selection screen is shown.

3. **If necessary, select the pad bank to use.**

When the setting is complete, press the [EXIT] key to return to the rhythm pattern selection screen.

4. **Press the REC [●] key.**

The key lights up and the display changes as follows. In this condition, drum sequence step input is possible.
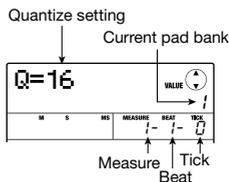
During drum sequence step input, the first line of the display shows the quantize value, and the second line shows the currently selected pad bank number. The counter shows the current position in measures/beats/ticks.
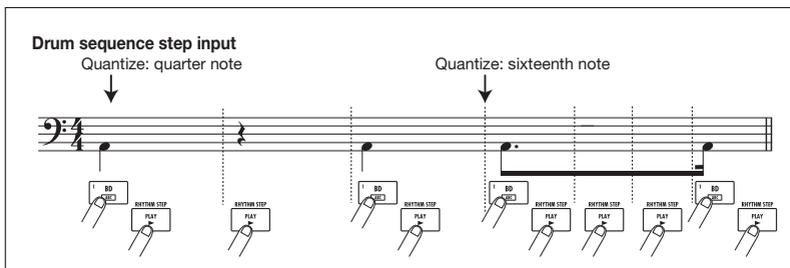
5. **Use the cursor up/down keys to select the quantize value.**

This setting becomes the length of one step. The quantize setting can be changed at any time during step input, using the cursor up/down keys.

4...........Quarter note
8...........Eighth note
12.........Eighth triplet note
16.........Sixteenth note
24.........Sixteenth triplet note
32.........Thirty-second note
Hi.........1 tick (1/48 of quarter note)

HINT

The quantize value setting is linked to the quantize setting for real-time input. If you change one setting, the other will also change.

6. **To enter a note, hit the pad corresponding to the note, and then press the PLAY [▶] (RHYTHM STEP) key.**

The pad lights up, and the unit advances by one step.
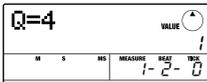
HINT

- The intensity with which you hit the pad is also recorded in the drum sequence.
- If you hit several pads during input, multiple sounds will be recorded at the same position.

7. **To enter a rest, press only the PLAY [▶] (RHYTHM STEP) key.**

If you press the PLAY [▶] (RHYTHM STEP) key by itself, the position advances by one step, but no play information is recorded.
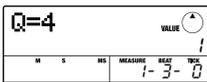
8. **Repeat steps 5 – 7 while changing the step length as necessary, to enter the desired rhythm pattern.**

When you reach the end of the pattern, the unit automatically returns to the first measure, letting you enter more sounds.

When you use the PLAY [▶] (RHYTHM STEP) key to move step by step through a recorded rhythm pattern, the pad recorded at the respective position lights up.

You can edit the recorded sequence as follows.

• Erasing an entered note

Repeatedly press the PLAY [▶] (RHYTHM STEP) key to move to the position to erase. Then hold down the [FUNCTION] key and press the respective pad. The note recorded at that point is erased, and the pad goes out.

HINT

During step input, you can use the [DRUM/BASS] key to call up the pad bank selection screen and switch the pad bank. (To return, press the [EXIT] key.)

NOTE

When searching for a note to erase, set the quantize value to the same value as the smallest value used during recording, or to a smaller value. Otherwise the start of a note may be missed.

9. **When you have finished step input, press the STOP [■] key.**

The REC [●] key goes out and the rhythm pattern selection screen appears again. By pressing the PLAY [▶] key you can check the rhythm pattern that you recorded.

10. **To return to the main screen, press the [EXIT] key repeatedly.**

Bass sequence step input

Compared to the drum sequence step input, the step input procedure for a bass sequence is somewhat more complex, because there are the additional elements of "pitch" and "duration".

As for drum track step input, you specify the step length (interval to next note or rest) using the quantize value, and you use the pads and the PLAY [▶] (RHYTHM STEP) key to enter notes and rests. But when you input a note, you must also specify the duration parameter. This parameter allows you to vary the actual duration for each note, while keeping the step length the same (see diagram on next page).

Bass sequence step input

Quantize: quarter note Quantize: eighth note Quantize: quarter note Quantize: eighth note
Duration: quarter note Duration: eighth note Duration: quarter note Duration: sixteenth note

1. At the rhythm pattern screen, select an empty rhythm pattern number or a rhythm pattern number where only a drum sequence has been recorded.

2. Press the [DRUM/BASS] key repeatedly, until the key is out.

The pads can now be used to play a bass program. Immediately after switching the sound, the range and scale selection screen is shown.

3. If necessary, select the scale type, key, and range.

When the setting is complete, press the [EXIT] key to return to the rhythm pattern selection screen.

4. Press the REC [●] key.

The key lights up and the display changes as follows. In this condition, bass sequence step input is possible.

Quantize setting   Current range number

Duration setting

Measure Beat   Tick

During bass sequence step input, the first line of the display shows the quantize value, and the second line shows the duration setting and the currently selected range. The counter shows the current position in measures/beats/ticks.

5. Use the cursor up/down keys to select the quantize value.

This setting becomes the length of one step.

6. Turn the dial to select the duration value, as listed below.

The duration is specified as " ♩ x 1", i.e. as multiples of a quarter note. Depending on the value, the actual duration becomes as follows.

1 – 8.....quarter note x 1 – 8
3/2........dotted quarter note
1/2........8th note
3/4........dotted 8th note
1/3........8th note triplet
1/4........16th note
1/6........16th note triplet
1/8........32nd note
1/12......32nd note triplet
1/16......64th note
1/24......64th note triplet

7. To enter a note, hit the pad corresponding to the note, and then press the PLAY [▶] (RHYTHM STEP) key.

The note is recorded, and the unit advances by the step duration set in step 5.

HINT

The intensity with which you hit the pad is also recorded in the bass sequence.

8. **To enter a rest, press only the PLAY [▶]
(RHYTHM STEP) key.**

If you press the PLAY [▶] (RHYTHM STEP) key by
itself, the position advances by one step (duration of
quantize value) but no play information is recorded.

```
Q=4                    VALUE ○
D=♩×1           E  1
  M    S    MS  MEASURE  BEAT  TICK
                1- 3-  0
```
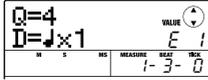
9. **Repeat steps 5 – 8 while changing the
quantize value and duration as necessary,
to enter the desired bass pattern.**

When you reach the end of the pattern, the unit
automatically returns to the first measure, letting you
continue the input.

You can edit the recorded sequence as follows.

• **Erasing an entered note**

Repeatedly press the PLAY [▶] (RHYTHM STEP) key
to move to the position to erase. Then hold down the
[FUNCTION] key and press the respective pad. The note
recorded at that point is erased, and the pad goes out.

HINT

During step input, you can use the [DRUM/BASS] key to call
up the range selection screen and switch the range and
scale. (To return, press the [EXIT] key.)

NOTE

When searching for a note to erase, set the quantize value to
the same value as the smallest value used during recording,
or to a smaller value. Otherwise the start of a note may be
missed.

10. **When you have finished step input, press
the STOP [■] key.**

The REC [●] key goes out and the rhythm pattern
selection screen appears again. By pressing the PLAY
[▶] key you can check the rhythm pattern that you
recorded.

11. **To return to the main screen, press the
[EXIT] key repeatedly.**

Entering rhythm pattern chord information

When you have recorded a rhythm pattern, and you later
set the chord information (root + chord type), the bass
sequence of the rhythm pattern will also be transformed
according to the chord information programmed in a
rhythm song.

HINT

For patterns not used in a rhythm song or for which no bass
sequence is input, this procedure is not necessary.

1. **From the main screen, press the [SONG/
PATTERN] key in the rhythm section
repeatedly, until the key is out.**

The rhythm pattern selection screen appears.

2. **Turn the dial to select the pattern for which
to specify chord information, and press the
[EDIT] key.**

The rhythm pattern edit menu appears.

```
PTN EDIT      ○
QUANTIZE
```

3. **Use the cursor left/right keys to bring up
the indication "EDIT OrgRoot" on the
display, and press the [ENTER] key.**

This screen allows you to specify the root for the selected
rhythm pattern.

```
Org Root      ○
E
    ↑
```
Chord root

4. **Turn the dial to select the root for the chord.**

The available range is C – B (default setting: E). When
setting chord information for a rhythm song, the value
specified here will become the root for transposing up or
down.

5. **When the setting is complete, press the
[EXIT] key.**

The rhythm pattern edit menu appears again.

6. Use the cursor left/right keys to bring up the indication "PTN EDIT OrgChord" on the display, and press the [ENTER] key.

The display changes as follows.

```
OrgChord    ◯
Major
```

This screen allows you to specify the chord type for that rhythm pattern.

7. Turn the dial to select the chord.

For the chord type, you can select Major or Minor.

For example, if you have entered a bass phrase with a G major chord in mind, set the root to "G" and the chord type to "Major".

8. When the setting is complete, press the [EXIT] key.

The setting is entered and the rhythm pattern edit menu appears again.

9. To return to the main screen, press the [EXIT] key repeatedly.

Changing the drum/bass sequence volume level

The playback volume of the rhythm pattern can be adjusted separately for the drum and bass with the [RHYTHM] fader. If necessary, the volume levels can also be individually programmed for each rhythm pattern.

1. From the main screen, press the [SONG/PATTERN] key in the rhythm section repeatedly, until the key is out.

The rhythm pattern selection screen appears.

2. Turn the dial to select the rhythm pattern for which to specify volume information, and press the [EDIT] key.

The rhythm pattern edit menu appears.

```
PTN EDIT    ⊙
QUANTIZE
```

3. Use the cursor left/right keys to bring up the indication "PTN EDIT DR LEVEL" on the display, and press the [ENTER] key.

The display changes as follows. This screen allows you to specify the drum sequence volume.
The display shows the current volume setting (0 – 15).

```
DR LEVEL    ◯
15
```

4. Turn the dial to select the desired setting, and then press the [EXIT] key.

The setting is entered, and the previous screen appears again.

5. Use the cursor left/right keys to bring up the indication "PTN EDIT BS LEVEL" on the display, and press the [ENTER] key.

The display changes as follows. This screen allows you to specify the bass sequence volume. The display shows the current volume setting (0 – 15).

```
BS LEVEL    ◯
15
```

6. Turn the dial to select the desired setting, and then press the [EXIT] key.

The setting is entered, and the previous screen appears again.

7. To return to the main screen, press the [EXIT] key repeatedly.

Assigning a name to a rhythm pattern

When an empty rhythm pattern is selected and used for input, the pattern name "Pat xxx" (where xxx is the pattern number) is automatically assigned. You can edit this pattern name as necessary.

1. **From the main screen, press the [SONG/ PATTERN] key in the rhythm section repeatedly, until the key is out.**

The rhythm pattern selection screen appears.

2. **Turn the dial to select the rhythm pattern for which to edit the name, and press the [EDIT] key.**

The rhythm pattern edit menu appears.

```
PTN EDIT      ⊙
QUANTIZE
```

3. **Use the cursor left/right keys to bring up the indication "PTN EDIT NAME" on the display, and press the [ENTER] key.**

The display changes as follows. This screen allows you to specify a name for the selected rhythm pattern.

```
PTN NAME      ⊙
Pat 500    -a-
```

4. **Use the cursor left/right keys to move the flashing position to the character to change, and turn the dial or use the rhythm section pads and keys to select a character.**

For information on how to input characters, refer to page 33.

HINT
By repeatedly pressing the [EDIT] key, you can clear all characters.

5. **Repeat step 4 until the name is as desired.**

6. **To return to the main screen, press the [EXIT] key repeatedly.**

Editing rhythm patterns

This section explains how to copy an existing rhythm pattern or how to erase the playing information and return the pattern to the blank condition.

Copying a rhythm pattern

You can copy the currently selected rhythm pattern to another pattern number. This is useful to create variations of a rhythm pattern.

1. **From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is out.**

The rhythm pattern selection screen appears.

2. **Turn the dial to select the rhythm pattern to use as copy source.**

3. **Press the [FUNCTION] key in the control section twice.**

The display changes as follows. In this condition, you can select the number of the copy destination rhythm pattern.

```
COPY          ○
117→420E
```
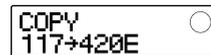
4. **Turn the dial to select the number of the rhythm pattern to use as copy destination.**

When an empty pattern is selected, the indication "E" is shown to the right of the pattern number.

NOTE
When you select a recorded rhythm pattern as destination, its contents will be overwritten with the data of the copy source.

5. **To carry out the copy operation, press the [ENTER] key. When the indication "COPY SURE?" appears, press the [ENTER] key once more.**

When the copy operation is completed, the display returns to the rhythm pattern selection screen. By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

6. To return to the main screen, press the [EXIT] key repeatedly.

Erasing a rhythm pattern

This section explains how to erase all data from a specified rhythm pattern, returning it to the blank state.

NOTE
It is not possible to restore data once the rhythm pattern has been erased. Use this operation with care.

1. From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is out.

The rhythm pattern selection screen appears.

2. Turn the dial to select the rhythm pattern to erase.

3. Press the [FUNCTION] key in the control section.

The display changes as follows.
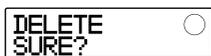
```
DELETE        ◯
SURE?
```

4. To carry out the erase operation, press the [ENTER] key.

When the erase operation is completed, the display returns to the rhythm pattern selection screen. By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

5. To return to the main screen, press the [EXIT] key repeatedly.

Creating a rhythm song

A rhythm song consists of a sequence of rhythm patterns with programmed chord and tempo information. The MRS-8 allows you to save up to 10 rhythm songs per project. While the [SONG/PATTERN] key is lit, one of these can be selected for editing or playing.

The following two methods are available for entering rhythm pattern information into a rhythm song.

■ Step input

With this method, you line up rhythm patterns one by one by specifying a pattern and the number of measures. Input can be performed at any point in the song. It is also possible to switch to another pattern while the previous pattern is still playing. This mode is suitable for specifying patterns in detail.

■ FAST (Formula Assisted Song Translator)

This method uses simple formulas to specify rhythm pattern playback from start to end. The result is written to the song in a single operation. Because input midway through a song is not possible with this method, it is most suitable for cases where the configuration of the entire song has been decided beforehand.

HINT
There is no difference in the completed rhythm song due to input method that was used, i.e. a song will be the same, regardless of whether it was created using step input or the FAST method. If necessary, you can first create a rough version of a song using FAST and then perform detailed editing using step input.

Selecting a rhythm song

Out of the 10 available songs, select the rhythm song for editing or playing as follows.

HINT
In the default condition of a project, all rhythm songs are empty.

1. From the main screen, press the [SONG/ PATTERN] key in the rhythm section repeatedly, until the key is lit.

The rhythm section switches to rhythm song mode, and

the rhythm song selection screen appears.

Rhythm song number
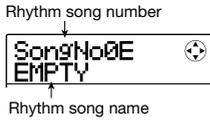
Rhythm song name

When the rhythm song is empty, the indication "EMPTY" is shown in the rhythm song name field, and the indication "E" is shown to the right of the rhythm song number.

2. Turn the dial to select a rhythm song number from 0 – 9.

3. To return to the main screen, press the [EXIT] key.

Entering pattern information using step input

This section explains how to input rhythm pattern data into an empty rhythm song by specifying the rhythm pattern number and number of measures.

1. From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is lit.

The rhythm section switches to rhythm song mode, and the rhythm song selection screen appears.

2. Press the REC [●] key in the transport section.

The key lights up and the display changes as follows. In this condition, you can perform rhythm song step input.

End-of-song indication   Current position
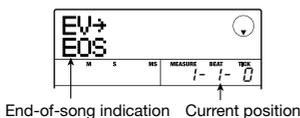
The indication "EOS" (End of Song) shows the position where the rhythm song ends. For an empty song, "EOS" will be located at the beginning. Therefore nothing happens if you play the song.

Current position

↓ 1 (measure number)

Rhythm song | End of Song
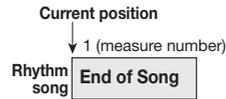
3. Use the cursor up/down keys to bring up the indication "←PTN" on the first line of the display.

During step input, the cursor up/down keys serve to bring up various kinds of information about events that are programmed at the current point. For example, when "PTN" is shown, rhythm pattern information can be entered for the rhythm song. The following items can be selected.

Parameter	Description
EV→	Event information at current point
PTN	Rhythm pattern number
TimSig	Time signature
ROOT	Chord root
CHORD	Chord type
TEMPO	Tempo
DrLevel	Drum sequence volume
BsLevel	Bass sequence volume
Dr KIT	Drum kit number
Bs PRG	Bass program number

HINT

When an item other than "EV→" is selected and no information is input for the current position, the arrow "←" is shown before the item name. This indicates that information input at a preceding point continues to be valid.

4. Press the [FUNCTION] key in the control section.

The indication "INSERT?" appears on the first line of the display.

Rhythm pattern number to insert

Number of measures to insert
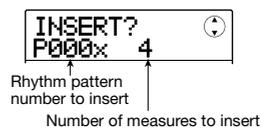
In this condition, you can input rhythm pattern information for the current point.

5. **Turn the dial to select the rhythm pattern to insert.**

6. **Use the cursor up/down keys to specify the number of measures to insert.**

If you specify more measures than the original length of the rhythm pattern, the rhythm pattern will be repeated. If you specify fewer measures, the song will switch to the next rhythm pattern before the current pattern has finished playing.

7. **To finalize the setting, press the [ENTER] key.**

The rhythm pattern information will be input at the current location, and the display reverts to the original screen. The "EOS" indication is moved back by the number of measures that were inserted.
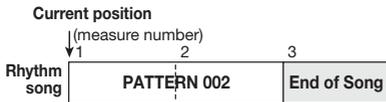
By pressing the PLAY [▶] key while this display is shown, you can repeatedly play the rhythm pattern entered at the current point.

8. **Repeatedly press the cursor right key to move to the measure number for which "EOS" is shown on the second line of the display.**

During rhythm song step input, you can use the cursor left/right keys to move the input position in measure units. When you reach the end of the song, the indication "EOS" is shown on the second line of the display.
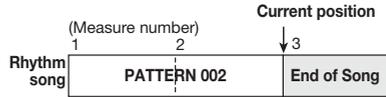
HINT

• The REW [◄◄] and FF [►►] keys in the transport section can be used to move the current position in beat units.

• When "EV→" is shown on the display, turning the dial moves the current position in sixteenth note units. By bringing up the "EV→" indication to move to a point within a measure and then using the cursor up/down keys to display event information, you can enter event information in sixteenth note units (→ p. 83).

9. **Repeat steps 4 – 8 to enter all required pattern information.**

10. **When all required pattern information has been entered, press the STOP [■] key.**

The REC [●] key goes out and the rhythm song selection screen appears again. If you press the PLAY [▶] key, the created rhythm song will be played.

To edit the entered rhythm pattern information, proceed as follows.

• Selecting a different rhythm pattern

Use the cursor left/right keys to move to the point where the respective rhythm pattern information is input, and then turn the dial to select the new rhythm pattern.

By turning the dial at a point where no rhythm pattern information is input ("←PTN" is shown), you can add new rhythm pattern information for this point.

The newly selected rhythm pattern information will always be valid until the point where the next rhythm pattern information is input.

• Deleting entered rhythm pattern information

Use the cursor left/right keys to move to the position of the rhythm pattern information to delete, and press the [FUNCTION] key twice. (The indication "EV ERASE SURE?" appears.) Then press the [ENTER] key. When rhythm pattern information was deleted, the previous pattern will remain valid until the point where the next rhythm pattern information is input.
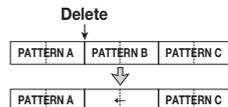
• Inserting a rhythm pattern in a song

Use the cursor left/right keys to move to the point where the rhythm pattern should be inserted, and perform steps 4 – 7. A new rhythm pattern is inserted at the current location, and all subsequent patterns are moved back by the duration of the inserted pattern.

Insert

PATTERN D

PATTERN A	PATTERN B	PATTERN C

PATTERN A	PATTERN B	PATTERN D	PATTERN C
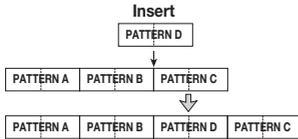
• Deleting a specific measure

Use the cursor left/right keys to move to the start position of the measure to delete. Press the [FUNCTION] key three times. (The indication "MEAS DEL SURE?" appears.) Then press the [ENTER] key. The measure at the current position is deleted, and subsequent rhythm pattern information moves forward. When a measure at the beginning of a rhythm pattern (such as the first measure of a 2-measure pattern) is deleted, that measure only is deleted, and the indication changes to "←PTN" for the second measure.

Delete 1 measure

PATTERN A	PATTERN B	PATTERN D	PATTERN C

PATTERN A	PATTERN B	←	PATTERN C
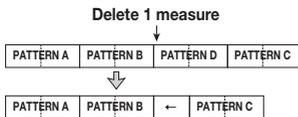
Using FAST for pattern information input

The FAST (Formula Assisted Song Translator) method developed by ZOOM uses simple formulas to specify rhythm pattern sequences and write an entire rhythm song in one operation.

The following keys and pads can be used for numeric input.

[x+] key
Enters the "+" (plus symbol) for lining up patterns and the "x" (multiplication symbol) for repeated play of the same pattern.

[( )] key
Enters the opening and closing brackets used for linking several patterns.
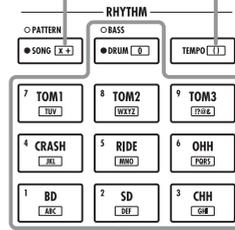
Pads 1 - 9 / [0] key
Serve for specifying pattern numbers and repetition count.

The basic rules for creating a rhythm pattern sequence are as follows.

• Line up patterns

Use the "+" symbol to line up rhythm patterns. For example, entering 0 + 1 + 2 will result in the following rhythm pattern play sequence.

PATTERN 0	PATTERN 1	PATTERN 2

• Repeat patterns

Use the "x" (multiplication) symbol to specify pattern repetitions. As in normal arithmetic, "x" takes precedence over "+". For example, entering 0 + 1 x 2 + 2 will result in the following rhythm pattern play sequence.

PATTERN 0	PATTERN 1	PATTERN 1	PATTERN 2

• Repeat multiple patterns

Use the "(" and ")" symbols (opening and closing brackets) to link a group of patterns for repetition. Formulas enclosed in brackets take precedence over other formulas. For example, entering 0 + (1 + 2) x 2 + 3 will result in the following rhythm pattern play sequence.

PATTERN 0	PATTERN 1	PATTERN 2

PATTERN 1	PATTERN 2	PATTERN 3
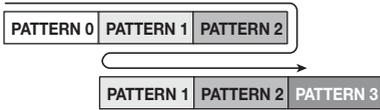
An example for creating the rhythm pattern sequence 0 + (1+2) x 4 is shown below.
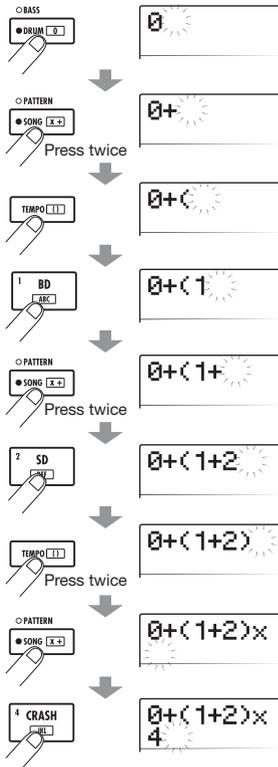
HINT

• If the formula does not fit on two lines, the indication scrolls by one character each. If you use the cursor left/right keys to move the input position, the line scrolls left and right accordingly.

• For FAST input, the leading zeros 0 and 00 can be omitted. For example, pattern 001 is specified as "1", and pattern 050 as "50".

• The entered formula is saved as part of a project. By calling up the formula later, you can edit it or use it to write the song.

NOTE

• The FAST method can only be used to write a song in one go, from beginning to end. Entering rhythm patterns partly into the song is not possible.

• To edit a rhythm song that was written with this method, edit the formula and then write the entire song again, or use step input.

1. **Press the [SONG/PATTERN] key repeatedly, until the key is lit.**

The rhythm section switches to the rhythm song mode, and the rhythm song selection screen appears.

2. **Press the [EDIT] key.**

The rhythm song edit menu appears.

```
SongEdit
TRANSPOS
```

3. **Use the cursor left/right keys to bring up the indication "SongEdit FAST" on the display, and press the [ENTER] key.**

A cursor appears on the first line of the display, and FAST input is possible.

Cursor

4. **Use the pads and keys of the rhythm section to enter the formula for creating the rhythm song.**

```
0+(1+2)x
4
```
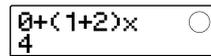
If you make a mistake during input, you can correct it as follows.

• Deleting a number/symbol

Use the cursor left/right keys to move the flashing segment to the number/symbol to delete, and press the [EDIT] key.

• Inserting a number/symbol

Use the cursor left/right keys to move the flashing segment to the point where you want to insert a number or symbol, and input the new number/symbol with the pads and keys.

5. **When formula input is completed, press the [ENTER] key.**

The display changes as follows. In this condition, you can select the rhythm song number into which to write the song.

SaveSong
0E
↑
Rhythm song number

HINT

When you select an empty rhythm song number, the indication "E" is shown to the right of the number.

NOTE

When you select an existing rhythm song as write destination, the contents of that rhythm song will be overwritten.

6. **Turn the dial to select the destination rhythm song, and press the [ENTER] key.**

The write operation is carried out, and the rhythm song edit menu appears again.

To check the result, press the [EXIT] key to return to the rhythm song selection screen, select the rhythm song that you have written, and press the PLAY [▶] key.

7. **To return to the main screen, press the [EXIT] key repeatedly.**

Entering chord information

This section explains how to add chord information (root and chord type) data to the rhythm song that you have created by inputting rhythm pattern data. When playing a rhythm song for which chord information was input, the bass sequence will change according to the chord progression.

HINT

• If the original root of the rhythm pattern and the root specified for the rhythm song are different, the bass sequence phrase will be transposed according to the root input for the rhythm song.

• If the original chord type of the rhythm pattern and the chord type specified for the rhythm song are different, the bass sequence phrase will be converted according to the chord type input for the rhythm song. (Depending on the phrase and chord type, there may be no change.)

1. **Bring up the rhythm song selection screen and turn the dial to select the rhythm song for which to enter chord information.**

2. **Press the REC [●] key.**

The key lights up and rhythm song step input becomes possible.

3. **Use the cursor up/down keys to bring up the indication "ROOT" on the first line of the display.**

You can now enter the chord root for the rhythm pattern played at this point.

At a point where rhythm pattern information is already input, the chord information "E--" (root: E, chord type: no conversion) is automatically assigned. Therefore, for a rhythm song without entered chord information, the phrase of the pattern is unchanged and the root is transposed to E.

ROOT
E --
M   AS   MS   MEASURE BEAT TICK
1- 1- 0

Chord type
Chord root

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 changing the chord root to A.

```
ROOT              🕒
A --
   M    S    MS   MEASURE  BEAT  TICK
                   1-  1-  0
```
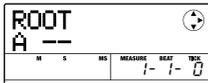
HINT
During chord information input, you can press the PLAY [▶] key to check the rhythm pattern. The pattern will be played with the new chord setting applied. To stop play, press the STOP [■] key.

5. **To change the chord type, press the cursor down key once to bring up the indication "CHORD" on the first line of the display.**

You can now input the chord type.

```
CHORD             🕒
A --
```

6. **Turn the dial to select the chord type from the following options.**

Display	Description	Display	Description
--	No change	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

7. **Move to the location where you want to input the next chord information, and input chord information in the same way as described in steps 3 – 6.**

You can move the input location during rhythm song step input in the following ways.

• **Moving in steps of a measure**
Use the cursor left/right keys to move to the beginning of the preceding or following measure.

• **Moving in steps of a beat**
Use the REW [◀◀]/FF [▶▶] keys to move to the beginning of the preceding or following beat.

• **Moving in steps of a sixteenth note**
Repeatedly press the cursor up key to bring up the

indication "EV→" on the display, and turn the dial to move forward or backward in 12-tick (16th note) units.

If necessary, you can also input chord information at a point within a measure, as shown below (smallest unit: sixteenth note). To do this, bring up the indication "EV→" on the first line of the display, turn the dial to move current point, and then bring up the chord information input screen again.

```
           Em        Am  B7  Em         Am
Measure 1          2          3          4
        ┌──────────────────┬──────────────────┐
        │    PATTERN A     │    PATTERN B     │
        └──────────────────┴──────────────────┘
Beat    1  2  3  4  1  2  3  4  1  2  3  4  1  2  3  4
```
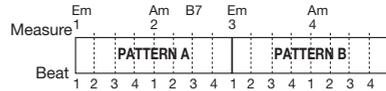
HINT
At a point where no chord information is input, "←" is shown to the left of the "ROOT" or "CHORD" indication. This means that the immediately preceding information continues to be valid.

8. **Input the remaining chord information in the same way.**

If you have made a mistake or want to make a change, proceed as follows.

• **To change chord information**
Move to the location at which the chord information is input, use the cursor up/down keys to switch the display to "ROOT" or "CHORD", and turn the dial to change the chord information.

• **To delete chord information**
Move to the location at which the chord information is input, and use the cursor up/down keys to show the chord information to delete. Press the [FUNCTION] key twice. (The indication "EV ERASE SURE?" appears.) When you press the [ENTER] key, the chord information will be deleted, and the display changes to "← ROOT" or "← CHORD".

9. **When you have finished, press the STOP [■] key.**

The unit returns to the rhythm song selection screen. By pressing the PLAY [▶] key in this condition, you can check the rhythm song with the new chord information. To return to the main screen, press the [EXIT] key.

Entering other information

A rhythm song contains information about rhythm patterns, chord, tempo, time signature etc. in a matrix configuration, as shown at the bottom of this page. This is called event information. When the rhythm song is in the step input condition, you can move the current position with the cursor left/right keys etc. and use the cursor up/down keys to call up and enter or edit event information.

1. **Bring up the rhythm song selection screen and turn the dial to select the rhythm song for which to enter chord information.**

2. **Press the REC [●] key.**

The key lights up and rhythm song step input becomes possible.

3. **Use the cursor up key to bring up the indication "EV→" on the first line of the display.**

This screen lets you check which event information is entered at the current point. The symbol after "EV→" (such as "Pt" or "TS") denotes the type of event.

Entered event type
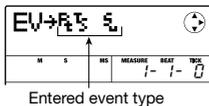
Available events and their symbols are listed in the table below.

Event type	Symbol	Description	Setting range
PTN		Rhythm pattern number	000 – 510
TimSig		Time signature (beat)	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 sequence volume	0 – 15
BsVOL		Bass sequence volume	0 – 15
DrKIT		Drum kit	See appendix
BsPRG		Bass program	See appendix

HINT

• Time signature information can be entered only at the beginning of a measure.

• If no tempo information is input for the rhythm song, the tempo currently set for the rhythm section will be used. To ensure that a rhythm song will always play with the same tempo, be sure to enter tempo information at the beginning of the song.

4. **Move to the location where you want to input a new event.**

For details on how to move the current location, refer to page 82.

5. **Use the cursor up/down keys to select the type of event to input.**

If the event you select here has been input at the current location, its value will be displayed.

Measure	1	2	3	4	5
Pattern	PATTERN 001	←	PATTERN 020	←	
Time signature	4/4	←	←	←	
Root/chord	D maj	←	G min	A7	
Tempo	BPM-135	←	←	←	
Drum track volume	10	←	←	←	
Bass track volume	10	←	←	←	
Drum kit number	0	←	←	←	
Bass program number	0	←	←	←	

```
DrLevel          ⊕
    15
```
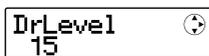
If there is no corresponding event, the display will indicate "←xxx" (where xxx is the event name). This indicates that the previously input event information still applies.

```
←Tempo           ⊕
```
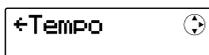
6. **Turn the dial to input the event value.**

HINT

During rhythm song step input, you can press the PLAY [▶] key to check the rhythm pattern. The pattern will be played with the current setting applied. To stop play, press the STOP [■] key.

7. **Input the remaining events in the same way.**

To input more information for the same type of event, you can move the current position in measures or beats while the event input screen is displayed.

If you make a mistake or want to change the information, the events can be edited in the following ways.

• **To change an event setting**

Display the event to change, and turn the dial to alter the setting.

• **To delete event information**

Display the event to delete, and press the [FUNCTION] key twice. (The indication "EV ERASE SURE?" appears.) Then press the [ENTER] key.

8. **When you have finished, press the STOP [■] key.**

The REC [●] key goes out, and the rhythm song selection screen appears again. To return to the main screen, press the [EXIT] key repeatedly.

Playing a rhythm song

This section explains how to select and play one of the 10 rhythm songs that were created by inputting rhythm pattern and chord information.

1. **From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is lit.**

The rhythm song selection screen appears.

```
SongNo0          ⊕
SONG000
```

2. **Turn the dial to select the rhythm song, and then press the PLAY [▶] key.**

The selected rhythm song will begin playing. If something has been recorded on the audio tracks, those tracks will play back simultaneously.

HINT

It is also possible to play a drum kit or bass program manually during rhythm song playback by hitting the pads.

NOTE

If you select an empty rhythm song for which an "E" is shown to the right of the song number, nothing will be played back.

3. **To stop the rhythm song, press the STOP [■] key.**

4. **To return to the main screen, press the [EXIT] key.**

Editing a rhythm song

This section explains how to edit a rhythm song that you have created.

Copying a specified range of measures

Part of a rhythm song can be copied in measures and inserted into another location. This is convenient to repeat a portion of a rhythm song.
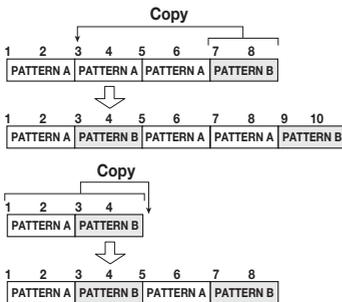
Copy

1	2	3	4	5	6	7	8
PATTERN A	PATTERN A	PATTERN A	PATTERN B

1	2	3	4	5	6	7	8	9	10
PATTERN A	PATTERN B	PATTERN A	PATTERN A	PATTERN B

Copy

1	2	3	4
PATTERN A	PATTERN B

1	2	3	4	5	6	7	8
PATTERN A	PATTERN B	PATTERN A	PATTERN B

1. From the main screen, press the [SONG/PATTERN] key repeatedly, until the key is lit.

The rhythm song selection screen appears.

2. Turn the dial to select the rhythm song to edit.

3. Press the REC [●] key.

The key lights up and rhythm song step input is possible.

4. Repeatedly press the [FUNCTION] key to bring up the indication "COPY START" on the display.

This screen lets you specify the measure to be used as copy source start point.

Copy source start point

5. Turn the dial to select the measure to use as copy source start point, and press the [ENTER] key.

The display changes as follows. This screen lets you specify the measure to be used as copy source end point.
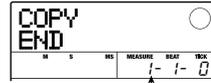
Copy source end point

6. Turn the dial to select the measure to use as copy source end point, and press the [ENTER] key.

The copy range is specified, and the screen for selecting the copy destination appears.
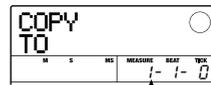
Copy destination start point

7. Turn the dial to select the measure to use as copy destination start point.

8. To carry out the copy process, press the [ENTER] key.

The "EOS" marker is shifted back by the number of copied measures.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

9. Press the STOP [■] key.

The unit returns to the rhythm song selection screen. To return to the main screen, press the [EXIT] key.

Transposing the entire rhythm song

You can transpose the bass sequence of the rhythm song up or down in semitone units.

1. From the main screen, press the [SONG/PATTERN] key repeatedly, until the key is lit.

The rhythm song selection screen appears.

2. Turn the dial to select the rhythm song to transpose.

3. Press the [EDIT] key.

The rhythm song edit menu appears.

```
SongEdit     ⟨•⟩
TRANSPOS
```

4. Verify that the indication "TRANSPOS" is on the display, and press the [ENTER] key.

The display changes as follows.

```
TRANSPOS     ◯
0
```
↑
Transpose value

5. Turn the dial to select the transpose setting (-6 – 0 +6), and press the [ENTER] key.

The default setting is 0 (no transposing). When you select a setting such as +5, the bass sequence will be transposed five semitones (a perfect fourth) up. (Depending on the range, the result may be one octave higher or lower.)

When you press the [ENTER] key to confirm the transpose setting, the indication "TRANSPOS SURE?" appears on the display.

6. To carry out the transpose operation, press the [ENTER] key once more.

The transpose operation is carried out, and the rhythm song edit menu appears again.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

NOTE

When you carry out the transpose operation, the root of the chord information for the rhythm song is rewritten. To return to the original condition, perform transpose once more in the opposite direction.

7. To return to the main screen, press the [EXIT] key repeatedly.

Copying a rhythm song

You can copy the contents of any rhythm song in a project to any other rhythm song number. This is useful to create variations of a song.

NOTE

When you execute the copy, the contents of the destination rhythm song will be erased. Use this function with care.

1. From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is lit.

The rhythm song selection screen appears.

2. Turn the dial to select the rhythm song to copy.

This song will be used as copy source.

3. Press the [FUNCTION] key twice.

The display changes as follows.

```
COPY         ◯
0→    1E
```
↑   ↑
Copy source rhythm song   Copy destination rhythm song

4. Turn the dial to select the number of the copy destination rhythm song, and press the [ENTER] key.

When you select an empty rhythm song number, the indication "E" is shown to the right of the number.

When you press the [ENTER] key, the indication "COPY SURE?" appears on the display.

5. To carry out the copy operation, press the [ENTER] key once more.

When the copy operation is completed, the unit returns to the rhythm song selection screen with the destination rhythm song being loaded.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

6. To return to the main screen, press the [EXIT] key repeatedly.

Erasing the rhythm song

This section explains how to erase the entire rhythm song, resetting it to a blank state.

NOTE

Once you erase the rhythm song, it cannot be recovered. Use this function with care.

1. **From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is lit.**

The rhythm song selection screen appears.

2. **Turn the dial to select the rhythm song to erase.**

3. **Press the [FUNCTION] key.**

The display changes as follows.
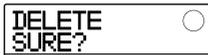
```
DELETE        ◯
SURE?
```

4. **To carry out the erase operation, press the [ENTER] key.**

When the erase operation is completed, the unit returns to the rhythm song selection screen.
By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

5. **To return to the main screen, press the [EXIT] key repeatedly.**

Assigning a name to a rhythm song

When a rhythm song is created, the song name "Songxxx" (where xxx is the song number) is automatically assigned. You can edit this name as necessary.

1. **From the main screen, press the [SONG/ PATTERN] key repeatedly, until the key is lit.**

The rhythm song selection screen appears.

2. **Turn the dial to select the rhythm song whose name you want to edit.**

3. **Press the [EDIT] key.**

The rhythm song edit menu appears.

```
SongEdit      ⊙
TRANSPOS
```

4. **Use the cursor left/right keys to bring up the indication "SongEdit NAME" on the display, and press the [ENTER] key.**

The display changes as follows.

```
SongName      ⊙
SONG000    -a-
```

5. **Use the cursor left/right keys to move the flashing position to the character to change, and turn the dial or use the rhythm section pads and keys to select a character.**

For information on how to input characters, refer to page 33.

6. **When the name has been input, press the [EXIT] key.**

The rhythm song name is changed, and the display returns to the rhythm song edit menu.

7. **To return to the main screen, press the [EXIT] key repeatedly.**

Importing rhythm patterns and rhythm songs from another project

This section explains how to import all rhythm pattern and rhythm song data or only a specific rhythm pattern from another project that was saved on the SD card.

NOTE

The import process will overwrite existing rhythm patterns/ rhythm songs in the currently selected project. Take care not to accidentally overwrite rhythm pattern or rhythm song data that you want to keep.

1. From the main screen, press the [SONG/ PATTERN] key to bring up the rhythm pattern or rhythm song selection screen.

Importing of rhythm patterns or rhythm songs is possible both in rhythm pattern mode and rhythm song mode.

2. Press the [SYSTEM/UTILITY] key.

The rhythm utility menu for making various rhythm section settings appears.

```
UTILITY      ⊙▸
DRUM KIT
```

3. Use the cursor left/right keys to bring up the indication "UTILITY IMPORT" on the display, and press the [ENTER] key.

The display changes as follows.

```
IMPORT       ⊙▸
ALL
```

4. Use the cursor left/right keys to select ALL (import all rhythm patterns and rhythm songs) or PATTERN (import specific rhythm pattern), and press the [ENTER] key.

In this condition, you can select the source project from which to import.

```
IMPORT       ◯
BontLkB1     0
```
↑ Project name   ↑ Project number

5. Turn the dial to select the source project, and press the [ENTER] key.

The subsequent steps differ, depending on which selection was made in step 4.

• When ALL was selected

Verify that the indication "IMPORT SURE?" is shown on the display. Then proceed to step 6.

• When PATTERN was selected

The source rhythm pattern is shown on the display. Turn the dial to select the desired rhythm pattern, and press the [ENTER] key. The import destination pattern then is displayed. Use the dial again to select the destination pattern, and press the [ENTER] key. The indication "IMPORT SURE?" appears on the display.

6. To carry out the import process, press the [ENTER] key.

When all patterns/songs were selected, the rhythm pattern or rhythm song selection screen appears again. When a specific rhythm pattern was selected, the unit returns to the condition of step 5. To return to the main screen, press the [EXIT] key repeatedly.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Editing various settings of the rhythm section

This section explains how to edit various settings that affect the entire rhythm section, such as adjusting the pad sensitivity or adjusting the volume of the metronome.

Basic procedure

The basic procedure for editing the rhythm section settings is the same for most items, as described below.

HINT
This procedure can be carried out either in rhythm pattern mode or rhythm song mode.

1. **From the main screen, press the [SONG/PATTERN] key to bring up the rhythm pattern or rhythm song selection screen.**

2. **Press the [SYSTEM/UTILITY] key.**
The rhythm utility menu for making various rhythm section settings appears.

```
UTILITY      ⊙
DRUM KIT
```

3. **Use the cursor left/right keys to select one of the following items to edit, and press the [ENTER] key.**

• **DRUM KIT**
Select the drum kit to use for rhythm pattern/rhythm song play (→ p. 64).

• **BASS PRG**
Select the bass program to use for rhythm pattern/rhythm song play (→ p. 64).

• **COUNT**
Change the length of the pre-count that is heard during real-time input of a rhythm pattern.

• **ClickVol**
Change the volume level of the metronome click that is heard during real-time input of a rhythm pattern.

• **PAD SENS**
Change the pad sensitivity which determines the volume level in relation to the force with which the pad is struck.

• **MIDI**
Make MIDI-related settings (→ p. 108).

• **IMPORT**
Import rhythm patterns and rhythm songs from another project saved on the SD card (→ p. 88).

• **MEMORY**
Check the remaining amount of rhythm pattern and rhythm song memory.

• **POSITION**
Select whether the drum track panning operates as seen from the drummer or from the listener (audience).

4. **Turn the dial to edit the setting.**
The screen display and operation will be different for each item. For details on most items, refer to the sections that follow. For information on rhythm pattern/rhythm song import and MIDI settings, refer to the respective sections in this manual.

5. **When you have finished making settings, press the [EXIT] key repeatedly to return to the main screen.**

Changing the length of the pre-count

You can change the length of the pre-count that is heard when you record a rhythm pattern in real time. Perform steps 1 – 3 of "Basic procedure" to bring up the indication "UTILITY COUNT", and press the [ENTER] key. Then turn the dial to choose one of these settings.

```
COUNT        ◯
4
```

• **OFF**
The pre-count is turned off.

• **1 – 8**
A pre-count of 1 – 8 beats is heard (default: 4).

- **SPECIAL**

A special pre-count as shown below is heard.

Changing the metronome volume

You can change the volume of the metronome that is heard when you record a rhythm pattern in real time. Perform steps 1 – 3 of "Basic procedure" to bring up the indication "UTILITY ClickVol", and press the [ENTER] key. Then turn the dial to set the volume (0 – 15).
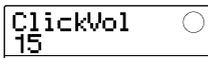
HINT

A setting of zero means that the metronome click is off.

Adjusting the sensitivity of the pads

You can specify the volume that is produced according to the force with which you hit the pads (pad sensitivity). Perform steps 1 – 3 of "Basic procedure" to bring up the indication "UTILITY PAD SENS", and press the [ENTER] key. Then turn the dial to choose one of these settings.

- **SOFT**

The volume will be soft, regardless of how strongly you tap the pad.

- **MEDIUM**

The volume will be medium, regardless of how strongly you tap the pad.

- **LOUD**

The volume will be loud, regardless of how strongly you tap the pad.

- **LITE**

Maximum sensitivity. Even light taps will produce a loud volume.

- **NORMAL**

Normal sensitivity (default setting).

- **HARD**

Low sensitivity. Strong tapping is needed to produce a loud volume.

- **EX HARD**

Lowest sensitivity. Very strong tapping is needed to produce a loud volume.

Checking the remaining amount of memory

To check the remaining amount of recording memory for rhythm patterns and rhythm songs, perform steps 1 – 3 of "Basic procedure" to bring up the indication "UTILITY MEMORY", and press the [ENTER] key.
This screen is for display only. There is no setting that can be edited.

Swapping the left/right pan position

The pan setting for the drum sound can be set to apply as seen from the drummer or from the listener.
Perform steps 1 – 3 of "Basic procedure" to bring up the indication "UTILITY POSITION", and press the [ENTER] key. Then select one of the following settings.

- **PLAYER**

Left/right pan setting applies as seen from the player (drummer).

- **LISTENER**

Left/right pan setting applies as seen from the listener (audience).

Reference [Effects]

This section explains the functions and operation of the effect section built into the MRS-8.

About the effects

The MRS-8 has two types of effects, an "insert effect" that is inserted at a specific position, and a "send/return effect" that is used via the built-in mixer. The two effect types can be used simultaneously. The characteristics of these effects are described below.

■ Insert effect

The insert effect is placed into the signal path at a specific point. You can select one of the following positions at which to apply the effect.

(1) **Immediately after the input jack**
(2) **In the output of any audio track or drum track/bass track**
(3) **Immediately before the [MASTER] fader**

When the position immediately after the input jack is selected, the effect processes the input signal, and the result will be recorded when you carry out recording.

When the insert effect is applied to one of the audio tracks (tracks 1 – 8) or the drum track/bass track (drum kit/bass program output signal), the effect processes only a specific track. This can be used to modify the sound of a recorded track.

By selecting the position immediately before the [MASTER] fader, you can process the final stereo mix, for example to adjust the tonal quality or sonic intensity during mixdown or bounce recording.

■ Send/return effect

The send/return effect is internally connected to the send/return loop of the mixer section. This applies to all tracks and can be used to add effects such as reverb or chorus during mixdown or bounce recording.

The signal level of each track going to the send/return effect (send level) can be adjusted individually. The output of the send/return effect is returned to the internal mixer and added to the stereo mix.

Send level adjustment
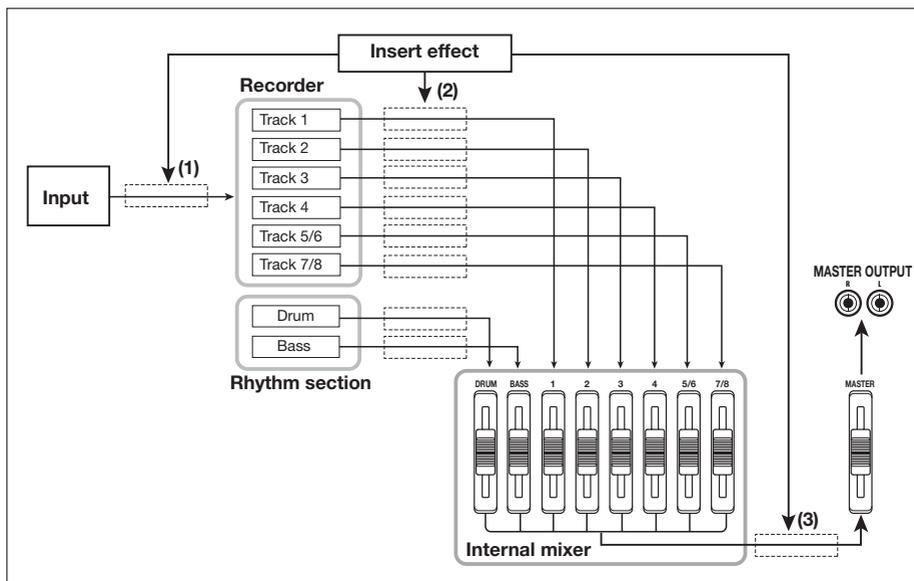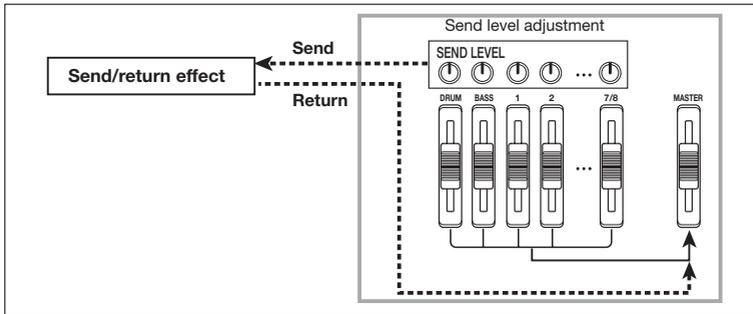
Using the insert effect

This section explains how to select the position for the insert effect, how to select a patch, and how to edit patches.

About insert effect patches

The insert effect section contains a number of single effects such as compressor, distortion, and delay. Each of these separate effects is called an "effect module".
In the insert effect, the effect modules are connected in series. A combination of effect modules that can be used simultaneously is called an "algorithm".

The MRS-8 allows the following algorithms.

- **CLEAN**
- **DIST**
- **ACO/BASS SIM (Display: Ac/BsSIM)**
- **BASS**

An algorithm suitable for recording guitar/bass.

- **MIC**

An algorithm suitable for microphone recording of vocals and acoustic instruments.

- **LINE**

An algorithm suitable for recording line-level output instruments such as a synthesizer.

- **DUAL MIC**

An algorithm with two entirely separate channels for mono input x 2 and mono output x 2.

- **MASTERING (Display: MASTRING)**

An algorithm suitable for processing the final stereo mix signal.

Depending on the selected algorithm, the input/output configuration of the effect will differ. The arrangement of effect modules for each algorithm and the input/output signal flow are shown in the diagram below.

HINT

For some insert position settings, a stereo signal may be mixed to mono before effect input (→ p. 94).

Algorithm	Effect module arrangement					Input/output type
CLEAN DIST ACO/BASS SIM BASS	COMP	PRE AMP/DRIVE	ZNR	EQ	MODULATION/DELAY	Mono → Stereo
MIC	COMP/LIM	MIC PRE+DE-ESSER	ZNR	EQ	MODULATION/DELAY	
LINE	COMP/LIM	ISOLATOR	ZNR	EQ	MODULATION	Stereo → Stereo
DUAL MIC	COMP/LIM	MIC PRE	ZNR	EQ	DOUBLING	Mono x 2 → Mono x 2
	COMP/LIM	MIC PRE	ZNR	EQ	DOUBLING	
MASTERING	3BAND COMP LO-FI	NORMALIZE	ZNR	EQ	DIMENSION RESONANCE	Stereo → Stereo

Each effect module in an algorithm comprises two aspects, namely the effect type and the effect parameters. Even within the same algorithm, changing the effect type and/or the effect parameters can produce a variety of different sounds.

```
┌─────────────── Patch ───────────────┐
│  ┌──────┐  ┌──────────┐  ┌──────┐   │
──┤  │ COMP │  │ PRE AMP/ │  │ ZNR  │   │
│  └──────┘  │  DRIVE   │  └──────┘   │
│            └──────────┘             │
│  ┌──────┐  ┌──────────┐  ┌──────┐   │
│  │  EQ  │  │MODULATION/│ │PAT LVL│──┼──►
──┤  └──────┘  │  DELAY   │  └──────┘   │──►
└──────────────└──────────┘────────────┘
```
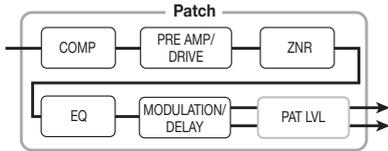
The edited effect type and parameter settings are stored as a so-called "patch". The insert effect allows 20 – 50 patches per algorithm. The numbers are listed in the table below.

Algorithm	Number of patches (preprogrammed patches)
CLEAN	30 (22)
DIST	50 (42)
ACO/BASS SIM	20 (10)
BASS	20 (10)
MIC	50 (31)
LINE	50 (30)
DUAL MIC	50 (30)
MASTERING	30 (21)

To use a patch, first select the algorithm and then select one of the patches in the algorithm. When you select a patch, it becomes effective immediately.

Changing the insert location of the insert effect

In the default condition of a project, the insert effect is applied immediately after the input. To change the insert location, proceed as follows.

1. **From the main screen, press the [INPUT SRC] key in the effect section.**
The current insert position is shown on the display.
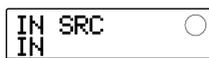
```
┌────────────────────┐
│ IN SRC        ○    │
│ IN                 │
└────────────────────┘
        ↑
   Insert position
```

The display meaning is as follows.

• **IN**
Immediately after input (default)

• **DRUM**
Drum track

• **BASS**
Bass track

• **TR 1 – 4**
Tracks 1 – 4

• **TR 1/2, TR 3/4, TR 5/6, TR 7/8**
Mono tracks x 2 (tracks 1/2, 3/4) or stereo tracks (tracks 5/6, 7/8)

• **MASTER**
Immediately before [MASTER] fader

2. **Turn the dial to select the insert position.**

HINT
While the screen of step 1 is shown, the status keys and INPUT [ON/OFF] keys 1/2 can also be used to select the insert position. To select the track pairs 1/2 and 3/4, press both status keys together. To select the drum/bass track using the status key method, press the [RHYTHM] status key repeatedly until the desired insert position ("DRUM" or "BASS") is shown.

3. **When the desired insert position has been selected, press the [EXIT] key to return to the main screen.**

Selecting the patch for the insert effect

This section explains how to select the patch for the insert effect.

1. **From the main screen, press the [INSERT EFFECT] key in the effect section repeatedly, until the key is lit.**
The following display is shown. In this condition, you can select the algorithm and patch for the insert effect.

Algorithm name

CLEAN
Standard   PATCH   0

Patch name   Patch number
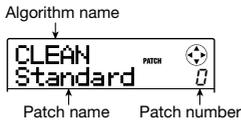
2. **Use the cursor up/down keys to select the algorithm to use.**

When you select the algorithm, the patch currently selected for that algorithm becomes active.

3. **Turn the dial to select the patch to use.**

The new patch is called up immediately.

HINT

- You can also use the cursor left/right keys to adjust the patch level (the final volume of the patch).
- If the indication "EMPTY" is shown in the patch name field, selecting the patch will have no effect.

4. **To temporarily turn off the insert effect, press the [INSERT EFFECT] key so that the key goes out.**

The insert effect is switched to the bypass (off) condition. The indications "BYPASS" and "TUNER→ENTER" are shown alternately on the display.

To turn the insert effect on again, press the [INSERT EFFECT] key once more.

HINT

Pressing the [ENTER] key in the bypass condition activates the tuner function (→ p.114).

5. **Press the [EXIT] key to return to the main screen.**

The flow of the signal before and after the insert effect will change, depending on the insert position and the number of input/output channels (mono/stereo).

The illustration at right shows how the signal changes before and after the insert effect, depending on the insert effect position. (In the effect indication, "M→S" stands for mono input/stereo output, "S→S" stands for stereo input and output, and "Dual" stands for mono input x 2 and mono output x 2.)

- **Insert position immediately after input**

Recording on a mono track

Input 1 — EFFECT (M→S) L/R → Track

Input 1 — EFFECT (DUAL) L/R → Track

Input 1 / Input 2 — EFFECT (S→S) L/R → Track

Input 1 — EFFECT (S→S) L/R → Track

Input 1 / Input 2 — EFFECT (M→S) L/R → Track

Input 1 / Input 2 — EFFECT (DUAL) L/R → Track
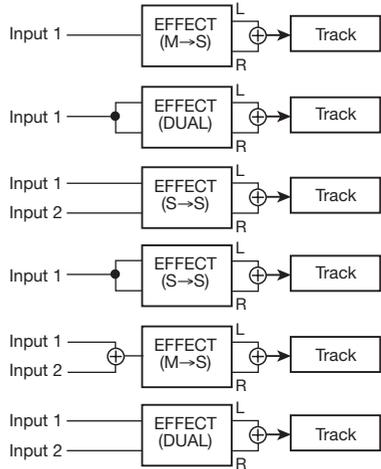
Recording on a stereo track

Input 1 — EFFECT (M→S) L → Odd-numbered track / R → Even-numbered track

Input 1 — EFFECT (DUAL) L → Odd-numbered track / R → Even-numbered track

Input 1 / Input 2 — EFFECT (S→S) L → Odd-numbered track / R → Even-numbered track

Input 1 — EFFECT (S→S) L → Odd-numbered track / R → Even-numbered track

Input 1 / Input 2 — EFFECT (M→S) L → Odd-numbered track / R → Even-numbered track

Input 1 / Input 2 — EFFECT (DUAL) L → Odd-numbered track / R → Even-numbered track

- **Insert position at output of audio track or drum kit/bass program**

Insert target is mono track (1 - 4) or bass track

Recorder | | Internal mixer
Track — EFFECT (M→S) — L/R ⊕ → Fader

Track — EFFECT (S→S) — L/R ⊕ → Fader

Track — EFFECT (DUAL) — L/R ⊕ → Fader
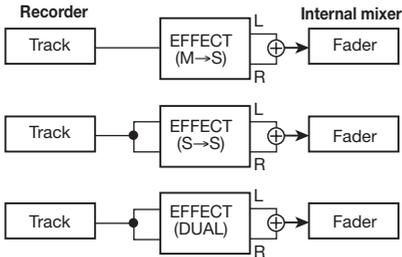
Insert target is stereo track (5/6, 7/8), mono track pair (1/2, 3/4) or drum track

Recorder | | Internal mixer
Odd-numbered track / Even-numbered track ⊕ — EFFECT (M→S) — L → Fader / R → Fader

Odd-numbered track / Even-numbered track — EFFECT (S→S) — L → Fader / R → Fader

Odd-numbered track / Even-numbered track — EFFECT (DUAL) — L → Fader / R → Fader

- **Insert position immediately before [MASTER] fader**

L/R ⊕ — EFFECT (M→S) — MASTER fader — MASTER OUTPUT L / R

L / R — EFFECT (S→S) — MASTER fader — MASTER OUTPUT L / R
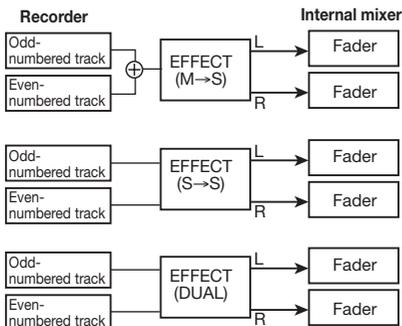
L / R — EFFECT (DUAL) — MASTER fader — MASTER OUTPUT L / R
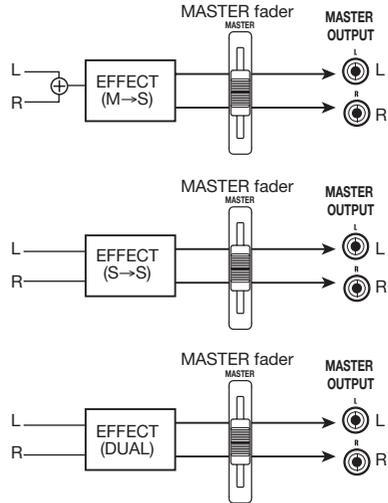
Editing an insert effect patch

The effect modules of an algorithm 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 sonic result.

For some effect modules, you can also change the effect type. For example, the MODULATION/DELAY effect module of the MIC algorithm provides 19 effect types such as chorus, flanger, phaser, etc. (When you change the effect type, the effect parameter arrangement also changes.)

Effect module: MODULATION/DELAY

Effect type: CHORUS | FLANGER | PHASER | •••

Effect parameters:
- CHORUS: DEPTH / RATE / MIX
- FLANGER: DEPTH / RATE / FB
- PHASER: RATE / COLOR
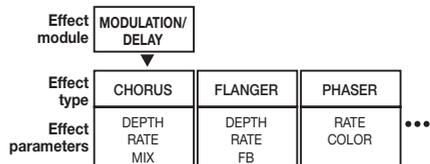
This section explains how to edit the effect type and effect parameters for the currently selected patch.

The algorithm itself (type and arrangement of effect modules) cannot be edited.

1. From the main screen, press the [INSERT EFFECT] key in the effect section repeatedly, until the key is lit.

The insert effect patch selection screen is shown.

```
CLEAN        PATCH  ⊕
Standard        0
```

2. Use the cursor up/down keys to select the algorithm which has the patch you want to edit. Turn the dial to select the patch.

HINT

If the indication "EMPTY" is shown in the patch name field, all of the modules are set to off. By editing such a patch, you can create it from scratch.

3. Press the [EDIT] key.

The indication "EDIT" appears on the display. This means that the patch can now be edited.

The first line of the display shows the effect module currently selected for editing.

Effect module ⟶ **EDIT**

```
COMPRESS   EDIT   ⊕
SENS            VALUE  4
```
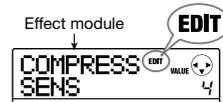
4. Use the cursor left/right keys to select the effect module to edit.

```
MOD/DLY   EDIT   ⊕
CHORUS
```
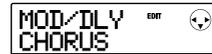
Depending on the selected effect module, the indication on the first line of the display changes as shown in the table below.

This table shows the display that is shown when the effect module is on. If the effect module is off, the first line of the display shows the module name or the effect type, and the second line shows "-OFF-".

HINT

In the DUAL MIC algorithm, the modules assigned to the L and R channels can be edited separately. The indication "L" on the display means that the module for the left channel is selected. The indication "R" means that the module for the right channel is selected.

5. To change the effect type of the currently selected effect module, turn the dial.

Algorithm	Module/display indication				
CLEAN DIST ACO/BASS SIM BASS	COMPRESS COMP	→ PRE/DRV PRE AMP/DRIVE	→ 3BandEQ EQ	→ MOD/DLY MODULATION/DELAY	→ TOTAL ZNR, PAT LVL
MIC	COMP/LIM COMP/LIM	→ MIC PRE MICPRE+DE-ESSER	→ 3BandEQ EQ	→ MOD/DLY MODULATION/DELAY	→ TOTAL ZNR, PAT LVL
LINE	COMP/LIM COMP/LIM	→ ISOLATOR ISOLATOR	→ 3BandEQ EQ	→ MOD/DLY MODULATION/DELAY	→ TOTAL ZNR, PAT LVL
DUAL MIC	COMP L COMP/LIM	→ MicPre L MICPRE	→ EQ L EQ	→ DOUBLE L DOUBLING	→ TOTAL ZNR, PAT LVL
MASTERING	CMP/LoFi 3BAND COMP/ Lo-Fi	→ NORMLZR NORMALIZER	→ 3BandEQ EQ	→ DIM/RESO DIMENSION/ RESONANCE	→ TOTAL ZNR, PAT LVL

For effect modules which comprise multiple effect types, the name of the currently selected effect type is shown on the second line of the display. When you turn the dial in this condition, the effect type changes.
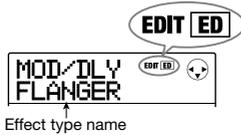
Effect type name

HINT

- If the contents of a patch have been changed, the "EDIT" indicator in the upper part of the display will change to "EDITED". When the setting is returned to the original condition, the indicator reverts to "EDIT".
- To edit the ZNR module, bring up the indication "TOTAL" on the first line of the display, and then press the cursor down key to call up the parameter.

6. **Use the cursor up/down keys to select the effect parameter to edit.**

The displayed parameter will be different, depending on the effect module and effect type.

The following illustration shows what appears on the display when you have selected the DEPTH parameter of the "FLANGER" effect.

Effect parameter   Setting value

HINT

When the first line of the display shows "TOTAL", the cursor up/down keys can be used to select the ZNR module and the patch level.

7. **Turn the dial to change the setting value.**

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 information in the appendix of this manual.

8. **To toggle the effect module on or off, bring up an effect type or parameter for the module, and then press the [ENTER] key.**

The effect module is turned off. The module name or the effect type is shown on the first line and the indication "-OFF-" on the second line of the display. Pressing the [ENTER] key once more in this condition turns the

module on again.

NOTE

The modules included in TOTAL cannot be turned off.

9. **To compare the sound of the currently edited patch before and after editing, press the [INSERT EFFECT] key.**

Pressing the [INSERT EFFECT] key during editing activates the compare function. While the compare function is active, the display changes as follows and the patch reverts to the last stored condition.

To return to the edited patch, press the [INSERT EFFECT] key once more, or press the [EXIT] key.

10. **Repeat steps 4 – 8 as necessary to edit other modules.**

11. **To adjust the patch level (the final volume of the patch), use the cursor left/right keys to bring up the indication "TOTAL PAT LVL" on the display, and turn the dial.**

The patch level can be adjusted in the range from 1 to 30.
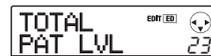
12. **When you have finished editing, press the [EXIT] key repeatedly to return to the main screen.**

NOTE

Keep in mind that if you select another patch without first storing the edited patch, the changes will be lost. For information on how to store a patch, refer to the next section.

Storing or swapping insert effect patches

An insert effect patch that you have edited can be stored in any location of the same algorithm. By storing an existing patch in another location, you can create a copy of that patch. Interchanging the position of patches (swapping) is also possible.

1. **From the insert effect patch selection screen or the edit screen, press the [FUNCTION] key.**

The currently selected patch goes into store standby mode. In this condition, you can select whether to perform store or swap.

```
STORE TO  PATCH  ⊕
Standard         0
```
Patch number

2. **Use the cursor left/right keys to bring up the indication "STORE TO" or "SWAP TO".**

3. **Turn the dial to select the number of the patch to store/swap.**

When carrying out store, the current patch settings will be stored under this number.

When carrying out swap, the currently selected patch and the patch settings selected here will be interchanged.

4. **To carry out the store/swap operation, press the [FUNCTION] key.**

When the store/swap operation is completed, the insert effect patch selection screen appears again.

By pressing the [EXIT] key instead of the [FUNCTION] key, you can cancel the operation and back up one step at a time.

HINT
- Patches are saved as part of a project.
- Patches from another project can be imported to the current project (→ p. 102).

Assigning a name to an insert effect patch

This section explains how to assign a name to the currently selected insert effect patch.

1. **From the insert effect patch selection screen, select the patch whose name you want to change.**

```
CLEAN    PATCH  ⊕
Standard         0
```

2. **Press the [EDIT] key.**

The selected patch can now be edited.

3. **Use the cursor left/right keys to bring up the indication "TOTAL PAT LVL" on the display.**
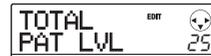
```
TOTAL    EDIT   ⊕
PAT LVL         25
```

4. **Repeatedly press the cursor down key to bring up the indication "PAT NAME" on the display.**

The name of the selected patch can now be edited. The cursor indicates the character that can be changed.

```
PAT NAME  EDIT  ⊕
█tandard        -A-
```
Cursor

5. **Use the cursor left/right keys to move the cursor to the character you want to change, and turn the dial or use the rhythm section pads and keys to select a character.**

For information on how to input characters, refer to page 33.

6. **To confirm the new name, press the [FUNCTION] key in the control section twice.**

The patch is stored, overwriting the old information. When storing is complete, the insert effect patch selection screen appears again.

Applying the insert effect only to the monitor signal

Normally, when the insert effect is applied immediately after the input, the signal processed by the effect will be recorded (effect recording). 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 may be more comfortable singing if an effect is applied to the monitor signal only.

1. **Set the insert effect position to immediately after the input.**

2. **From the main screen, press the [SYSTEM/ UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

3. **Use the cursor left/right keys to bring up the indication "SYSTEM REC SRC" on the display, and press the [ENTER] key.**

The display changes as follows.

You can now select one of the following two signal types 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).

Fader 1 / MASTER OUTPUT jacks / [MASTER] fader
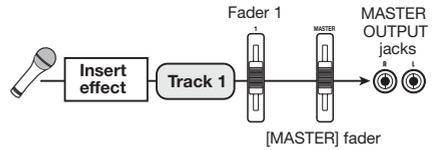
• **DRY**

Only the unprocessed input signal will be recorded on the track. If the insert effect is applied to the input, the signal appearing at the MASTER OUTPUT jacks will be processed by the effect.

Fader 1 / MASTER OUTPUT jacks / [MASTER] fader
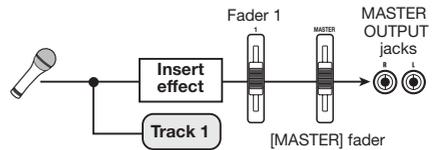
4. **Turn the dial to change the setting to "DRY".**

5. **When you have finished making settings, press the [EXIT] key repeatedly to return to the main screen.**

NOTE

This setting is stored for each project. If required, change the setting back to "WET" before you begin recording other parts.

Using the send/return effect

This section explains how to select and edit patches for the send/return effect.

About the send/return effect patches

The send/return effect of the MRS-8 is a single effect module for which one effect type (reverb, chorus, delay, etc.) can be selected.

Each effect type has various effect parameters which can be adjusted to control the sound produced by the effect.

Such settings can be assigned a name and stored as a patch. In the default condition, a project has 60 send/return effect patches (40 of which are preprogrammed). By selecting one of these, the send/return effect can be instantly switched.

Selecting a send/return effect patch

This section explains how to select a send/return effect patch.

1. **From the main screen, press the [SEND/RETURN] key in the effect section repeatedly, until the key is lit.**

The send/return effect patch selection screen appears.

Patch name   Patch number

2. **Turn the dial to select the patch.**

As you turn the dial, new patches will be recalled immediately. If the send/return effect send level for each track has been raised, you can press the PLAY [▶] key to play back the song and check out the result of the newly selected patch.

HINT
• You can also use the cursor left/right keys to adjust the EFX LVL parameter (the mix amount of the effect sound).
• For information on how to adjust the send level, see page 59.

3. **To temporarily turn off the send/return effect, press the [SEND/RETURN] key so that the key goes out.**

The send/return effect is switched to the bypass (off) condition. The indication "SEND -MUTE-" is shown on the display. To turn the send/return effect on again, press the [SEND/RETURN] key once more.

4. **Press the [EXIT] key to return to the main screen.**

Editing a send/return effect patch

This section explains how to edit a send/return effect patch.

1. **From the main screen, press the [SEND/RETURN] key in the effect section repeatedly, until the key is lit.**

The send/return effect patch selection screen appears.

2. **Turn the dial to select the patch to edit.**

HINT
If the indication "EMPTY" is shown in the patch name field, all of the modules are set to off. By editing such a patch, you can create it from scratch.

3. **Press the [EDIT] key.**

The currently selected effect type appears on the second line of the display.

Effect type

The indication "EDIT" is shown on the display during patch editing.

4. **Turn the dial to switch the effect type.**

When the effect type is changed, the effect parameters will also change accordingly.

HINT

• If the contents of a patch have been changed, the "EDIT" indicator in the upper part of the display will change to "EDITED". When the setting is returned to the original condition, the indicator reverts to "EDIT".

• By pressing the [ENTER] key during editing, you can temporarily turn the effect off, which is convenient during parameter adjustment. To turn the effect back on, press the [ENTER] key once more.

5. **Use the cursor up/down keys to select the effect parameter to edit.**

The first line of the display shows the effect type, and the second line shows the name and current value of the effect parameter.

Effect parameter   Setting value
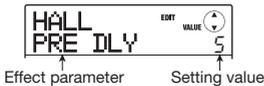
HINT

To change the effect type, press the cursor up key repeatedly to bring up the indication of step 3, and then turn the dial.

6. **Turn the dial to change the setting.**

For details on the effect types and effect parameters for the send/return effect, refer to the appendix at the end of this manual.

7. **To compare the sound of the currently edited patch before and after editing, press the [SEND/RETURN] key.**

Pressing the [SEND/RETURN] key during editing activates the compare function.

While the compare function is active, the display changes as follows and the patch reverts to the last stored condition.

To return to the edited patch, press the [SEND/RETURN] key once more, or press the [EXIT] key.

8. **Repeat steps 5 – 6 as necessary to edit other effect parameters.**

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

The send/return effect patch selection screen appears again.

NOTE

Keep in mind that if you select another patch without first storing the edited patch, the changes will be lost. For information on how to store a patch, refer to the next section.

Storing or swapping send/return effect patches

A patch that you have edited can be stored in any location of the send/return effect. By storing an existing patch in another location, you can create a copy of that patch. Interchanging the position of patches (swapping) is also possible.

1. **From the send/return effect patch selection screen or edit screen, press the [FUNCTION] key.**

The currently selected patch goes into store standby mode. In this condition, you can select whether to perform store or swap.

Patch number

2. **Use the cursor left/right keys to bring up the indication "STORE TO" or "SWAP TO".**

3. **Turn the dial to select the number of the patch to store/swap.**

When carrying out store, the current patch settings will be stored under this number.

When carrying out swap, the currently selected patch and the patch settings selected here will be interchanged.

4. **To carry out the store/swap operation, press the [FUNCTION] key.**

When the store/swap operation is completed, the send/return effect patch selection screen appears again.

By pressing the [EXIT] key instead of the [FUNCTION] key, you can cancel the operation and back up one step at a time.

HINT
• Patches are saved as part of a project.
• Patches from another project can be imported to the current project.

Assigning a name to a send/return effect patch

This section explains how to assign a name to the currently selected send/return effect patch.

1. **From the send/return effect patch selection screen, select the patch whose name you want to change.**

```
SEND      PATCH  ◄◆►
VoChorus        0
```

2. **Press the [EDIT] key.**

The selected patch can now be edited.

3. **Repeatedly press the cursor down key to bring up the indication "PAT NAME" on the display.**

The name of the selected patch can now be edited. The cursor indicates the character that can be changed.

```
PAT NAME  EDIT  ◄◆►
■oChorus       -A-
     ↑
   Cursor
```

4. **Use the cursor left/right keys to move the cursor to the character you want to change, and turn the dial or use the rhythm section pads and keys to select a character.**

For information on how to input characters, refer to page 33.

5. **To confirm the new name, press the [FUNCTION] key in the control section twice.**

The patch is stored, overwriting the old information. When storing is complete, the send/return effect patch selection screen appears again.

NOTE
Keep in mind that the name will revert to the previous name if you switch to another patch without storing the edited patch.

Importing patches from another project

If required, you can import all patches or specific patches of the insert effect or send/return effect from another project.

NOTE
Keep in mind that importing patches in this way will overwrite patches in the current project. Take care not to accidentally erase patches that you wish to keep.

1. **To import a specific patch, select the patch to use as import target.**

• **Importing a specific insert effect patch**
From the main screen, press the [INSERT EFFECT] key to bring up the insert effect patch selection screen. Then use the cursor up/down keys and the dial to select the algorithm and patch to use as import target. The import source can be selected from the patches of the same algorithm.

• **Importing a specific send/return effect patch**
From the main screen, press the [SEND/RETURN EFFECT] key to bring up the send/return effect patch selection screen. Then use the dial to select the patch to use as import target.

2. **Press the [SYSTEM/UTILITY] key to bring up the indication "UTILITY IMPORT" on the display, and then press the [ENTER] key.**

The display changes as follows.

```
┌─────────────────────────┐
│ IMPORT          ⊙       │
│ ALL                     │
└─────────────────────────┘
```
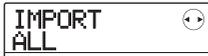
3. Turn the dial to select ALL (import all patches) or PATCH (import single patch), and press the [ENTER] key.

In this condition, you can select the project from which to import.

```
┌─────────────────────────┐
│ IMPORT          ○       │
│ PRJ005          5       │
└─────────────────────────┘
   ↑                ↑
Project name   Project number
```

4. Turn the dial to select the import source project, and press the [ENTER] key.

The subsequent steps differ, depending on which selection was made in step 3.

• When ALL was selected

Verify that the indication "IMPORT SURE?" is shown on the display and proceed to step 5.

• When PATCH was selected

The import source patch appears on the display. When you turn the dial to select the patch and press the [ENTER] key, the import target patch selected in step 1 is shown. If necessary, turn the dial to select the number of the patch to use as import target, and press the [ENTER] key. The indication "SURE?" appears on the display.

5. To carry out the import process, press the [ENTER] key.

All patches or the specified patch of the selected project will be imported. When the process is completed, the display of step 1 appears again.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Reference [Projects]

This section describes how to perform operations for entire projects.

About projects

On the MRS-8, the data needed to reproduce a song you create are managed in units called "projects". By loading a project, you can always go back to exactly the same condition that existed when the project was saved.

A project contains the following information.

- Audio data recorded on V-takes 1 – 10 of tracks 1 – 8 and the master track
- V-take selected for each track
- Internal mixer settings
- Track parameter settings
- Numbers and settings of patches currently selected for insert effect/send return effects
- Rhythm patterns
- Rhythm songs
- Drum kit/bass program currently selected for drum/bass track
- Other settings

HINT

On the MRS-8, recording/playback operations can be performed only for the currently loaded project. It is not possible to perform functions for multiple projects simultaneously.

Working with projects

This section explains how to perform operations such as loading or saving a project.

Basic procedure

Some steps are the same for all project operations. These are explained below.

1. **From the main screen, press the [SYSTEM/ UTILITY] key in the display section.**

The display changes as follows.

```
SYSTEM
PROJECT          ⊙
```

2. **Verify that "SYSTEM PROJECT" is shown on the display, and press the [ENTER] key.**

The project menu appears on the display, allowing you to select the desired project operation.

```
PROJECT          ⊙
SELECT
```

HINT

Each time you call up the project menu, the current project is automatically saved.

3. **Use the cursor left/right keys to select one of the following operations.**

- **PROJECT SELECT**

Load a previously saved project from the SD card.

- **PROJECT NEW**

Create a new project.

- **PROJECT COPY**

Duplicate a project saved on the SD card.

- **PROJECT ERASE**

Erase a project from the SD card.

• **PROJECT NAME**

Edit the name of the currently loaded project.

• **PROJECT PROTECT**

Switch the protection status of the currently loaded project on or off.

• **PROJECT SEQ PLAY**

Continuously play the master tracks from several projects saved on the SD card (sequence play).

HINT

For details on the sequence play function, see page 111.

---

4. **Press the [ENTER] key to 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 repeatedly.**

Depending on which selection was made in step 3, the main screen may return automatically.

Loading a project

You can select a project that was saved on the SD card, and load it.

HINT

When power to the MRS-8 is turned on, the project that was last worked on will be loaded automatically.

---

1. **Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "PROJECT SELECT" on the display. Then press the [ENTER] key.**

The name and number of the project to be loaded are shown on the display.

```
PRJ SEL       ○
PRJ000        0
```

Project name   Project number

2. **Turn the dial to select the desired project.**

3. **Press the [ENTER] key to load the project.**

When loading is completed, the unit returns to the main screen. By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Creating a new project

This operation creates a new project on the SD card.

1. **Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "PROJECT NEW" on the display. Then press the [ENTER] key.**

The name and number of the project to create are shown on the display.

Project number

```
PRJNo001      ☺
PRJ001      -A-
```
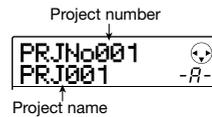
Project name

The number of the newly created project is assigned automatically, choosing the lowest free project number, and a default name of "PRJxxx" (where xxx is the project number) will be assigned.

The project name is shown with a cursor on the first character. This indicates that you can change the project name.

2. **If necessary, edit the project name.**

To edit the name, use the cursor left/right keys and the dial or the pads and keys in the rhythm section to input a character. For details on entering characters, see page 33.

3. **To create the project, press the [ENTER] key.**

The newly created project is loaded automatically, and the unit returns to the main screen.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

HINT

• The project name can also be edited later (→ p. 107).

• If the recorder is stopped and the main screen is shown, you can call up the screen of step 1 simply by pressing the [NEW PROJECT] key.

Copying a project

This operation duplicates a project that is saved on the SD card.

1. **Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "PROJECT COPY" on the display. Then press the [ENTER] key.**

The name and number of the project to copy are shown on the display.

```
PRJ COPY    ◯
PRJ000      0
```
Project name   Project number

2. **Turn the dial to select the copy source project, and press the [ENTER] key.**

The display changes as follows.

```
PRJ COPY    ◯
COPY TO     1
```
Copy destination project number

From this screen, you can select the copy destination project number.

3. **Turn the dial to select the copy destination project number, and press the [ENTER] key.**

The indication "SURE?" appears on the display.

4. **Press the [ENTER] key to copy the project.**

When copying is completed, the copy destination project is loaded, and the unit returns to the main screen.
By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Erasing a project

This operation erases a saved project from the SD card.

NOTE

Once a project has been erased, it cannot be restored. Use this operation with care.

1. **Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "PROJECT ERASE" on the display. Then press the [ENTER] key.**

The display changes as follows.

```
PRJ ERS     ◯
PRJ002      2
```
Project name   Project number
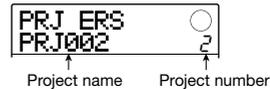
2. **Turn the dial to select the project, and press the [ENTER] key.**

The indication "SURE?" appears on the display.

3. **Press the [ENTER] key to erase the project.**

You can also erase the project that is currently loaded. If you do this, the lowest-numbered project on the SD card will automatically be loaded after the erase operation has been completed.

NOTE

A project for which protect is ON cannot be erased. Set protect to OFF and then repeat the procedure (→ p. 107).

Changing the project name

This operation lets you edit the name of the currently loaded project.

1. **Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "PROJECT NAME" on the display. Then press the [ENTER] key.**

The display changes as follows.

```
PRJ NAME    ☺
■RJ001     -A-
```
Cursor

A cursor appears on the first character of the project name.

2. **Use the cursor left/right keys and the dial or the pads and keys in the rhythm section to input a character.**

For details on entering characters, see page 33.

To return to the main screen after editing the name, press the [EXIT] key repeatedly.

Protecting a project

This operation lets you write-protect the currently loaded project, which disables project saving and editing. When protect is ON, the following operations will not be allowed.

• Erasing a project

• Editing or recording on the recorder

• Changing the V-take

• Editing a patch for the insert effect and send/return effect

• Recording or editing a rhythm pattern or rhythm song

• Setting or deleting marker information

• Changing the names of various data

HINT

A project that has been protected can still be played normally, and you can change the mixing balance and make certain other changes, but the changes cannot be saved.

1. **Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "PROJECT PROTECT" on the display. Then press the [ENTER] key.**

The display changes as follows.

```
PRJ PRT     ○
OFF
```
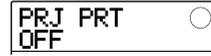
2. **Turn the dial to select ON (protect enabled) or OFF (protect disabled).**

If protect is ON for the project, a lock icon is shown in the bottom right of the main screen.

```
PRJ 008     ☺
PRJ008
  0  0  0    1- 1- 0
             MARKER
            00
            🔒 ←  Lock icon
```
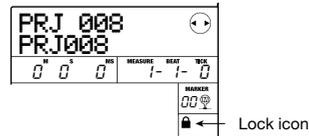
A change in the protect status becomes active immediately. To return to the main screen after making the setting, press the [EXIT] key repeatedly.

NOTE

A project that is not protected will be automatically saved on the SD card every time the power is turned off or the project menu is called up. If you have finished a song, we recommend to turn protect ON. This will prevent inadvertently saving changes caused by operation steps that you have taken after finishing the song.

Reference [MIDI]

This section explains the MIDI-related settings and functions of the MRS-8.

About MIDI

MIDI (Musical Instrument Digital Interface) is a standard that allows messages such as play data and sound data (collectively called "MIDI messages") to be exchanged between devices including electronic musical instruments and computers.

The MRS-8 is equipped with a MIDI OUT connector that can send internally generated MIDI messages to other MIDI compatible devices. This can be used to supply rhythm pattern playing information and synchronization information.

What you can do using MIDI

On the MRS-8, you can use MIDI for the following functions.

• Send play information

You can send Note On/Off messages from the MRS-8 when hitting the pads or when playing a rhythm song/rhythm pattern. These can be used to play an external MIDI sound source connected to the MIDI OUT connector.

• Send sync information

The MRS-8 can supply clock information based on internal tempo (Timing Clock) or absolute time information in hours/minutes/seconds/frames (MIDI Time Code) to an external MIDI device, for synchronization of transport operations.

• Send control change information

The MRS-8 can supply Control Change messages according to drum/bass sequence information programmed in a rhythm pattern or rhythm song.

Making MIDI-related settings

This section explains how to make MIDI-related settings.

Basic procedure

The procedure for making MIDI settings is similar for most settings. The basic steps are as follows.

1. **From the main screen, press the [SONG/PATTERN] key and then the [SYSTEM/UTILITY] key.**

The rhythm utility menu for making various rhythm section related settings appears.

2. **Use the cursor left/right keys to bring up the indication "UTILITY MIDI" on the display, and press the [ENTER] key.**

The display changes as follows.
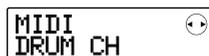
In this condition, you can select MIDI-related setting items.

3. **Use the cursor left/right keys to select one of the following items.**

• DRUM CH
Set the MIDI channel for sending playing information of drum kit.

• BASS CH
Set the MIDI channel for sending playing information of bass program.

• CLOCK
Turn Timing Clock transmission on/off.

• SPP
Turn Song Position Pointer transmission on/off (information about current position in beats from the start

of the song).

- **COMMAND**

Turn Start/Stop/Continue message transmission on/off.

- **MTC**

Turn MIDI Time Code transmission on/off.

NOTE

Control Change transmission is always enabled, except when the drum kit/bass program send channel is set to off.

4. Press the [ENTER] key to display the setting of the selected item, and turn the dial to change the setting.

For details on each item, refer to the following explanation.

5. When you have finished making settings, press the [EXIT] key repeatedly to return to the main screen.

Setting the drum kit/bass program MIDI channel

You can specify the MIDI channels for the drum track and bass program.

Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "MIDI DRUM CH" or "MIDI BASS CH" on the display. Then turn the dial to select one of the following settings.

- **1 – 16CH**

Select one of MIDI channels 1 – 16 (default: DRUM CH=10CH, BASS CH=9CH)

- **OFF**

Channel messages (Note On/Off, Control Change etc.) for the drum kit or bass program will not be sent.

```
DRUM CH      ○
10CH
```
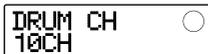
If you specify a MIDI channel (1 – 16), hitting a pad of the MRS-8 or playing back a rhythm pattern or rhythm song will cause the drum/bass track playing information to be transmitted as Note On/Off messages in the selected channel.

HINT

By selecting the same channel for the drum kit and bass program, the playing information can be sent together on a single channel via the MIDI OUT connector.

Turning Timing Clock messages on or off

This setting specifies whether the MIDI synchronization message Timing Clock will be transmitted.

Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "MIDI CLOCK" on the display. Then press the [ENTER] key and turn the dial to select one of the following settings.

- **ON (Transmission on)**

Timing Clock information will be transmitted when the MRS-8 is running (default setting).

- **OFF (Transmission off)**

Timing Clock information will not be transmitted.

```
CLOCK       ○
ON
```
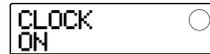
The Timing Clock information is derived by dividing a quarter note by 24. When Timing Clock is on, the clock signal will calculated based on the tempo of the rhythm pattern/rhythm song that is playing.

In order for the external MIDI device to play back in synchronization at an appropriate tempo, you will need to specify the tempo of the rhythm pattern/rhythm song at the MRS-8. To synchronize the measure indication at the MRS-8 and the MIDI device, the time signature setting at both devices must be matched.

NOTE

Timing Clock information will be transmitted even if the drum/bass track is muted.

HINT

- When using MIDI Timing Clock messages transmitted from the MRS-8 to synchronize the transport locate operation at the external MIDI device, you should also turn on transmission for Song Position Pointer and Start/Stop/Continue messages in addition to Timing Clock.
- If you transmit Timing Clock together with Note On/Off or MTC information from the MRS-8, synchronization may become unstable. When transmitting Timing Clock, transmission of these messages should be turned off.

Turning Song Position Pointer messages on or off

You can specify whether Song Position Pointer messages will be transmitted. Song Position Pointer is a MIDI message that indicates the current position as a beat/clock count from the start. Normally it is used in conjunction with Timing Clock.

Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "MIDI SPP" on the display. Then press the [ENTER] key and 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-8 (default setting).

- **OFF (Transmission off)**

Song Position Pointer messages will not be transmitted.

```
SPP        ◯
ON
```

Turning Start/Stop/Continue messages on or off

You can specify whether Start/Stop/Continue messages will be transmitted. Start/Stop/Continue are MIDI messages that indicate the transport status of a device. Normally these messages are used in conjunction with Timing Clock.

Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "MIDI COMMAND" on the display. Then press the [ENTER] key and 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-8 stops or begins running (default setting).

- **OFF (Transmission off)**

Start/Stop/Continue messages will not be transmitted.

```
COMMAND    ◯
ON
```
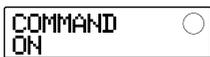
Turning MIDI Time Code (MTC) messages on or off

You can specify whether MIDI Time Code (MTC) messages used for synchronization will be transmitted. Refer to steps 1 – 3 of "Basic procedure" to bring up the indication "MIDI MTC" on the display. Then press the [ENTER] key and turn the dial to select one of the following settings.

- **24 (24 frames/second)**

- **25 (25 frames/second)**

- **29.97nd (29.97 frames/second, non-drop)**

- **30nd (30 frames/second, non-drop)**

When the MRS-8 is running, MTC messages with the specified frame rate are sent out.

- **OFF (Transmission off)**

MTC messages will not be transmitted.

```
MTC        ◯
OFF
```

When using MTC to synchronize MIDI devices, the MRS-8 always functions as MTC master. Set up the other device to operate as MTC slave which receives MTC messages and functions accordingly.

An example for synchronizing the MRS-8 with a synthesizer is shown below.
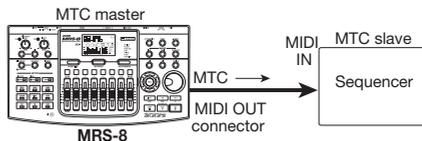
The frame rate setting (24, 25, 29.97nd, 30) must always be matched at the master and slave side. Otherwise correct synchronization is not possible.

HINT

If you transmit MTC as well as other MIDI messages from the MRS-8, synchronization may become unstable. When transmitting MIDI Time Code (MTC) messages, transmission of other messages should be turned off.

Reference [Other Functions]

This section explains various other functions of the MRS-8.

Playing several projects continuously (sequence play)

The MRS-8 lets you line up the master tracks from multiple projects saved on the SD card and play them continuously in a specified order (sequence play). This is handy to record several projects on an external recorder, or to play the accompaniment to multiple songs during a live performance.

To use sequence play, you create a playlist which specifies the order of projects. Up to 10 different playlists can be created per SD card. Up to 99 projects can be specified per playlist.

Creating a playlist

Register projects in a playlist as follows.

1. **Verify that the V-take you want to play is selected for each project's master track.**

NOTE
Projects in which an unrecorded V-take is selected for the master track cannot be registered in a playlist.

2. **From the main screen, press the [SYSTEM UTILITY] key in the display section.**
The display changes as follows.

```
SYSTEM
PROJECT        ⊙
```

3. **Press the [ENTER] key.**
The project menu for various project related functions appears.

```
PROJECT        ⊙
SELECT
```

4. **Use the cursor left/right keys to bring up the indication "PROJECT SEQ PLAY" on the display, and press the [ENTER] key.**
The display changes as follows.

```
SEQ PLAY       ○
EMPTY          ¡
```
Playlist number

The display shows the screen for selecting a playlist. The second line of the display shows the number of the selected playlist and the number of projects registered in that playlist. If an empty playlist has been selected, the display shows "EMPTY".

5. **Turn the dial to select the playlist for which to register projects, and press the [EDIT] key.**
The display changes as follows.

```
END OF         ○
LIST           ¡
```
Playback number

This screen lets you register projects in the playlist. The bottom right of the display shows the playback number which indicates the sequential position of the current project.

The "END OF LIST" indication denotes the end of the playlist. When the playlist is empty, the indication "END OF LIST" appears at the beginning of the list.

6. **Turn the dial to select the project to register at the beginning of the playlist.**
The project is registered in the first position of the playlist. The "END OF LIST" indication moves to the next playback number.

(1) Project number/project name

```
PRJ 001        ⊙
MRS8DEMO       ¡
  4ᴹ36ˢ 120ᵀᴵᶜᴷ   MEASURE  BEAT  TICK
```
(2) V-take duration   (3) Playback number
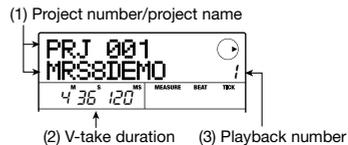
(1) Project number/project name

Shows the number and name of the project registered in the playlist.

(2) V-take duration

Shows the playing time of the V-take selected for the master track of the registered project, in minutes, seconds, and milliseconds.

(3) Playback number

Shows the playback position of the project.

NOTE

• Projects in which an unrecorded V-take is selected for the master track cannot be registered in a playlist. If the name of a desired project does not appear on the display, check whether a recorded V-take is selected for the master track.

• A master track whose selected V-take is extremely short (4 seconds or less) cannot be registered in a playlist.

7. Press the cursor right key.

The display changes as follows.

```
┌─────────────┐
│END OF    ◔  │
│LIST      2  │
└─────────────┘
```

In this condition, you can select the second project to play.

8. Turn the dial to select the next project to play.

Use the same procedure to select projects for subsequent positions. A maximum of 99 projects can be registered in a playlist.

To edit the contents of a playlist, proceed as follows.

• **To change projects in a playlist**

Use the cursor left/right keys to select the position number for which you want to change the project, and use the dial to select another project.

• **To insert a project in a playlist**

Use the cursor left/right keys to select the position number where you want to insert a project. Press the [FUNCTION] key in the display section twice. (The indication "INSERT?" appears on the display.) Turn the dial to select another project, and press the [ENTER] key. The project is inserted and subsequent projects are renumbered.

• **To delete a single project from a playlist**

Use the cursor left/right keys to select the position number of the project to delete. Press the [FUNCTION] key in the display section. (The indication "DELETE SURE?" appears on the display.) Press the [ENTER] key. The project is deleted and subsequent projects are renumbered.

• **To delete all projects from a playlist**

On the playlist registration screen, press the [FUNCTION] key in the display section. (The indication "DELETE SURE?" appears on the display.) Press the cursor down key. (The indication "ALL DEL SURE?" appears on the display.) To carry out the operation, press the [ENTER] key.

• **To switch the V-take for the master track**

Press the [EXIT] key repeatedly to return to the main screen. Load the project for which you want to switch the V-take, and select the V-take for the master track. Then return to the playlist registration screen.

9. When you have registered all desired projects in the playlist, press the [EXIT] key repeatedly to return to the main screen.

NOTE

• The playlist can be edited and played from any project.

• If the V-take data of the master track of a project registered in a playlist are deleted from the SD card, or when the V-take selection has been changed to an empty V-take, the respective playlist becomes empty.

Playing a playlist

Select the playlist for continuous project playback as follows.

1. From the main screen, press the [SYSTEM UTILITY] key in the display section.

The display changes as follows.

```
┌─────────────┐
│SYSTEM    ◉  │
│PROJECT      │
└─────────────┘
```

2. Press the [ENTER] key.

The project menu for various project related functions appears.

```
PROJECT    ⊙
SELECT
```

3. **Use the cursor left/right keys to bring up the indication "PROJECT SEQ PLAY" on the display, and press the [ENTER] key.**

The display shows the screen for selecting a playlist. When a playlist is selected for which projects have been registered, the counter in the bottom of the display shows the total playback time of all projects in the playlist.

```
SEQ PLAY    ◯
   3 Songs     →1
20 15 320   MEASURE BEAT TICK
   ↑              ↑
Total playing time   List number
of projects
```

4. **Turn the dial to select the desired playlist.**

5. **Press the PLAY [▶] key.**

Projects are played in the order as registered in the playlist. During playback, the display changes as follows.

```
PLAY    ⚡    ◯
PRJ000         2
  ↑            ↑
Name of project   Playback number
being played
```
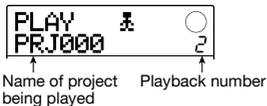
When a project has played through, the master track of the next project is automatically loaded and played.
During project playback, the following keys can be used to select a project, pause play, or locate a certain point.

• PLAY [▶] key
Play from the start of the current project.

• STOP [■] key
Stop project playback and return to the start of the current project.

• ZERO [◀◀] key
Return to the start of the project registered for playback position 1.

• FF [▶▶] key
Stop playback, jump to the beginning of the next project, and resume playback.

• REW [◀◀] key
Stop playback, jump to the beginning of the previous project, and resume playback.

When playback of the last project is completed, the recorder stops.

HINT

During playback, you can use the [MASTER] fader to adjust the playback volume. (Other faders have no effect.)

6. **To return to the main screen, press the [EXIT] key repeatedly.**

Using the tuner function

The MRS-8 incorporates a versatile tuner that can also accommodate 7-string guitar, 5-string bass and other unconventional tunings. This section explains how to use the tuner function.

Using the chromatic tuner

The chromatic tuner which can automatically detect pitch in semitone steps operates as follows.

1. **Connect the instrument that you want to tune to one of the INPUT 1/2 connectors and set the respective INPUT [ON/OFF] key to ON.**

When using INPUT 1, the [INPUT 1 SELECT] switch on the rear panel must be set to the correct position.

HINT
- If you press the [MIC] key so that it is lit, the internal microphone will be active and can be used for tuning.
- If both inputs are activated, the input signals will be mixed and sent to the tuner. Set the INPUT [ON/OFF] key of the input not required for tuning to OFF.

2. **Press the [INSERT EFFECT] key in the effect section repeatedly, until the key is out.**

The insert effect is bypassed and the display alternately shows "INSERT BYPASS" and "TUNER→ENTER."

3. **Press the [ENTER] key.**

The tuner function is turned on. In the default condition of a project, the chromatic tuner will be selected.

Currently selected tuner
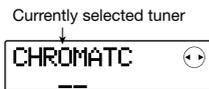
HINT
- You can switch the tuning type by pressing the left and right cursor keys. For details, see the next section.
- While the tuner is operating, all effects are disabled.

4. **Play the note that you want to tune.**

The pitch is automatically detected, and the display shows the nearest note name (C, C#, D, D#, E...). The display also indicates by how much the current pitch is different from the correct pitch.
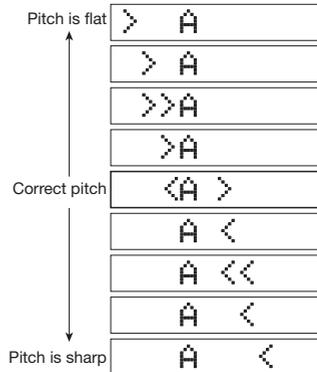
5. **Adjust the pitch until the "<>" indication encloses the desired note.**

6. **To change the reference pitch of the tuner, turn the dial during tuner operation.**

The reference pitch of the tuner is set to center A = 440 Hz by default. The reference pitch can be adjusted over the range of 435 – 445 Hz, in 1-Hz steps.
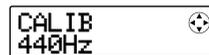
When the value was changed, the original display will return after a while. You can also press the [EXIT] key or one of the cursor keys to return.

HINT
- The reference pitch setting is saved individually for each project.
- When you change the reference pitch of the tuner, the pitch of the rhythm section bass program will also change accordingly.

7. When you have finished using the tuner function, press the [EXIT] key repeatedly to return to the main screen.

Using other tuning types

The MRS-8 allows various other tuning types besides chromatic tuning, including standard tuning for guitar and bass, and various special tuning functions.
Using the example of a guitar/bass connected to the INPUT 1 connector, the following section describes how to use other tuning types.

1. Connect the instrument that you want to tune to the INPUT 1 connector and set the INPUT [ON/OFF] key 1 to ON.

Make sure that the [INPUT 1 SELECT] switch is set to GUITAR/BASS. If the [MIC] key is lit, press the key so that it is flashing or out.

HINT
When the internal mic is activated, it can be used for tuning. This is convenient for tuning an acoustic guitar.

2. Press the [INSERT EFFECT] key in the effect section repeatedly, until the key is out.

The insert effect is bypassed and the display alternately shows "INSERT BYPASS" and "TUNER→ENTER."

3. Press the [ENTER] key to turn the tuner function on, and use the cursor left/right keys to select the tuning type.

While the tuner function is active, the cursor left/right keys serve to switch the tuning type. Tuning types and notes for each string are listed in the table below.

For example, when you select the tuning type "GUITAR", the display shows the following information.

Target note for string number   String number
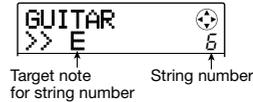
HINT
While the tuner is operating, all effects are disabled.

4. Play the indicated string as an open string, and perform tuning.

HINT
If required, you can change the reference pitch of the tuner (A = 440 Hz). The procedure is the same as for the chromatic tuner.

5. Use the cursor up/down keys to select other string numbers.

Tune the other strings in the same way.

6. When you have finished using the tuner function, press the [EXIT] key repeatedly to return to the main screen.

Tuning type		GUITAR	BASS	OPEN-A	OPEN-D	OPEN-E	OPEN-G	DADGAD
	1	E	G	E	D	E	D	D
	2	B	D	C#	A	B	B	A
	3	G	A	A	F#	G#	G	G
String number/note name	4	D	E	E	D	E	D	D
	5	A	B	A	A	B	G	A
	6	E		E	D	E	D	D
	7	B						

Switching the level meter display type

In the default condition of a project, the level meter below the display indicates the level of the signal after passing through the faders (post-fader). If required, you can change the setting so that the signal before passing through the level faders (pre-fader) is shown. To do this, proceed as follows.

1. **From the main screen, press the [SYSTEM/ UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

2. **Use the cursor left/right keys to bring up the indication "SYSTEM LVL MET" on the display, and press the [ENTER] key.**

The current level meter setting will be displayed.

```
LVL MET        ◯
POST
```

The settings have the following meaning.

• POST

The meter shows the level of the signal after passing through the faders.

• PRE

The meter shows the level of the signal before passing through the faders.

3. **Turn the dial to change the setting.**

4. **When the setting is complete, press the [EXIT] key repeatedly to return to the main screen.**

Adjusting the display contrast and backlight

You can adjust the display contrast and turn the backlight on and off. To do this, proceed as follows.

1. **From the main screen, press the [SYSTEM/ UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

2. **Use the cursor left/right keys to bring up the indication "SYSTEM LCD" on the display, and press the [ENTER] key.**

A display related item can be selected.

```
LCD            ⊙
LIGHT
```

3. **Use the cursor left/right keys to select "LIGHT" (backlight on/off) or CONTRAST (adjust display contrast), and press the [ENTER] key.**

• When LIGHT was selected

Turn the dial to set the backlight to ON or OFF.

```
LIGHT          ◯
ON
```

• When CONTRAST was selected

Turn the dial to set the contrast in the range from 1 to 8.

```
CONTRAST       ◯
1
```

4. **When the setting is complete, press the [EXIT] key repeatedly to return to the main screen.**

Changing the SD card

The SD card should normally only be removed or inserted while the MRS-8 is turned off. However, by using the following procedure, the SD card can be removed or inserted while the MRS-8 is on.

NOTE
If the SD card is changed without following the procedure below and while the MRS-8 is on, data may be permanently destroyed.

1. **From the main screen, press the [SYSTEM/ UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

2. **Use the cursor left/right keys to bring up the indication "SYSTEM CARD" on the display, and press the [ENTER] key.**

The menu for various SD card functions appears.

```
CARD         ⊙▸
EXCHANGE
```

3. **Verify that the indication "CARD EXCHANGE" is shown on the display and press the [ENTER] key.**

If currently a SD card is inserted in the MRS-8, the indication "CARD Exist" is shown.

```
CARD         ◯
Exist
```

While this screen is being shown, the SD card can be changed.

4. **Replace the SD card.**

For information on how to remove the SD card, see page 13. When the card is removed, the display indication changes to "CARD NotExist".

```
CARD         ◯
NotExist
```
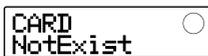
Depending on the type of SD card that was inserted, operation changes as follows.

- **SD card not ready for use in MRS-8 was inserted**

The indication "FORMAT SURE?" appears on the display. When you press the [ENTER] key at this point, the SD card will be formatted (initialized) and the data of all projects that were handled up to this point will be saved on the card (except for audio data).

When the formatting and saving process is completed, the main screen appears.

HINT
If you cancel the format by pressing the [EXIT] key, the indication "CARD NotExist" appears again. In this case, the unit operates as if no card were inserted.

- **SD card already formatted in MRS-8 was inserted**

The indication "LoadData <-ENT->" appears on the display. When you press the [ENTER] key twice at this point, the project with the lowest number stored on the SD card will be loaded.

You can save all project data up to this point (except audio data) on the new card. To do this, use the cursor left/right keys when "LoadData" is displayed to bring up the indication "SaveData" and press the [ENTER] key. In this condition, you can select the copy target project number. Turn the dial to select the number and press the [ENTER] key twice. The data are saved, and then the project is loaded.

Formatting an SD card

To format an SD card in the MRS-8, proceed as follows.

NOTE
When you format a card, all data already on the card will be erased and cannot be restored. Perform this operation with care.

1. **From the main screen, press the [SYSTEM/UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

2. **Use the cursor left/right keys to bring up the indication "SYSTEM CARD" on the display, and press the [ENTER] key.**

The menu for various SD card functions appears.

```
CARD          ⊙
EXCHANGE
```

3. **Use the cursor left/right keys to bring up the indication "CARD FORMAT" on the display, and press the [ENTER] key.**

The display changes as follows.

```
FORMAT        ◯
SURE?
```
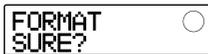
4. **To proceed with formatting, press the [ENTER] key.**

During formatting, the indication "Format wait..." is shown. When the process is completed, a new project is automatically created and the main screen appears.

By pressing the [EXIT] key instead of the [ENTER] key, you can cancel the operation and back up one step at a time.

Checking the available SD card capacity/project size

This operation displays the remaining capacity of the SD card and the size of the currently loaded project.

1. **From the main screen, press the [SYSTEM/UTILITY] key in the display section.**

The indication "SYSTEM PROJECT" appears on the display.

2. **Use the cursor left/right keys to bring up the indication "SYSTEM CARD" on the display, and press the [ENTER] key.**

The menu for various SD card functions appears.

```
CARD          ⊙
EXCHANGE
```

3. **Use the cursor left/right keys to bring up the indication "CARD CAPACITY" on the display, and press the [ENTER] key.**

4. **Use the cursor up/down keys to select the desired screen from one the following options.**

• **REMAIN (MB units)**
This shows the remaining space on the SD card in MB (megabyte) units.

```
REMAIN        ⊙
000037MB
```

• **REMAIN (m/s units)**
The approximate recordable time remaining on the SD card (converted into one track) is shown in minutes (m), and seconds (s).

```
REMAIN        ⊙
0007m24s
```
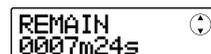
• **PRJ SIZ (MB units)**
This shows the size of the currently loaded project in MB (megabyte) units.

```
PRJ SIZE    (⟲)
 00007MB
```

• **PRJ SIZ (m/s units)**

This shows the size of the currently loaded project in terms of recorded time (converted into one track), in minutes (m), and seconds (s).

```
PRJ SIZE    (⟲)
0001m09s
```

To return to the main screen, press the [EXIT] key repeatedly.

NOTE
• These screens are for display only and contain no settings that can be changed.
• The remaining recordable time is an approximation. Use it for general reference only.

Troubleshooting

If there are problems during operation of the MRS-8, check the following points first.

Problems during playback

■ No sound, or sound is very weak
- Check the connections to your monitor system, and the volume setting of the system.

- Make sure that the [MASTER] fader is raised.

- Make sure that the status keys in the mixer section are lit in green and that the faders are raised. If a key is out, press it to make it light up in green.

■ Playback sound is distorted
- Lower the faders of recorded tracks so that the level meter 0 (dB) segment does not light.

- If the EQ gain of the mixer is set extremely high, the sound may be audibly distorted even if the fader for the track is lowered. Set the EQ to an appropriate value.

■ 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. 60), or operate the fader of the odd-numbered channel.

- The [RHYTHM] fader controls only the sound (drum kit or bass program) currently selected for the rhythm section. Press the [DRUM/BASS] key in the rhythm section repeatedly to select the desired sound, and then operate the fader.

■ No sound from input signal, or sound is very weak
- Make sure that the respective INPUT [ON/OFF] key is lit.

- Make sure that the respective [INPUT] control is raised.

- Make sure that the record level setting (→ p. 15) is appropriate.

- Make sure that the [INPUT 1 SELECT] switch is set to the appropriate position for the instrument connected to the INPUT 1 connector.

■ The display indicates "Don't Play" and playback is not possible

The recorder will not operate in the current screen. Press the [EXIT] key repeatedly to switch to the main screen.

■ The indication "Stop Recorder" is shown on the display, and operation is not possible.

The current operation is not possible while the transport is in playback mode. Press the STOP [■] key to stop the recorder.

Problems during recording

■ Cannot record on a track
- Make sure that you have selected a recording track.

- Recording is not possible if the project is write-protected. Either turn protect off (→ p. 107), or use a different project.

- If the indication "CARD PROTECT" is shown on the display, write protect is enabled for the inserted SD card. Slide the write protect switch on the card up to turn write protect off.

- If the indication "FULL" appears during recording, the SD card is full. Change to another SD card or erase unneeded data to free up space. The V-take currently being recorded will not be saved.

■ The signal from an instrument or mic connected to an INPUT connector is not available

While the built-in mic is active, the INPUT 1 connector cannot be used. Press the [MIC] key so that it is flashing or out. This turns the built-in mic off.

■ **The recorded sound is distorted**

• Check whether the input sensitivity setting and record level setting are appropriate.

• When the insert effect is applied to the input, check whether the effect output level (patch level) setting is appropriate.

Problems with effects

■ **Insert effect does not work**

• Make sure that the [INSERT EFFECT] key is lit.

• Check whether the insert effect position has been selected correctly.

■ **Send/return effect does not work**

• Make sure that the [SEND/RETURN] key is lit.

• Make sure that the send level for the track is raised (→ p. 28).

Problems with the rhythm section

■ **Cannot hear the rhythm pattern playback**

• Press the [DRUM/BASS] key repeatedly to select the desired sound (drum kit/bass program), and then operate the [RHYTHM] fader.

• Press the [DRUM/BASS] key repeatedly to select the desired sound (drum kit/bass program), and then press the [RHYTHM] status key repeatedly until the key is lit in green.

• If the drum/bass sequence level has been set to zero within a pattern, that sound will not be heard. Raise the level setting for the drum/bass sequence (→ p. 74).

■ **Cannot hear the rhythm song playback**

• Make sure that you have not selected an empty rhythm song (→ p. 76).

• Make sure that the selected rhythm song does not include an event with a volume level zero setting (→ p. 83).

■ **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 the pad strongly. Change the pad sensitivity setting (→ p. 90).

■ **Cannot create a new rhythm pattern/ rhythm song**

If the display indicates "SEQ FULL", the rhythm section memory has been used to maximum capacity. Delete unneeded rhythm patterns or songs to free up memory.

■ **Notes recorded in the rhythm pattern do not play**

Notes that exceed the maximum polyphony (6 sounds for drum kit, 1 sound for bass program) will not be played. Delete some of the notes that have been recorded to stay within the maximum polyphony.

Problems with MIDI

■ **Cannot synchronize with external MIDI device**

• Make sure that the MIDI cable is correctly connected from the MIDI OUT connector of the MRS-8 to the MIDI IN connector of the external device.

• Synchronization with an external MIDI device is only possible by using the MIDI clock or MTC output from the MRS-8.

• Make sure that the external MIDI device is set to receive MIDI clock or MTC and synchronize to it.

• When synchronizing on the timing clock, make sure that output is enabled for Timing Clock, Song Position Pointer, and Start/Stop/Continue messages at the MRS-8 (→ p. 110).

• When synchronizing on the MTC (MIDI Time Code), make sure that the frame rate setting of both devices is matched and that the external MIDI device is set to playback standby (→ p. 110).

Other problems

■ Cannot create a new project or copy a project

• If the write protect switch of the SD card has been set to the write protect position, data cannot be saved on the card.

• If the display indicates "FULL", there is no more free space on the SD card. Change to another SD card or erase unneeded data to free up space.

■ Cannot save a project

• When a project has been set to write protect status, overwrite/save cannot be carried out. Turn protect off (→ p. 107).

• If the display indicates "PRJ FULL", no more projects can be created on the SD card. Change to another SD card or erase unneeded projects to free up space.

■ SD card is not recognized

• Format the SD card in the MRS-8 (→ p. 118).

• The MRS-8 cannot use SD cards with a capacity of less than 16 MB. If such a card is inserted, the indication "Too Small" is shown.

Appendix

Specifications

● **Recorder**

Physical track	8
Virtual take	80 (10 takes per track)
Drum track	1 (stereo)
Bass track	1
Simultaneous recordable track	
	2
Simultaneous playback track	
	11 (8 audio + stereo drum + bass)
Recording time	256MB 100min
	1GB 400min
	(in mono track)

* Regardless of the card capacity, continuous recording can be performed up to 180 minutes.

* Recording times are approximate. Actual times may be somewhat shorter, depending on the setting conditions.

Project	1000 per card
Marker	100 points per project
Locator	minute/second/millisecond, measure/beat/tick
Track editing	Copy, move, erase, exchange, trim, fade-in/out, reverse
Other function	Punch-in/out, bounce recording, A-B repeat, capture/swap

● **Mixer**

Fader	8
Level meter	Post-fader/pre-fader
Track parameter	2-band equalizer, effect send level, panning (balance)
Stereo link	Track 1/2 or 3/4 linkable

● **Effect**

Algorithm	8 (CLEAN, DIST, ACO/BASS SIM, BASS, MIC, DUAL MIC, LINE, MASTERING)
Module	6 for insert, 1 for send/return
Type	94 for insert, 6 for send/return
Patch	300 for insert, 60 for send/return
Tuner type	Chromatic, guitar, bass, open A/D/E/G, D modal

● **Rhythm**

Voice	6 for drum, 1 for bass
Drum kit	8
Drum sound	27 per kit (9 pads x 3 banks)
Bass sound	5
Pad	9 (velocity sensitive)
Resolution	48 PPQN
Beat	1/4 – 8/4
Rhythm pattern	511 per project
Rhythm song	10 per project
Measure	99 per rhythm pattern
Note/event	Approx. 20000 per rhythm song
Tempo	40.0 – 250.0 BPM

A/D conversion	24-bit, 64-times oversampling
D/A conversion	24-bit, 128-times oversampling
Sampling frequency	44.1 kHz

Display	55 x 35 mm custom LCD with backlight	**Power supply**	
Input 1	Standard mono phone jack	AC adaptor	DC 9 V, 300 mA (ZOOM AD-0006)
	Input impedance 10 kilohms (MIC/LINE), 470 kilohms (GUITAR/BASS)	Battery	4 x IEC R6 (size AA); approx. battery life 4 hours/5 hours (display backlight on/off)
Input 2	XLR-3-31/standard phone combo jack		
	(Balanced) input impedance 1 kilohm, pin 2 hot	**Dimension**	300 (W) x 165 (D) x 60 (H) mm
	(Unbalanced) input impedance 10 kilohms	**Weight**	1.1 kg without batteries
Input level	-50 dBm < continuously variable < +4 dBm		
Master output	RCA phono jack (L/R)		
	Output load impedance 10 kilohms or more		
	Rated output level -10 dBm		
Headphones output	Standard stereo phone jack		
	50 mW into 32-ohm load		
MIDI	OUT		

* 0 dBm = 0.775 Vrms

* Design and specifications are subject to change without notice.

Effect Parameters

Insert Effect

■ CLEAN, DIST, ACO/BASS SIM, BASS algorithm

COMP module

Type	Parameter		
COMPRESS	SENS	ATTACK	LEVEL
	Keeps the dynamic range consistent.		

Parameter description

Parameter	Setting range	Description
SENS	0 – 10	Adjusts the compression input sensitivity.
ATTACK	0 – 10	Adjusts the compression attack speed.
LEVEL	1 – 8	Adjusts the module output level.

PRE AMP/DRIVE module

Type	Parameter					
J-CLN	Clean sound that models a transistor combo amp.					
US-CLN	Clean sound that models a built-in type vacuum tube amp.					
US-DRV	Drive sound that models a built-in type vacuum tube amp.					
TWEED	Model of a small built-in vacuum tube combo amp with dry distortion.					
CLASS A	Unique crunch sound that models a British-style combo amp.					
UK-CRU	Crunch sound that models a British-style vacuum tube stack amp.					
UK-DRV	Drive sound that models a British-style vacuum tube stack amp.					
CMB 335	Models a vacuum tube combo amp characterized by long sustain.					
MTL PNL	High-gain drive sound that models a vacuum tube stack amp.					
BLK BTM	Model of a vacuum tube stack amp, characterized by fat bass and delicate distortion.					
MD LEAD	Drive sound that models a high-gain amp suitable for lead guitar.					
FZ-STK	60's sound typical of a Fuzz unit played through an amp stack.					
TE BASS	Model of a bass amp with a distinctively clean low-mid range.					
FD BASS	Model of a bass amp with vintage-style drive.					
	GAIN	TONE	LEVEL			
	Parameters for type J-CLN to FD BASS are the same.					
SNS BASS	Trebly drive sound for bass.					
CR+CAB	Combination of crunch and cabinet simulator.					
TS+CAB	Combination of vintage overdrive and cabinet simulator.					
GV+CAB	Combination of vintage distortion and cabinet simulator.					
MZ+CAB	Combination of metal-style distortion and cabinet simulator.					
9002+CAB	Combination of the Zoom 9002 distortion and cabinet simulator.					
	GAIN	TONE	LEVEL	CABINET	SPEAKER	DEPTH
	Parameters for type SNS BASS to 9002+CAB are the same.					
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 electroacoustic guitar.					
BASS SIM	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.					

Parameter description

Parameter	Setting range	Description
GAIN	1 – 30	Adjusts the amount of gain.
TONE	0 – 10	Adjusts the tone.
LEVEL	1 – 8	Adjusts the module output level.
CABINET		Selects the cabinet type
	CM	Combo-type cabinet.
	br	Produces a brighter tone than CM.
	Ft	Cabinet with a flat response.
	St	Stack-type cabinet.
	bC	Combo-type cabinet for bass.
	bS	Stack-type cabinet for bass.
SPEAKER		Selects the loudspeaker type.
	C1	Combo-type guitar amp with one 12 inch speaker.
	C2	Combo-type guitar amp with two 12 inch speakers.
	C3	Combo-type guitar amp with one 10 inch speaker.
	GS	Stack-type guitar amp with four 10 inch speakers.
	GW	Multiple stack-type amps placed together.
	bC	Combo-type bass amp with one 15 inch speaker.
	bS	Stack-type bass amp with four 6.5 inch speakers.
DEPTH	0 – 10	Adjusts the cabinet resonance of the speaker.
TOP	1 – 30	Adjusts the resonance of the strings.
BODY	0 – 10	Adjusts the resonance of the body.
COLOR	1 – 4	Adjusts the character of the electroacoustic guitar preamp.

3 BAND EQ module

Type	Parameter			
3BandEQ	HIGH	MID	LOW	LEVEL
	Three-band equalizer.			

Parameter description

Parameter	Setting range	Description
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	Adjusts the module output level.

MODULATION/DELAY module

Type	Parameter			
CHORUS	DEPTH	RATE	MIX	
	Adds pulsation and spaciousness to the sound.			
V-CHORUS	DEPTH	RATE	MIX	
	Simulates the warm sound of a vintage effect.			
FLANGER	DEPTH	RATE	FB	
	Produces a unique, undulating sound.			
PHASER	POSITION	RATE	COLOR	
	Produces a swooshing sound.			
TREMOLO	DEPTH	RATE	CLIP	
	Periodically varies the level of the sound.			
AUTO PAN	WIDTH	RATE	CLIP	
	Pereodically moves the stereo position of the sound.			
AUTO WAH	FLT TYPE	POSITION	RESONANC	SENS
	Gives a varying wah sound that depends on the picking intensity.			
PITCH	SHIFT	TONE	BALANCE	
	Modifies the pitch of the direct sound.			
SLOW-ATK	POSITION	TIME	CURVE	
	Creates a "violin playing" sound with soft attack.			
VIBE	DEPTH	RATE	BALANCE	
	Automatic vibrato effect.			

STEP	DEPTH	RATE	RESONANC			
	Changes the sound with step-like filter characteristics.					
RING MOD	POSITION	RATE	BALANCE			
	Produces a metallic sound.					
CRY	POSITION	RESO	SENS			
	Talking-modulator-like effect.					
EXCITER	FREQ	DEPTH	LowBoost			
	Gives the sound more focus and spatial definition.					
AIR	SIZE	TONE	MIX			
	Simulates the air ambience of the room, giving the sound spatial depth.					
WIDE	TIME	WET LVL	DRY LVL			
	Simulates a stereo recording with two microphones.					
DELAY	TIME	FB	MIX			
	Delay effect with a delay time of up to 2.9 seconds.					
ECHO	TIME	FB	MIX			
	Delay effect with warm sound, up to 2.9 second delay time.					
FIX-WAH	FLT TYPE	POSITION	FREQ	R MODE	R WAVE	R SYNC
	Changes the wah frequency in sync with rhythm tempo.					
ARRM-PIT	TYPE	TONE	R WAVE	R SYNC		
	Changes the pitch in sync with rhythm tempo.					

Parameter description

Parameter	Setting range	Description
DEPTH	EXCITER: 0 – 30	Adjusts the depth of the effect.
	Others: 0 – 10	
RATE	TREMOLO: 1 – 30, t0 – t9, M1	Adjusts the speed of the effect. The "tx" or "Mx" setting results in sync with the rhythm tempo.
	FLANGER, PHASER, AUTO PAN: 1 – 30, t0 – t9, M1 – M4	
	Others: 1 – 30	
MIX	0 – 30	Adjusts the mix amount of the effect.
FB	FLANGER: -10 – 10	Adjusts the amount of feedback.
	DELAY, ECHO: 0 – 10	
POSITION	AF, bF	Selects the module location from AF; after the 3 BAND EQ module and bF; before the PRE AMP/DRIVE module.
COLOR		Specifies the type of phase tone.
	1	4-stage phaser
	2	4-stage phaser with inverted feedback
	3	8-stage phaser
	4	8-stage phaser with inverted feedback
CLIP	0 – 10	Emphasizes the effect.
WIDTH	0 – 10	Adjusts the width between L/R.
FLT TYPE	bPF, LPF	Specifies the filter type.
RESONANC	AUTO WAH, CRY: 1 – 10	Adjusts the effect character intensity.
	STEP: 0 – 10	
SENS	-10 – -1, 1 – 10	Adjusts the effect sensitivity.
SHIFT	-12.0 – 24.0	Adjust the pitch shift amount. The value "1.0" corresponds to semitone.
TONE	0 – 10	Adjusts the tone.
BALANCE	0 – 30	Adjusts the balance between the direct sound and effect sound.
TIME	SLOW-ATK: 1 – 30	Adjusts the attack speed.
	WIDE: 1 – 64	Adjusts the delay time in 1-ms steps. The "tx" or "M1" setting results in sync with the rhythm tempo.
	DELAY, ECHO: 1 - 2900, t1 - t9, M1	
CURVE	0 – 10	Adjusts the attack curve.
FREQ	EXCITER: 1 – 5	Adjusts the frequency.
	FIX-WAH: 1 – 50	Adjusts wah effect center frequency.
LowBoost	0 – 10	Emphasizes the low frequency range.
SIZE	1 – 10	Adjusts the spatial width.
WET LVL	0 – 30	Adjusts the mix amount of the effect sound.
DRY LVL	0 – 30	Adjusts the mix amount of the direct sound.
LEVEL	1 - 8	Adjusts the module output level.

		Selects the changing width.
R MODE		
	oFF	Frequency stays constant.
	UP	Minimum→ maximum
	dn	Maximum→ minimum
	HI	Setting value → maximum
	Lo	Minimum→ setting value
R WAVE		Selects the control waveform.
	1	Rising sawtooth wave
	2	Rising fin wave
	3	Falling sawtooth wave
	4	Falling fin wave
	5	Triangle wave
	6	Second power triangle wave
	7	Sine wave
	8	Square wave
R SYNC		Adjusts the control waveform cycle.
	0.5	Eighth note
	1	Quarter note
	2	Half note
	3	Dotted half note
	b1 – b4	1 measure - 4 measures
TYPE		Selects the pitch change type.
	1	Semitone lower → original
	2	Original → semitone lower
	3	Doubling → detune + original
	4	Detune + original → doubling
	5	Original → 1 octave higher
	6	1 octave higher → original
	7	Original → 2 octaves lower
	8	2 octaves lower → original
	9	1 octave lower + origina → 1 octave higher + original
	10	1 octave higher + original → 1 octave lower + original
	11	Perfect 5th lower + original → perfect 4th higher + original
	12	Perfect 4rth higher + original → perfect 5th lower + original
	13	0 Hz + original → 1 octave higher
	14	1 octave higher → 0 Hz + original
	15	0 Hz + original → 1 octave higher + original
	16	1 octave higher + original → 0 Hz + original

Sync settings of RATE and TIME parameters

Setting	Sync cycle
t0	32nd note
t1	16th note
t2	Quarter triplet
t3	Dotted 16th note
t4	8th note
t5	Half triplet
t6	Dotted 8th note
t7	Quarter note
t8	Dotted quarter note
t9	Half note
M1	Whole note
M2	2 x whole note
M3	3 x whole note
M4	4 x whole note

ZNR module

Type	Parameter
ZNR	THRSHOLD
	Cuts noise during performance pauses.

Parameter description

Parameter	Setting range	Description
THRSHOLD	OFF, 1 – 30	Adjusts the sensitivity. Set this high as far as the attacks or decays sound natural.

■ MIC algorithm

COMP/LIM module

Type	Parameter			
COMPRESS	THRSHOLD	RATIO	ATTACK	LEVEL
	Keeps the dynamic range consistent.			
LIMITER	THRSHOLD	RATIO	RELEASE	LEVEL
	Controls the signal peeks.			

Parameter description

Parameter	Setting range	Description
THRSHOLD	-24 – 0	Adjusts the sensitivity.
RATIO	COMP: 1 – 26	Adjusts the compression degree of the signal.
	LIMIT: 1 – 54, ∞	
ATTACK	0 – 10	Adjusts the compression attack speed.
LEVEL	0 – 12	Adjusts the module output level.
RELEASE	0 – 10	Adjusts the time between the threshold and compression finish.

MIC PRE module

Type	Parameter			
MIC PRE	COLOR	TONE	LEVEL	DE-ESSER
	Preamp for microphone.			

Parameter description

Parameter	Setting range	Description
COLOR		Adjust the frequency response.
	1	Flat response
	2	Low cut
	3	Acoustic guitar characteristics
	4	Acoustic guitar characteristics with low cut
	5	Vocal characteristics
	6	Vocal characteristics with low cut
TONE	0 – 10	Adjusts the tone.
LEVEL	1 – 8	Adjusts the module output level.
DE-ESSER	0 – 10	Adjusts the cut amount of vocal sibilants.

3 BAND EQ module
See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

MODULATION/DELAY module

Type	Parameter			
CHORUS	DEPTH	RATE	MIX	
	Adds pulsation and spaciousness to the sound.			
V-CHORUS	DEPTH	RATE	MIX	
	Simulates the warm sound of a vintage effect.			
FLANGER	DEPTH	RATE	FB	
	Produces a unique, undulating sound.			
PHASER	RATE	COLOR		
	Produces a swooshing sound.			
TREMOLO	DEPTH	RATE	CLIP	
	Periodically varies the level of the sound.			

AUTO PAN	WIDTH	RATE	CLIP		
	Pereodically moves the stereo position of the sound.				
PITCH	SHIFT	TONE	BALANCE		
	Modifies the pitch of the direct sound.				
SLOW-ATK	TIME	CURVE			
	Creates a "violin playing" sound with soft attack.				
VIBE	DEPTH	RATE	BALANCE		
	Automatic vibrato effect.				
STEP	DEPTH	RATE	RESONANC		
	Changes the sound with step-like filter characteristics.				
RING MOD	RATE	BALANCE			
	Produces a metallic sound.				
CRY	RESONANC	SENS			
	Talking-modulator-like effect.				
EXCITER	FREQ	DEPTH	LowBoost		
	Gives the sound more focus and spatial definition.				
AIR	SIZE	TONE	MIX		
	Simulates the air ambience of the room, giving the sound spatial depth.				
DELAY	TIME	FB	MIX		
	Delay effect with a delay time of up to 2.9 seconds.				
ECHO	TIME	FB	MIX		
	Delay effect with warm sound, up to 2.9 second delay time.				
DOUBLING	TIME	TONE	MIX		
	Doubling effect with a delay time of up to 100 milliseconds.				
FIX-WAH	FLT TYPE	FREQ	R MODE	R WAVE	R SYNC
	Changes the wah frequency in sync with rhythm tempo.				
ARRM-PIT	TYPE	TONE	R WAVE	R SYNC	
	Changes the pitch in sync with rhythm tempo.				

Regarding the parameter description, see the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

ZNR module
See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

■ LINE algorithm

COMP/LIM module
See the MIC algorithm.

ISOLATOR module

Type	Parameter				
ISOLATOR	XOVER LO	XOVER HI	MIX HIGH	MIX MID	MIX LOW
	Divides the signal into three frequency bands, and specifies the mix amount each.				

Parameter description

Parameter	Setting range	Description
XOVER LO	50 – 16000	Adjusts the frequency for bass/midrange division.
XOVER HI	50 – 16000	Adjusts the frequency for midrange/treble division.
MIX HIGH	OFF, -24 – 6	Adjusts the treble mix amount.
MIX MID	OFF, -24 – 6	Adjusts the midrange mix amount.
MIX LOW	OFF, -24 – 6	Adjusts the bass mix amount.

3 BAND EQ module
See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

MODULATION/DELAY module

Type	Parameter			
CHORUS	DEPTH	RATE	MIX	
	Adds pulsation and spaciousness to the sound.			
FLANGER	DEPTH	RATE	FB	LFO SFT
	Produces a unique, undulating sound.			
PHASER	RATE	COLOR	LFO SFT	
	Produces a swooshing sound.			
TREMOLO	DEPTH	RATE	CLIP	
	Periodically varies the level of the sound.			
AUTO PAN	WIDTH	RATE	CLIP	
	Pereodically moves the stereo position of the sound.			
PITCH	SHIFT	TONE	BALANCE	
	Modifies the pitch of the direct sound.			
RING MOD	RATE	BALANCE		
	Produces a metallic sound.			
DELAY	TIME	FB	MIX	
	Delay effect with a delay time of up to 1.4 seconds.			
ECHO	TIME	FB	MIX	
	Delay effect with warm sound, up to 1.4 second delay time.			
DOUBLING	TIME	TONE	MIX	
	Doubling effect with a delay time of up to 100 milliseconds.			

Parameter description

Parameter	Setting range	Description
DEPTH	0 – 10	Adjusts the depth of the effect.
RATE	TREMOLO: 1 - 30, t0 - t9, M1	Adjusts the speed of the effect. The "tx" or "Mx" setting results in sync with the rhythm tempo.
	FLANGER, PHASER, AUTO PAN: 1 - 30, t0 - t9, M1 - M4	
	Others: 1 – 30	
MIX	0 – 30	Adjusts the mix amount of the effect.
FB	FLANGER: -10 – 10	Adjusts the amount of feedback.
	DELAY, ECHO: 0 – 10	
LFO SFT	0 – 180	Adjusts the phase difference between L/R.
COLOR	1 – 4	Specifies the type of phase tone.
CLIP	0 – 10	Emphasizes the effect.
WIDTH	0 – 10	Adjusts the width between L/R.
SHIFT	-24.0 – 12.0	Adjust the pitch shift amount. The "dt" setting results in a detune effect.
TONE	0 – 10	Adjusts the tone.
BALANCE	0 – 30	Adjusts the balance between the direct sound and effect sound.
TIME	DOUBLING: 1 – 100	Adjusts the delay time in 1-ms steps. The "tx" or "M1" setting results in sync with the rhythm tempo.
	DELAY, ECHO: 1 – 1400, t1 – t9, M1	

ZNR module

See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

■ DUAL MIC algorithm

COMP/LIM module
MIC PRE module
3 BAND EQ module

See the MIC algorithm.
(Same with the MIC algorithm except that there is not the parameter "DE-ESSER" in MIC PRE module)

DOUBLING module

Type	Parameter			
DOUBLE L/R	TIME	TONE	MIX	
	Doubling effect with a delay time of up to 100 milliseconds.			

Parameter description

Parameter	Setting range	Description
TIME	1 – 100	Adjusts the delay time in 1-ms steps.
MIX	0 – 30	Adjusts the mix amount of the effect.
TONE	0 – 10	Adjusts the tone.

ZNR module
See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

■ MASTERING algorithm

3 BAND COMP/Lo-Fi module

Type	Parameter							
MLT CMP	XOVER LO	XOVER HI	SENS HI	SENS MID	SENS LOW	MIX HIGH	MIX MID	MIX LOW
	Divides the signal into three frequency bands, and specifies the compression and the mix amount each.							
Lo-Fi	CHARACTR	COLOR	DISTORTN	TONE	EFX LVL	DRY LVL		
	Degrades the audio quality of the sound.							

Parameter description

Parameter	Setting range	Description
XOVER LO	50 – 16000	Adjusts the frequency for bass/midrange division.
XOVER HI	50 – 16000	Adjusts the frequency for midrange/treble division.
SENS HI	0 – 24	Adjusts the compressor input sensitivity for the treble range.
SENS MID	0 – 24	Adjusts the compressor input sensitivity for the midrange.
SENS LOW	0 – 24	Adjusts the compressor input sensitivity for the bass range.
MIX HIGH	OFF, -24 – 6	Adjusts the treble mix amount.
MIX MID	OFF, -24 – 6	Adjusts the midrange mix amount.
MIX LOW	OFF, -24 – 6	Adjusts the bass mix amount.
CHARA	0 – 10	Specifies the character of the filter.
COLOR	1 – 10	Adjusts the color.
DIST	0 – 10	Adjusts the degree of distortion.
TONE	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.

NORMALIZER module

Type	Parameter
NORMLZR	GAIN
	Set the input level of the 3 BAND COMP/Lo-Fi module.

Parameter description

Parameter	Setting range	Description
GAIN	-12 – 12	Adjusts the level.

3 BAND EQ module
See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

DIMENSION/RESONANCE module

Type	Parameter						
DIMENSN	RISE 1	RISE 2					
	Produces spatial width.						
RESONNC	DEPTH	FreqOFST	RATE	TYPE	RESONANC	EFX LVL	DRY LVL
	A resonance filter with LFO.						

Parameter description

Parameter	Setting range	Description
RISE 1	0 – 30	Adjusts the emphasizing degree of the stereo component.
RISE 2	0 – 30	Adjusts the spaciousness that includes the monaural component.
DEPTH	0 – 10	Adjusts the depth of the effect.
FreqOFST	1 – 30	Adjusts the LFO offset.
RATE	1 – 30, t0 – t9, M1 – M4	Adjusts the speed of the effect. The "tx" or "Mx" setting results in sync with the rhythm tempo.
TYPE	HPF, LPF, bPF	Specifies the filter type.
RESONANC	1 – 30	Adjusts the effect character intensity.
EFX LVL	0 – 30	Adjusts the mix amount of the effect sound.
DRY LVL	0 – 30	Adjusts the mix amount of the direct sound.

ZNR module

See the CLEAN, DIST, ACO/BASS SIM, BASS algorithm.

Send/return Effect

CHORUS/DELAY module

Type	Parameter					
CHORUS	LFO TYPE	DEPTH	RATE	PRE DLY	EFX LVL	
	Adds pulsation and spaciousness to the sound.					
DELAY	TIME	FB	DAMP	PAN	EFX LVL	
	Delay effect with a delay time of up to 2.9 seconds.					
HALL	PRE DLY	DECAY	EQ HIGH	EQ LOW	E/R MIX	EFX LVL
	Simulates the acoustics of a concert hall.					
ROOM	PRE DLY	DECAY	EQ HIGH	EQ LOW	E/R MIX	EFX LVL
	Simulates the acoustics of a room.					
SPRING	PRE DLY	DECAY	EQ HIGH	EQ LOW	EFX LVL	
	Simulates a spring type reverb machine.					
PLATE	PRE DLY	DECAY	EQ HIGH	EQ LOW	EFX LVL	
	Simulates a plate reverb.					

Parameter description

Parameter	Setting range	Description
LFO TYPE	Mn, St	Selects the LFO phase: Mn (mono) or St (stereo).
DEPTH	0 – 10	Adjusts the depth of the effect.
RATE	1 – 30	Adjusts the speed of the effect.
PRE DLY	CHORUS: 1 - 30	Adjusts the pre-delay time.
	HALL, ROOM, SPRING, PLATE: 1 – 100	
EFX LVL	0 – 30	Adjusts the mix amount of the effect sound.
TIME	1 - 2900, t1 – t9, M1	Adjusts the delay time in 1-ms steps. The "tx" or "M1" setting results in sync with the rhythm tempo.
FB	0 – 10	Adjusts the amount of feedback.
DAMP	0 – 10	Adjusts the cut amount of the delay sound's high range.
PAN	L10 – L1, 0, r1 – r10	Adjusts the stereo position of the delay sound.
DECAY	1 – 30	Adjusts the reverb time.
EQ HIGH	-12 – 6	Adjusts the high range level of the effect sound.
EQ LOW	-12 – 6	Adjusts the low range level of the effect sound.
E/R MIX	0 – 30	Adjusts the volume of early reflections.

Effect Patch

Insert Effect

■ CLEAN algorithm

No.	Name	Comment
0	Standard	Basic sound touched up for recording
1	J-Chorus	JC clean sound
2	Phaser	Emulates a vintage phase effect
3	DryComp	Line input clean sound with a hint of doubling
4	RiffCLN	Rock'n roll sound bringing out differences between guitars
5	WideCLN	Wide clean sound with crunch
6	PunchCLN	Airy sound with a punch
7	Arpeggio	Clean sound for arpeggios
8	CleanCH	Clean channel sound of an American-made vintage tube amp
9	50sRNB	Tremolo sound for rhythm & blues
10	StrmBeat	Basic sound for strummed backing
11	CompCln	Natural compression sound
12	12-Clean	Clean sound with an upper octave mixed in
13	Funky	Funky cutting sound
14	FDR-Cln	Clean sound of American-made vintage tube amp
15	Rockbily	Rockabilly sound with short delay
16	NYFusion	Clean sound for direct-line recording
17	Wet-Rhy	Cutting sound for ballads
18	JazzTone	Clean sound for jazz
19	DeepFLG	Clean flanging sound
20	ArrmWah	Clean wah sound using FIX-WAH
21	Kaitei	Mellow echoed sound for arpeggios or lead
22 - 29	EMPTY	

■ DIST algorithm

No.	Name	Comment
0	MRS-Drv	Full distortion with rich sustain
1	RCT-BG	High-gain amp sound of American-made "Rectifier" series
2	CrnchCmp	Crunch sound with a touch of compression
3	9002Lead	ZOOM 9002 sound
4	F-Tweed	Sound of a small, American-made vintage tube amp
5	BlackPnl	Heavy metal sound of "5100 series" American-made stack amp
6	MatchCru	Crunch sound of a modern class-A amp
7	Sticky	Tight crunch sound
8	HardPick	Hard crunch sound
9	RockDrv	Straight rock drive sound
10	Duplex	Spacious lead sound with dual overlay effect
11	MadBass	Distortion bass sound for high range chord playing and lead
12	Straight	Versatile, straight lead sound
13	JetSound	Versatile jet sound
14	Combo-BG	Overdrive sound with detailed long sustain
15	FDR-Twin	Clean sound of American-made vintage tube amp
16	Beatle	Class-A type Mersey Beat sound
17	WildFuzz	Vintage fuzz box
18	JB.Style	Octaver for guitar and bass unison riffs

19	Pitch-5	Even single notes sound like power chords
20	BRT-Drv	Great sound of British "900 series" stack amp
21	Soldan	High-gain amp sound for single coil half-tone settings
22	MatchDrv	Drive sound of a modern class-A amp
23	Snake	Heavy metal sound with a solid bottom
24	Crunch	Ensemble of "800" series crunch and delay
25	Ballad	Warm lead sound
26	Metal-X	Metal sound with subtle overtones
27	DP-Drv	1970's hard rock sound
28	WetDrive	Simple wet overdrive sound
29	Mellow	Lead sound with a sweet tone
30	MultiDst	Strong all-round sound
31	Bright	Crisp sound
32	Melody	Tastefully seasoned sound for melodies
33	V-Blues	Vintage blues sound
34	BlueFngr	Bluesy sound for finger picking
35	HDR-Drv	Wet hard rock sound
36	Cry-Lead	Zoom's original "cry effect" sound
37	ZakWah	Lead sound with auto-wah
38	LA-Std	L.A. studio-style big chorus sound
39	TheRing	Ring modulator simulation
40	JimVib	Remade famous vibrato
41	Creamy	Mild fuzz
42 - 49	EMPTY	

■ ACO/BASS SIM algorithm

No.	Name	Comment
0	AcoSIM 1	Simulates unadorned acoustic guitar sound
1	AcoSIM 2	Simulates acoustic guitar with beautiful chorus
2	AcoSIM 3	Shimmering detuned sound with no modulation
3	FullSize	Simulates acoustic guitar with full-sized body
4	Light12	Light 12-string guitar sound
5	BsSIM 1	Simulates a tight picked bass
6	BsSIM 2	Chorus bass simulation for melody lines
7	BsSIM 3	Auto-wah bass simulation
8	FlngBass	Flanging sound often used in 1980's fusion
9	UniSolo	Guitar and bass unison sound
10 - 19	EMPTY	

■ BASS algorithm

No.	Name	Comment
0	BS-Pick	Tight sound for playing with a pick
1	BS-Od	Retro distortion sound
2	BS-Drv	Hard distortion sound
3	BS-Fingr	All-round sound for finger picking
4	BS-Slap	Crisp slap sound
5	BS-Comp	Sound with attack, controlled by picking dynamics
6	BS-Edge	Tight sound with an edge
7	BS-Solo	Chorus sound for melodies
8	BS-Octve	Sound with an upper octave mixed in
9	BS-Wah	Funky bass with auto-wah
10 - 19	EMPTY	

■ MIC algorithm

No.	Name	Comment
0	Vo-Stnd	Standard vocal effect
1	Vo-Rock	Rock vocal effect
2	Vo-Balld	Ballade vocal effect with detuned chorus
3	Vo-Echo	Vocal echo
4	Vo-PreC1	Smooth, listenable sound for condenser mics
5	Vo-PreC2	Adds depth for condenser mics
6	Vo-PreD1	Improves definition for dynamic mics
7	Vo-PreD2	Makes sound fatter and wetter
8	Vo-Robot	Robot voice as in SF movies
9	AG-Live	Sound for mic recording with a live feel, not only for guitar
10	AG-Brght	Bright and crisp sound for mic recording
11	AG-Solo	Gorgeous solo sound
12	AG-Edge	Acoustic guitar recording sound with enhanced edge
13	AG-Strum	Acoustic guitar recording sound for strumming
14	ForWind	Sound with distinctive mid-range
15	ForBrass	Crisp-sounding short delay
16	ForPiano	Enhances depth and definition
17	AG-Mix 1	Enhanced sound for strumming
18	AG-Mix 2	Enhanced sound for arpeggio
19	SweeperX	Adds sharp sweep to one-shot percussion
20	FXgroove	Rhythm machine sound
21	Lo&Hi	Boosts highs and lows and attenuates midrange
22	Lo-Boost	Emphasizes low end by pitch shifter
23	FanFan	Sound like talking into a fan
24	Alien	Space creature sound for vocal
25	TapeComp	Simulates analog multi-track recording
26	Duet??	Adds a child voice to female vocal or a female voice to male vocal
27	Active	Emphasizes attack
28	Psyche	Vocal gimmick effect in psychedelic style
29	DeepDLY	Delay for vocals, useful when cutting shouts or sound
30	HeGas	Duck voice after inhaling helium gas
31 - 49	EMPTY	

■ LINE algorithm

No.	Name	Comment
0	Syn-Lead	For synthesizer single note lead
1	OrganPha	Phaser for synthesizer/organ
2	OrgaRock	Boomy distortion for rock organ
3	EP-Chor	Beautiful chorus for electric piano
4	ClavFlg	Wah for clavinet
5	Concert	Concert hall effect for piano
6	Honkey	Honky-tonk piano simulation
7	PowerBD	Gives a bass drum more power
8	DrumFlng	Conventional flanger for drum
9	LiveDrum	Simulates outdoor live doubling
10	JetDrum	Phaser for 16-beat hi-hat
11	AsianKit	Changes a standard kit to an Asian kit
12	BassBost	Emphasizes low range
13	Mono->St	Gives spaciousness to a monaural source
14	AM Radio	AM radio simulation
15	WideDrm	Wide stereo effect for internal drums
16	DanceDrm	Reinforces bass for dance rhythms
17	Octaver	Adds one-octave lower sound
18	Percushn	Gives air, presence, and stereo spread to percussion

19	**MoreTone**	Distortion with emphasized midrange body
20	**SnrSmack**	Emphasizes snappy snare sound
21	**Shudder!**	Sliced sound for techno tracks
22	**SwpPhase**	Phaser with powerful resonance
23	**DirtyBiz**	Lo-fi distortion using ring modulator
24	**Doubler**	Doubling for vocal track
25	**SFXlab**	Forced SFX sound for synthesizer
26	**SynLead2**	Old-style jet sound for synthesizer lead
27	**Tekepiko**	For sequence phrases or single note muted guitar
28	**Soliner**	Simulates analog strings ensemble
29	**HevyDrum**	For hard rock drums
30 - 49	**EMPTY**	

■ DUAL MIC algorithm

No.	Name	Comment	Recommended L/R input
0	**Vo/Vo 1**	For duets	Vocals
1	**Vo/Vo 2**	Chorus for main vocal	Vocals
2	**Vo/Vo 3**	For harmony	Vocals
3	**AG/Vo 1**	Creates a street-like character	Acoustic guitar/Vocal
4	**AG/Vo 2**	Different from AG/Vo 1 in vocal character	Acoustic guitar/Vocal
5	**AG/Vo 3**	Aggressively modifies vocal character	Acoustic guitar/Vocal
6	**ShortDLY**	Short delay sound with effective doubling	Microphones
7	**FatDrum**	For drum recording with single point stereo mic	Microphones
8	**BothTone**	Tuned for male on L channel and female on R channel	Vocals
9	**Condnser**	Simulates condenser mic sound with dynamic mic input	Vocals
10	**DuoAtack**	Chorus for lead vocals with emphasized attack	Vocals
11	**Warmth**	Warm sound with prominent midrange	Vocals
12	**AM Radio**	Simulates AM monaural radio	Vocals
13	**Pavilion**	Narration sound at expo booths	Vocals
14	**TV News**	TV newscaster sound	Vocals
15	**F-Vo/Pf1**	For female vocal piano ballads	Vocal/Piano
16	**JazzDuo1**	Simulates jazz session LP with lo-fi sound	Vocal/Piano
17	**Cntmprry**	All-round clear sound	Vocal/Piano
18	**JazzDuo2**	JazzDuo 1 for male vocal	Vocal/Piano
19	**Ensemble**	For guitar with strong attack and mellow piano	Acoustic guitar/Piano
20	**Enhanced**	Enhances clear, strong outline for ballads	Acoustic guitar/Vocal
21	**Warmy**	Moderates overbright ambience	Acoustic guitar/Vocal
22	**Strum+Vo**	Smooth fat sound with midrange compensation	Acoustic guitar/Vocal
23	**FatPlus**	Spruces up a thin midrange	Acoustic guitar/Vocal
24	**Arp+Vo**	Overall solid sound	Acoustic guitar/Vocal
25	**ClubDuo**	Simulates live sound in small club	Acoustic guitars
26	**BigShape**	Enhances overall clarity	Acoustic guitars
27	**FolkDuo**	Fresh and clean sound	Acoustic guitars
28	**GtrDuo**	Suitable for guitar duos	Acoustic guitars
29	**Bright**	Bright and sharp outlook	Acoustic guitars
30 - 49	**EMPTY**		

■ MASTERING algorithm

No.	Name	Comment
0	PlusAlfa	Enhances the overall power
1	All-Pops	Conventional mastering
2	StWide	wide-range mastering
3	DiscoMst	For club sound
4	Boost	For hi-fi finish
5	Power	Powerful low range
6	Live	Adds a live feel
7	WarmMst	Adds a warm feeling
8	TightUp	Adds a hard feeling
9	1930Mst	Mastering with 1930's sound
10	LoFi Mst	Lo-fi mastering
11	BGM	Mastering for background music
12	RockShow	Makes a rock style mix live
13	Exciter	Lo-fi mastering with slight distortion in mid and upper range
14	Clarify	Emphasizes high-end range
15	VocalMax	Brings vocals to the foreground
16	RaveRez	Special sweep effect using sharp filter
17	FullComp	Strong compression over full frequency range
18	ClearPWR	Power tuning with emphasized midrange
19	ClearDMS	Enhances clarity and spaciousness
20	Maximizr	Boosts overall sound pressure level
21 - 29	EMPTY	

Send/return Effect

No.	Name	Comment
0	VoChorus	Chorus adding color to vocals
1	DeepDBL	Deep doubling
2	TightHal	Hall reverb with a hard tonal quality
3	LargeHal	Simulates the reverberation of a large hall
4	TrStudio	Simulates the reverberation of a rehearsal studio
5	VcxRev	Tuned to enhance vocals
6	RealPlat	Spring reverb simulation
7	VinSprin	Simulates analog spring reverb
8	Delay3/4	Dotted-8th-note delay in sync with rhythm tempo
9	Natural	Chorus with low modulation for backing
10	GtChorus	Chorus for weak guitar sound
11	Doubling	Versatile doubling
12	Echo	Showy analog-style delay
13	Delay3/2	Dotted-quarter-note delay in sync with rhythm tempo
14	FastCho	Fast-rated chorus
15	DeepCho	Versatile deep chorus
16	ShortDLY	Versatile short delay
17	SoloLead	Keeps fast phrases tight
18	WarmyDly	Simulates warm analog delay
19	EnhanCho	Enhancer using phase shift doubling
20	Detune	For instruments with strong harmonics such as electronic piano or synthesizer
21	Whole*1	Whole-note delay in sync with rhythm tempo
22	Delay2/3	Half-triplet-note delay in sync with rhythm tempo
23	Delay1/4	16th-note delay in sync with rhythm tempo
24	BrgtRoom	Room reverb with a hard tonal quality
25	SoftHall	Hall reverb with a mild tonal quality
26	SmallHal	Simulates the reverberation of a small hall
27	LiveHous	Simulates the reverberation of a club
28	DarkRoom	Room reverb with a mild tonal quality
29	Tunnel	Simulates the reverberation of a tunnel
30	BigRoom	Simulates the reverberation of a gym
31	PowerSt.	Gate reverb
32	BrgtHall	Simulates the bright reverb of a concert hall
33	BudoKan	Simulates the reverberation at Budokan in Tokyo
34	Ballade	For slow ballads
35	SecBrass	Reverb for brass section
36	ShortPlt	Short reverb
37	Dome	Reverb of a Domed-stadium
38	ClearSpr	Clear reverb with short reverb time
39	Dokan	Simulates the reverberation of a clay pipe
40 - 59	EMPTY	

Rhythm Pattern

In "Song" columns (No. 35-234), verses and fill-ins are gathered up on a style basis to make a rhythm song efficiently with FAST.

For example, when you enter (71+72+73)x2+(74+75+76)x2, 16-measure fusion rhythm part is completed. ("V" of a pattern name means verse, and "F" does fill-in.)

No.	Name	Measure
	Variation	
0	08Beat01	4
1	08Beat02	4
2	08Beat03	4
3	08Beat04	4
4	08Beat05	4
5	08Beat06	4
6	08Beat07	4
7	08Beat08	4
8	08Beat09	4
9	08Beat10	4
10	08Beat11	4
11	08Beat12	4
12	16Beat01	4
13	16Beat02	2
14	16Beat03	4
15	16Beat04	4
16	16Beat05	4
17	16Beat06	4
18	16Beat07	2
19	16Beat08	2
20	16Beat09	4
21	16Beat10	4
22	16Beat11	4
23	16Beat12	4
24	16FUS01	2
25	16FUS02	2
26	16FUS03	4
27	16FUS04	2
28	04JAZZ01	4
29	04JAZZ02	4
30	04JAZZ03	4
31	04JAZZ04	4
32	DANCE	2
33	CNTRY	2
34	68BLUS	4
No.	**Name**	**Measure**
	Song	
35	ROCKs1VA	2
36	ROCKs1Va	1
37	ROCKs1FA	1
38	ROCKs1VB	2
39	ROCKs1Vb	1
40	ROCKs1FB	1
41	ROCKs2VA	2
42	ROCKs2Va	1
43	ROCKs2FA	1
44	ROCKs2VB	2
45	ROCKs2Vb	1
46	ROCKs2FB	1
47	ROCKs3VA	1
48	ROCKs3FA	1
49	ROCKs3VB	1
50	ROCKs3FB	1
51	ROCKs4VA	2
52	ROCKs4Va	1
53	ROCKs4FA	1
54	ROCKs4VB	2
55	ROCKs4Vb	1
56	ROCKs4FB	1
57	HRKs1VA	1
58	HRKs1FA	1
59	HRKs1VB	1
60	HRKs1FB	1
61	HRKs2VA	2
62	HRKs2Va	1
63	HRKs2FA	1
64	HRKs2VB	2
65	HRKs2Vb	1
66	HRKs2FB	1
67	MTLs1VA	1
68	MTLs1FA	1
69	MTLs1VB	1
70	MTLs1FB	1
71	FUSs1VA	2
72	FUSs1Va	1
73	FUSs1FA	1
74	FUSs1VB	2
75	FUSs1Vb	1
76	FUSs1FB	1
77	FUSs2VA	2
78	FUSs2Va	1
79	FUSs2FA	1
80	FUSs2VB	2
81	FUSs2Vb	1
82	FUSs2FB	1
83	FUSs3VA	2
84	FUSs3Va	1
85	FUSs3FA	1
86	FUSs3VB	2
87	FUSs3Vb	1
88	FUSs3FB	1
89	INDTs1VA	2
90	INDTs1Va	1
91	INDTs1FA	1
92	INDTs1VB	2
93	INDTs1Vb	1
94	INDTs1FB	2
95	POPs1VA	2
96	POPs1Va	1
97	POPs1FA	1
98	POPs1VB	2
99	POPs1Vb	1
100	POPs1FB	1
101	RnBs1VA	2
102	RnBs1Va	1
103	RnBs1FA	1
104	RnBs1VB	2
105	RnBs1Vb	1
106	RnBs1FB	1
107	RnBs2VA	2
108	RnBs2Va	1
109	RnBs2FA	1
110	RnBs2VB	2
111	RnBs2Vb	1
112	RnBs2FB	1
113	MTNs1VA	2
114	MTNs1Va	1
115	MTNs1FA	1
116	MTNs1VB	2
117	MTNs1Vb	1
118	MTNs1FB	1
119	FUNKs1VA	2
120	FUNKs1Va	1
121	FUNKs1FA	1
122	FUNKs1VB	2
123	FUNKs1Vb	1
124	FUNKs1FB	1
125	FUNKs2VA	2
126	FUNKs2Va	1
127	FUNKs2FA	1
128	FUNKs2VB	2
129	FUNKs2Vb	1
130	FUNKs2FB	1
131	HIPs1VA	2
132	HIPs1Va	1
133	HIPs1FA	1
134	HIPs1VB	2
135	HIPs1Vb	1
136	HIPs1FB	1
137	HIPs1VC	2
138	HIPs1Vc	1
139	HIPs1VD	2
140	HIPs1Vd	1
141	HIPs2VA	2
142	HIPs2Va	1
143	HIPs2VB	2
144	HIPs2Vb	1
145	HIPs2FB	1
146	HIPs2VC	2
147	HIPs2Vc	1
148	HIPs2VD	2
149	DANCs1VA	1
150	DANCs1FA	1
151	DANCs1VB	1
152	DANCs1FB	1
153	DANCs2VA	2
154	DANCs2Va	1
155	DANCs2FA	1
156	DANCs2VB	2
157	DANCs2Vb	1
158	DANCs2FB	1
159	HOUSs1VA	1
160	HOUSs1FA	1
161	HOUSs1VB	1
162	HOUSs1FB	1
163	TECHs1VA	1
164	TECHs1FA	1
165	TECHs1VB	1
166	TECHs1FB	1
167	DnBs1VA	2
168	DnBs1Va	1
169	DnBs1FA	1
170	DnBs1VB	2
171	DnBs1Vb	1
172	DnBs1FB	1
173	TPs1VA	1
174	TPs1FA	1
175	TPs1VB	1
176	TPs1FB	1
177	AMBs1VA	2
178	AMBs1Va	1
179	AMBs1FA	1
180	AMBs1FB	1
181	BALDs1VA	2
182	BALDs1Va	1
183	BALDs1FA	1
184	BALDs1VB	2
185	BALDs1Vb	1
186	BALDs1FB	1
187	BLUSs1VA	2
188	BLUSs1Va	1
189	BLUSs1FA	1
190	BLUSs1VB	2
191	BLUSs1Vb	1
192	BLUSs1FB	1
193	CNTRs1VA	2
194	CNTRs1Va	1
195	CNTRs1FA	1
196	CNTRs1VB	2
197	CNTRs1Vb	1
198	CNTRs1FB	1
199	JAZZs1VA	2
200	JAZZs1Va	1
201	JAZZs1FA	1
202	JAZZs1VB	2

No.	Name	Measure	No.	Name	Measure	No.	Name	Measure	No.	Name	Measure
203	JAZZs1Vb	1	265	HRK03	2	329	HIP10	2	393	BLUS06	2
204	JAZZs1FB	1	266	HRK04	2	330	HIP11	2	394	CNTR01	2
205	AFROs1VA	2	267	HRK05	2	331	HIP12	2	395	CNTR02	2
206	AFROs1Va	1	268	HRK06	2	332	HIP13	2	396	CNTR03	2
207	AFROs1FA	1	269	HRK07	2	333	HIP14	2	397	CNTR04	2
208	AFROs1VB	2	270	MTL01	2	334	HIP15	2	398	JAZZ01	2
209	AFROs1Vb	1	271	MTL02	2	335	HIP16	2	399	JAZZ02	2
210	AFROs1FB	1	272	MTL03	2	336	HIP17	2	400	JAZZ03	2
211	REGGs1VA	2	273	MTL04	2	337	HIP18	2	401	JAZZ04	2
212	REGGs1Va	1	274	THRS01	2	338	HIP19	2	402	JAZZ05	2
213	REGGs1FA	1	275	THRS02	2	339	HIP20	2	403	JAZZ06	2
214	REGGs1VB	2	276	PUNK01	2	340	HIP21	2	404	JAZZ07	4
215	REGGs1Vb	1	277	PUNK02	2	341	HIP22	2	405	SHFL01	2
216	REGGs1FB	1	278	FUS01	2	342	HIP23	2	406	SHFL02	2
217	LATNs1VA	2	279	FUS02	2	343	DANC01	2	407	SHFL03	2
218	LATNs1Va	1	280	FUS03	2	344	DANC02	2	408	SHFL04	2
219	LATNs1FA	1	281	FUS04	2	345	DANC03	2	409	SHFL05	2
220	LATNs1VB	2	282	FUS05	2	346	DANC04	2	410	SKA01	2
221	LATNs1Vb	1	283	FUS06	2	347	DANC05	2	411	SKA02	2
222	LATNs1FB	1	284	FUS07	2	348	DANC06	2	412	SKA03	2
223	LATNs2VA	2	285	FUS08	2	349	HOUS01	2	413	SKA04	2
224	LATNs2Va	1	286	POP01	2	350	HOUS02	2	414	REGG01	2
225	LATNs2FA	1	287	POP02	2	351	HOUS03	2	415	REGG02	2
226	LATNs2VB	2	288	POP03	2	352	HOUS04	2	416	REGG03	2
227	LATNs2Vb	1	289	POP04	2	353	TECH01	2	417	REGG04	2
228	LATNs2FB	1	290	POP05	2	354	TECH02	2	418	AFRO01	2
229	MidEs1VA	2	291	POP06	2	355	TECH03	2	419	AFRO02	2
230	MidEs1Va	1	292	POP07	2	356	TECH04	2	420	AFRO03	2
231	MidEs1FA	1	293	POP08	2	357	TECH05	2	421	AFRO04	2
232	MidEs1VB	2	294	POP09	2	358	TECH06	2	422	AFRO05	2
233	MidEs1Vb	1	295	POP10	2	359	TECH07	2	423	AFRO06	2
234	MidEs1FB	1	296	POP11	2	360	TECH08	2	424	AFRO07	2
No.	**Name**	**Measure**	297	POP12	2	361	TECH09	2	425	AFRO08	2
	Standard		298	RnB01	2	362	TECH10	2	426	LATN01	2
235	ROCK01	2	299	RnB02	2	363	DnB01	2	427	LATN02	2
236	ROCK02	2	300	RnB03	2	364	DnB02	2	428	LATN03	2
237	ROCK03	2	301	RnB04	2	365	DnB03	2	429	LATN04	2
238	ROCK04	2	302	RnB05	2	366	DnB04	2	430	LATN05	2
239	ROCK05	2	303	RnB06	2	367	DnB05	2	431	LATN06	2
240	ROCK06	2	304	RnB07	2	368	DnB06	2	432	LATN07	2
241	ROCK07	2	305	RnB08	2	369	TRIP01	2	433	LATN08	2
242	ROCK08	2	306	RnB09	2	370	TRIP02	2	434	LATN09	2
243	ROCK09	2	307	RnB10	2	371	TRIP03	2	435	LATN10	2
244	ROCK10	2	308	FUNK01	2	372	TRIP04	2	436	LATN11	2
245	ROCK11	4	309	FUNK02	2	373	AMB01	2	437	LATN12	2
246	ROCK12	2	310	FUNK03	2	374	AMB02	2	438	BOSSA01	4
247	ROCK13	2	311	FUNK04	2	375	AMB03	2	439	BOSSA02	4
248	ROCK14	2	312	FUNK05	2	376	AMB04	2	440	SAMBA01	4
249	ROCK15	2	313	FUNK06	2	377	BALD01	2	441	SAMBA02	4
250	ROCK16	2	314	FUNK07	2	378	BALD02	2	442	MidE01	2
251	ROCK17	2	315	FUNK08	2	379	BALD03	2	443	MidE02	2
252	ROCK18	2	316	FUNK09	2	380	BALD04	2	444	MidE03	2
253	ROCK19	2	317	FUNK10	2	381	BALD05	2	445	MidE04	2
254	ROCK20	2	318	FUNK11	2	382	BALD06	2	446	INTRO01	1
255	ROCK21	2	319	FUNK12	2	383	BALD07	2	447	INTRO02	1
256	ROCK22	2	320	HIP01	2	384	BALD08	2	448	INTRO03	1
257	ROCK23	2	321	HIP02	2	385	BALD09	2	449	INTRO04	1
258	ROCK24	2	322	HIP03	2	386	BALD10	2	450	INTRO05	1
259	ROCK25	2	323	HIP04	2	387	BALD11	4	451	INTRO06	1
260	ROCK26	2	324	HIP05	2	388	BLUS01	2	452	INTRO07	1
261	ROCK27	2	325	HIP06	2	389	BLUS02	2	453	INTRO08	1
262	ROCK28	2	326	HIP07	2	390	BLUS03	2	454	INTRO09	1
263	HRK01	2	327	HIP08	2	391	BLUS04	2	455	INTRO10	1
264	HRK02	2	328	HIP09	2	392	BLUS05	2	456	INTRO11	1

457	INTRO12	1		463	INTRO18	1		469	ENDING06	1		473		
458	INTRO13	1		464	ENDING01	1		470	ENDING07	1		I	EMPTY	0
459	INTRO14	1		465	ENDING02	1		471	COUNT	2		508		
460	INTRO15	1		466	ENDING03	1		472	AllMute	1		509	METRO34	1
461	INTRO16	1		467	ENDING04	1						510	METRO44	1
462	INTRO17	1		468	ENDING05	1								

Drum Kits/Bass Programs

Drum Kit

No.	Name
0	Standard
1	Basic
2	LiveRock
3	Analog
4	Light
5	Brush
6	Funk
7	Pop

Bass Program

No.	Name
0	Finger
1	Pick
2	Slap
3	Acoustic
4	SynthBS

Instrument/MIDI note number chart

Pad	Bank 1		Bank 2		Bank 3	
	Instrument	Note#	Instrument	Note#	Instrument	Note#
BD	Kick drum	36	Rim shot	37	Low agogo	68
SD	Snare drum	38	Clap	39	High agogo	67
CHH	Closed hi-hat	42	Cowbell	56	Stick	33
CRASH	Crash cymbal	49	Low conga	64	High bongo	60
RIDE	Ride cymbal	51	Mute high conga	62	Low bongo	61
OHH	Open hi-hat	46	Open high conga	63	Metronome bell	34
TOM1	Tom 1	50	Cup	53	Maracas	70
TOM2	Tom 2	47	Tambourine	54	High timbale	65
TOM3	Tom 3	43	Claves	52	Low timbale	66

Files on SD card

■ PROJxxx folder

(xxx; 000-999 corresponding to project number)
Contains various data for each project.

PRJDATA.ZIF

Settings for marker, track parameter, effect

RHYTHM.SEQ

Rhythm pattern/rhythm song data

TRACKx_y.ZAF

Audio data for each track/V-take

(x; 0-7 corresponding to track number 1-8, y; 0-9 to V-take number 1-10)

■ SYS folder

Contains the system-related files.

MACPRM.ZIF

Number of most recently edited project

SEQPLY.LST

Play list data

■ SYSTEM.BIN

Common settings between projects on the card

* **Do not change the file names using a conventional SD card reader/writer. If the files have different names, they will not be recognized on the MRS-8.**

MIDI implementation

```
1. Recognized Messages

     None.

2. Transmitted Messages

    Status   1st    2nd      Description
    ------------------------------------------------------------------------
     8nH     kk     40H      Note Off  kk: note number
     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     7BH    00H      All Notes Off
     F1H     dd              MTC Quarter Frame  dd: data
     F2H     sl     sh       Song Position Pointer  shsl: song position
     F8H                     Timing Clock
     FAH                     Start
     FBH                     Continue
     FCH                     Stop

NOTE: n = MIDI Channel Number ( 0 - F )

3. System Exclusive Messages

     No SysEx messages are recognized/transmitted.
```

MIDI implementation chart

```
[SD card Recorder]                              Date :  30 Jun. 2004
Model MRS-8      MIDI Implementation Chart      Version: 1.00
```

Function ...		Transmitted	Recognized	Remarks
Basic Channel	Default Changed	1–16,OFF 1–16,OFF		Memorized
Mode	Default Messages Altered	3 x ******************		
Note Number	True voice	12–75 ******************		
Velocity	Note ON Note OFF	o x		
After Touch	Key's Ch's	x x		
Pitch Bend		x		
Control Change		7		Volume
Prog Change	True #	o ******************		
System Exclusive		x		
System Common	Qtr Frame Song Pos Song Sel Tune	o o x x		
System Real Time	Clock Commands	o o		
Aux Mes- sages	Local ON/OFF All Notes OFF Active Sense Reset	x o x x		
Notes		MTC quarter frame message is transmitted.		

```
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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■ The FCC regulation warning (for U.S.A.)

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- **Reorient or relocate the receiving antenna.**
- **Increase the separation between the equipment and receiver.**
- **Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.**
- **Consult the dealer or an experienced radio/TV technician for help.**