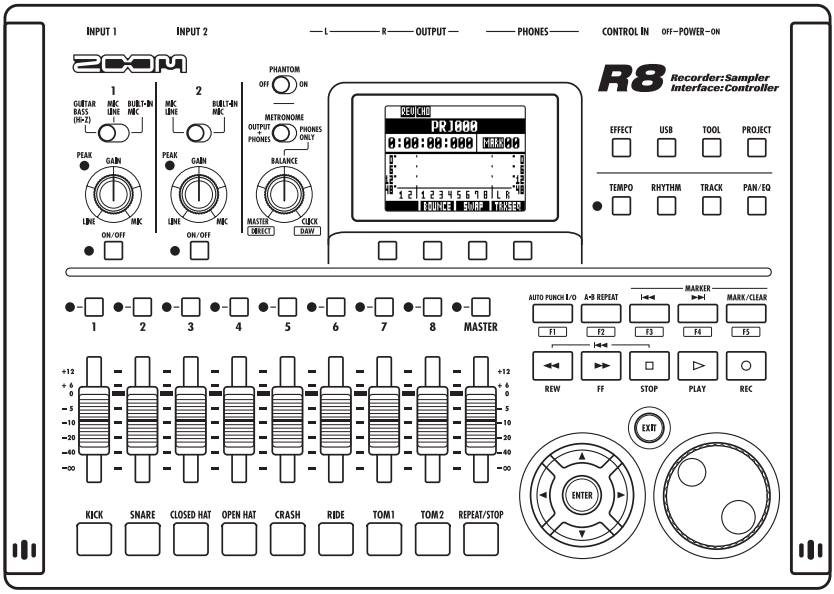
R8

Recorder:Sampler
Interface:Controller



OPERATION MANUAL

ZOOM

Usage and safety precautions

SAFETY PRECAUTIONS

In this manual, symbols are used to highlight warnings and cautions that you must read to prevent accidents.
The meanings of these symbols are as follows:

Warning	Something that could cause serious injury or death.
Caution	Something that could cause injury or damage to the equipment.

Other symbols

!	Required (mandatory) actions
⃠	Prohibited actions

⚠ Warning

Operation using an AC adapter

- ! Use only a ZOOM AD-17 AC adapter with this unit.
- ! Do not use in ways that exceed the ratings of an outlet or wiring or with currents other than 100 V.
  Before using this product in other countries (or regions) where the power voltage differs from AC 100 V, always consult with a store that handles ZOOM products and use a suitable AC adapter.

Operation using batteries

- ! Use 4 conventional 1.5-volt AA batteries (alkaline or nickel-metal hydride).
- ! Read battery warning labels carefully.
- ! Always close the battery compartment cover when using the unit.

Alterations

- ⃠ Never open the case or attempt to modify the product.

⚠ Precautions

Product handling

- ⃠ Do not drop, bump or apply excessive force to the unit.
- ⃠ Be careful not to allow foreign objects or liquids to enter the unit.

Operating environment

- ⃠ Do not use in extremely high or low temperatures.
- ⃠ Do not use near heaters, stoves and other heat sources.
- ⃠ Do not use in very high humidity or near splashing water.
- ⃠ Do not use in places with excessive vibrations.
- ⃠ Do not use in places with excessive dust or sand.

AC adapter handling

- ! When disconnecting the AC adapter from an outlet, always pull the body of the adapter itself.
- ! During lightning storms or when not using the unit for a long time, disconnect the power plug from the AC outlet.

Battery handling

- ! Install the batteries with the correct +/– orientation.
- ! Use a specified battery type. Do not mix new and old batteries or different brands or types at the same time.
- ! When not using the unit for an extended period of time, remove the batteries from the unit. If a battery leak should occur, wipe the battery compartment and the battery terminals carefully to remove all battery residue.

Connecting cables with input and output jacks

- ! Always turn the power OFF for all equipment before connecting any cables.
- ! Always disconnect all connection cables and the AC adapter before moving the unit.

Volume

- ⃠ Do not use the product at a loud volume for a long time.

Usage Precautions

Interference with other electrical equipment

In consideration of safety, the ***R8*** has been designed to minimize the emission of electromagnetic radiation from the device and to minimize external electromagnetic interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves could result in interference if placed nearby. If this occurs, place the ***R8*** and the other device farther apart.
With any type of electronic device that uses digital control, including the ***R8***, electromagnetic interference could cause malfunction, corrupt or destroy data and result in other unexpected trouble. Always use caution.

Cleaning

Use a soft cloth to clean the panels of the unit if they become dirty. If necessary, use a damp cloth that has been wrung out well.
Never use abrasive cleansers, wax or solvents, including alcohol, benzene and paint thinner.

Malfunction

If the unit becomes broken or malfunctions, immediately disconnect the AC adapter, turn the power OFF and disconnect other cables. Contact the store where you bought the unit or Zoom service with the following information: product model, serial number and specific symptoms of failure or malfunction, along with your name, address and telephone number.

Copyrights

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Introduction

Please read through this manual carefully in order to understand the functions of the **R8** well so that you can use it happily for many years.
After reading through this manual, please keep it along with the warranty in a safe place.
Please note that some details might be changed without notice in order to improve the product.

Thank you very much for purchasing the ZOOM **R8**, which we will refer to as the **R8** in this manual. The **R8** has the following features.

■ Multitrack recorder that can use up to 32 GB SDHC cards

The **R8** can is an 8-track recorder that supports SDHC cards of up to 32 GB. After making linear PCM recordings (WAV format) at 16/24-bit and 44.1/48kHz sampling rate, you can transfer recorded files to your computer to use them in DAW software.

■ Hi-Speed USB 2.0 audio interface

You can use the **R8** and its various input and output jacks as a Hi-speed USB 2.0 audio interface that can handle 2 inputs and 2 outputs at up to 24-bit and 96 kHz. Its effects can even be used (at 44.1 kHz only) and it can also operate using USB bus power.
(See the Audio Interface Manual on the included SD card for details.)

■ DAW software control surface

The **R8** can be connected to a computer by USB cable and used as a control surface for DAW software. You can operate transport functions, including play, record and stop keys and physically control onscreen faders. You can also assign various DAW functions to the F1–F5 function keys. (The assignable functions depend on the DAW software.)
(See the Audio Interface Manual on the included SD card for details.)

■ Handles a variety of input sources including guitars, microphones and line-level equipment

The **R8** has 2 input jacks that accept both XLR and standard phone connectors. Both can supply phantom power (24 or 48 V) and one can handle high-impedance input. In addition to high-impedance guitars and basses, the inputs can handle all types of sources, including dynamic and condenser microphones, synthesizers and other line level instruments. The built-in high-performance microphones are convenient for recording acoustic guitars and vocals.
(See “Connecting instruments” on P.21.)

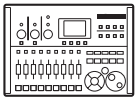
■ Sampler with 8 pads and 8 voices

Use the sampler to assign sounds to each track (pad) and create loops. Play the pads in real-time, and combine loops to create performances for a complete song. By simply lining up drum loops from the included SD card, anyone can easily create professional-quality backing parts and basic tracks. The recorder and sampler work together seamlessly, so you can record audio on other tracks while listening to loop playback.
(See “Using the sampler to make songs” on P.60.)

Confirmation of included items

The package contains the following items. Please verify them.

R8 unit



SD card

USB cable

AC adapter (ZOOM AD-17)

Cubase LE Installation DVD

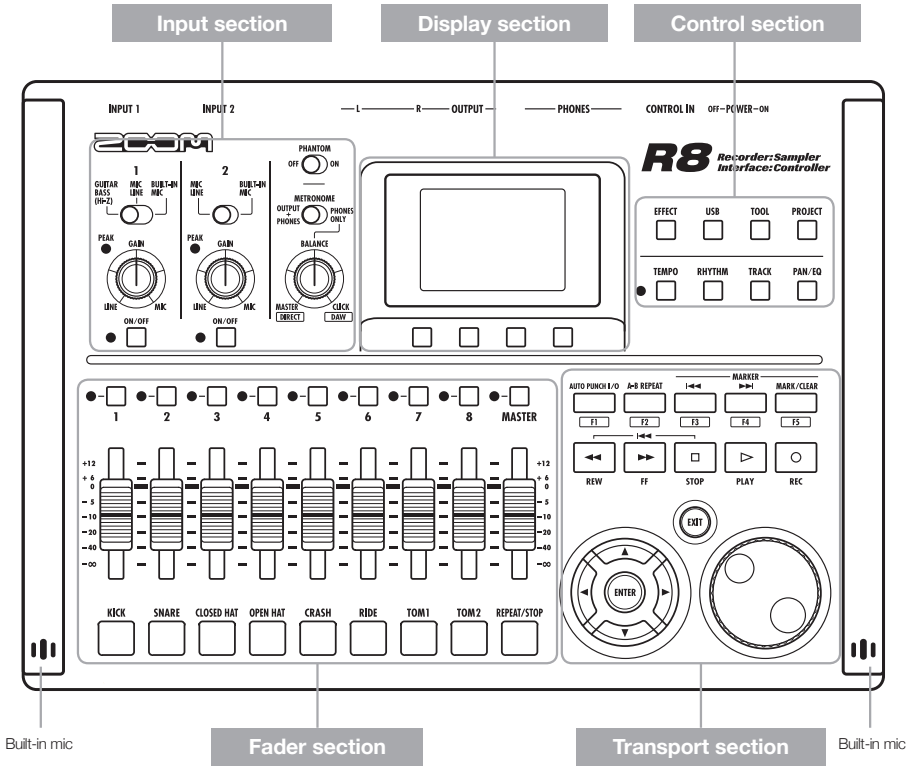
Operation manual (this document)

Cubase LE Startup Guide

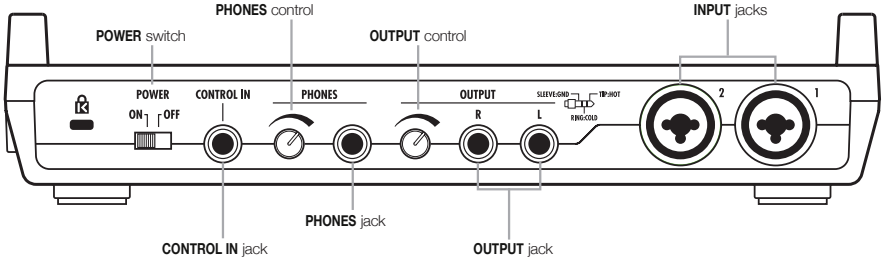
Note: the Audio Interface Manual (PDF) is on the SD card.

Contents

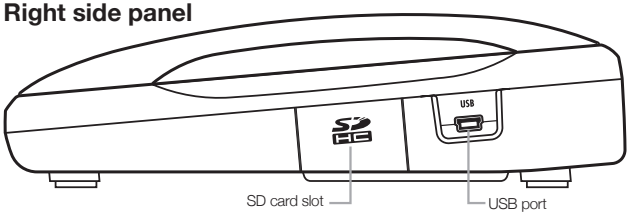
Panel layout and functions



Rear panel

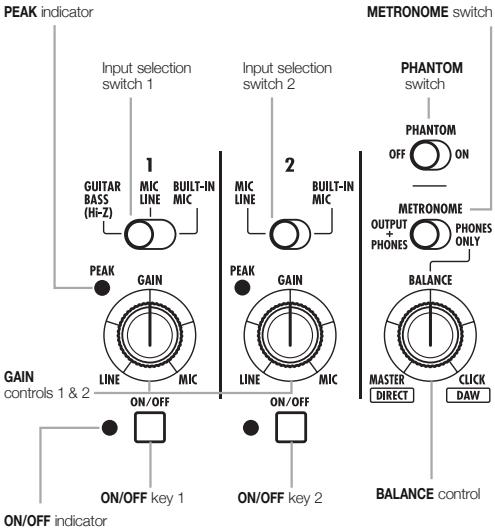


Right side panel

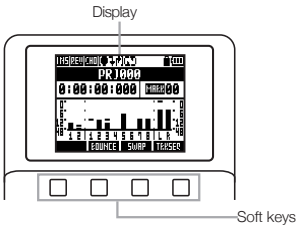


Bottom panel (not shown)
Battery compartment

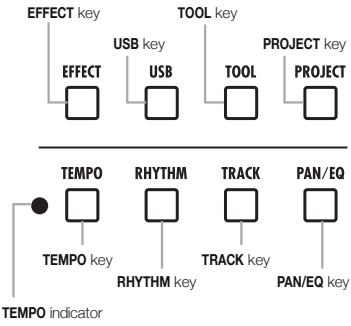
Input section



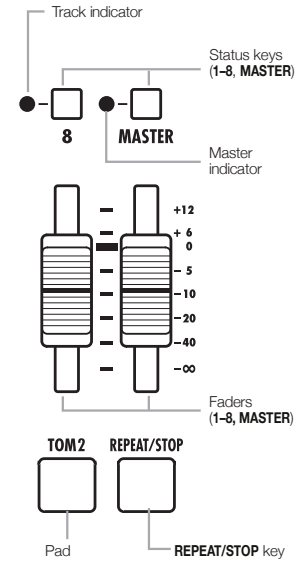
Display section



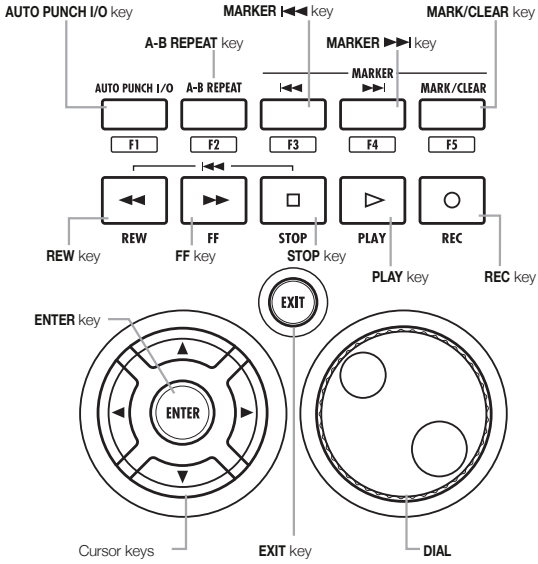
Control section



Fader section



Transport section



Switch and key overview

Here we explain how to use the keys and switches of the ***R8***.

Transport section

REC key	Functions only when tracks are in recording standby. • Stopped: starts recording standby • Recording standby: ends standby • Playing: starts recording (manual punch-in/out)
PLAY key	• Stopped: starts playback • Recording standby: starts recording
STOP key	• During recording: stops recording • During playback: stops playback • Recording standby: stops transport
FF key	• When stopped or during playback: fast forwards
REW key	• When stopped or during playback: rewinds • Hold **STOP** and press **REW** to return to the top of the song.
ENTER key	• Confirm an item
EXIT key	• Press to go back. • Press and hold to return to the top screen.
DIAL	• Change numbers and move among menus.
MARK/CLEAR	• Set, remove and move to marks
AUTO PUNCH I/O A-B REPEAT	• Set and cancel auto punch-in/out and A-B repeat

Cursor appearance

In manual On unit

Manual indications	
Move in menu	In explanations, the usable directions are shown with dark lines.

The cursors are used to move up, down, left and right to choose items. They are shown as above in the manual.

Control section

EFFECT key	• Set the insert and send- return effects
USB key	• Use the audio interface, control surface and card reader
TOOL key	• Make metronome, tuner, system and SD card settings
PROJECT key	• Create, set up and work with projects
TEMPO key	• Set the tempo (the indicator flashes in time with the tempo)
RHYTHM key	• Play, create and set rhythm patterns
TRACK key	• Assign tracks and make settings
PAN/EQ key	• Access track mixer settings

Fader section

TRACK 1–8 status keys	Change track status and check with indicator Green: play • Unlit: mute Red: record Orange: loop track or rhythm pattern track playing back
MASTER status key	Change master track status and check with indicator • Green: play • Unlit: master • Red: mix down

Input section

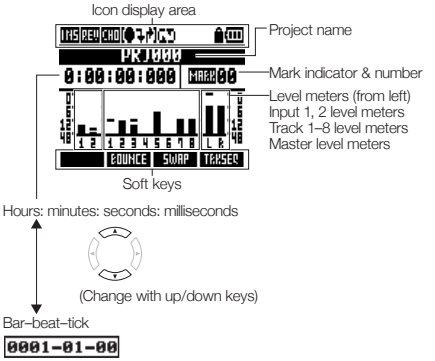
Input selection switch **1**	• Set for the instrument or mic used
Input selection switch **2**	• Set for the instrument or mic used
PHANTOM switch	• Phantom power **ON/OFF**
METRONOME switch **BALANCE** control	• Set metronome output When set to **PHONES ONLY**, **BALANCE** control adjusts the performance/metronome balance
GAIN controls 1, 2 **PEAK** indicators	• Set input sensitivity • Indicator lights when input level begins causing distortion
ON/OFF key 1, 2 Indicators	• Turn input **ON/OFF** • Indicator flashes when recording level begins causing distortion)

Display information

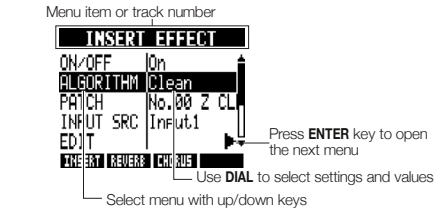
The display shows, for example, project data, connection and operation status as a recorder or a computer audio-interface, available functions and various menus.

Display and screen information

Top Screen: Shows the current project



Menu screen: Shows an operation menu



Icon display and settings

Insert effect icon (P.23, 45, 46, 80)

Shown when insert effect enabled.

To set: EFFECT

REVERB/CHORUS send-return icons (P.44, 80, 82)

Shown when send-return effects enabled.

To set: EFFECT

AUTO PUNCH IN/OUT icons (P.33)

Shown when auto punch-in/out enabled.

To set: AUTO PUNCH I/O

A-B REPEAT icon (P.38)

Shown when A-B repeat enabled.

To set: A-B REPEAT

PROTECT icon (P.91)

Shown when project protection enabled.

To set: PROJECT

Battery icon (P.14)

Shown when using battery power (including remaining charge and when battery needs changed). (Not shown when running on USB.)

Soft keys

The functions of the soft keys appear at the bottom of the display. Press the key under the indication to use that function.

Operation overview

1. Recording preparations

Do the following before starting recording.

Preparing to record P.17

- To start a new song, make a project first.
  - Creating a new project (P.17)
- Set the song's time signature and tempo.
  - Setting the time signature (P.18)
  - Setting the tempo (P.19)
- Set the metronome to use as a guide when recording.
  - Using the metronome (P.20)

2. Recording

Record an instrument, vocal or other sound source to each track. You can also assign audio file loops using the sampler function and rhythm

Recording the first track P.21

Record instruments and vocals to tracks in the project that you created.

- Connect instruments and mics, and adjust the input sensitivity.
  - Connecting instruments (P.21)
  - Adjusting the input gain (P.22)
  - Recording in stereo (stereo link) (P.29)
- Select tracks to record on and record.
  - Selecting tracks for recording (P.25)
  - Recording (P.26)
- You can use the following types of effects when recording.
  - Using insert effects (P.23)
  - Applying effects only for monitoring (P.89)
- You can also redo part or all of a recording.
  - Undoing the last action (UNDO/REDO) (P.26)
  - Recording part of a song again (punching in/out) (P.32)

Using the sampler P.60

- Assign audio files to tracks and set loops.
  - Assigning included drum loops to tracks (P.63)
  - Make loop settings (P.64)

Using rhythm functions P.48

- Assign rhythm patterns to tracks.
  - Assigning rhythm patterns to tracks (P.51)

patterns using the rhythm machine function to tracks, and arrange them in performance order using the track sequencer function.

Playback P.27

Playback instruments, vocals and other recorded sounds.

- Play back from any position and loop any interval that you want
  - Move to a point in a song (locate) (P.36)
  - Repeat playback of a specific section (A-B repeat) (P.38)
- Change a take (audio file assigned to a track).
  - Changing playback takes (P.30)

Overdubbing P.28

While playing back the recorded track, you can record (overdub) additional instruments and vocals to other tracks.

Bouncing tracks P.34

- If you run out of tracks, you can bounce them to reduce the number.
  - Combining multiple tracks into 1-2 tracks (bouncing) (P.34)

Using sequencer functions P.72

- Arrange loop tracks and rhythm pattern tracks in order to make performance data (sequence data) for one song.
  - Creating sequence data (P.73)
  - Playing back sequence data (P.78)

3. Mixing and mix down

After recording and preparing tracks, you can mix them and then make a stereo master track.

On the R8

Mixing P.40

Balance the tracks and set the effects used on them (mixing).

- Adjust the balance of the tracks.
  - Setting volume, EQ and pan (P.42)
- You can apply the following types of effects to each track.
  - Applying send-return effects (P.44)
  - Using insert effects on tracks (P.45)

Mixing down to stereo P.46

You can rerecord multiple tracks as a final stereo master track (mix down).

- When mixing down, you can apply the following types of effects.
  - Applying mastering effects (P.46)
- Mix down the song to stereo.
  - Mixing down to master tracks (P.47)

On a computer

By connecting the unit to a computer using a USB cable, you can use it as an audio interface, control surface and card reader. Doing so, you can use DAW software, for example, to mix and master your tracks.

- Audio interface/control surface (P.105)
- Exchanging data with a computer (card reader) (P.103)

Please see the Audio Interface Manual on the included SD card for information about the audio interface.

Connections

Refer to the illustration below to connect instruments, mics, other audio equipment and a computer, for example.

Outputs

1 Headphones

2 Stereo systems, speakers with built-in amplifiers, etc.

Inputs

Connect cables with XLR or phone plugs (mono/stereo, balanced/unbalanced) to the **INPUT** jacks.

3 Microphones

- Connect a mic to **INPUT 1** or **2**.
- Set the input selection switch to **MIC LINE**.
- Set the **PHANTOM** switch to **ON** to supply phantom power to a condenser mic.

4 Devices with stereo outputs

When using a synthesizer, a CD player or other stereo devices:

- Connect **OUTPUT** jack **L** to **INPUT 1** and **R** to **INPUT 2**.
- Set both input selection switches to **MIC LINE**.

5 Guitar/bass

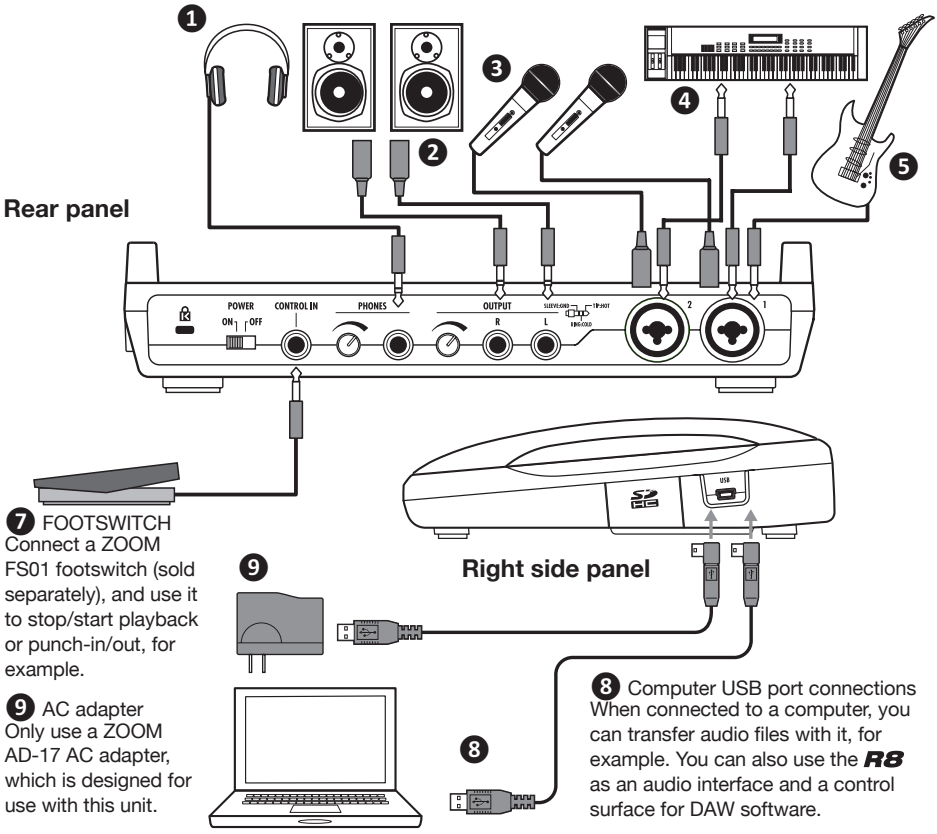
To connect a passive electric guitar or bass directly:

- Connect it to **INPUT 1**.
- Set input selection switch **1** to **GUITAR BASS (Hi-Z)**.

6 Built-in microphones

Use the built-in mics on the left and right of the unit to record drums or a band performance, for example.

- Set both input selection switches (**1** for left and **2** for right) to **BUILT-IN MIC**.



7 FOOTSWITCH

Connect a ZOOM FS01 footswitch (sold separately), and use it to stop/start playback or punch-in/out, for example.

9 AC adapter

Only use a ZOOM AD-17 AC adapter, which is designed for use with this unit.

8 Computer USB port connections

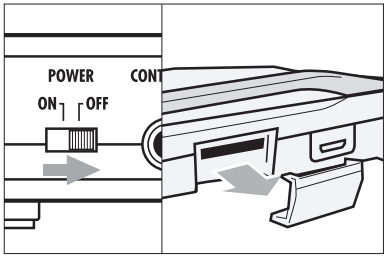
When connected to a computer, you can transfer audio files with it, for example. You can also use the ***R8*** as an audio interface and a control surface for DAW software.

SD card installation

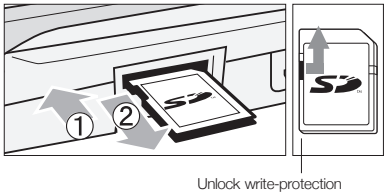
The **R8** saves recording data and settings on SD cards.
To protect your data, turn the power off before inserting or ejecting a card.
An SD card is necessary for recording.

Turn the power OFF and insert (ordinary use)

1 **Turn the POWER OFF and remove the SD card slot cover.**



2 **Insert an SD card that is not write-protected into the slot completely. To eject, push the card in first.**



Unlock write-protection

NOTE

If you want to change the SD card while the power is ON, you must follow special procedures. (P.110)
When inserting or removing an SD card, always turn the power OFF. Doing so when the power is ON could cause recording data to be lost.
If you cannot insert a card into the slot, you might be trying to insert it in the wrong direction or upside down. Do not force the card. Try again with the correct orientation. Forcing the card in could break it.
Always format an SD card that was used with a computer or a digital camera, for example, in the **R8** before using it.
If no SD card is inserted, the **REC** key will not function in Recorder Mode.

If a message appears

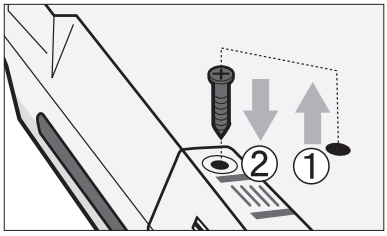
"No Card": No SD card is detected. Make sure an SD card is inserted properly
"Card Protected": The SD card is write-protected. Slide the lock switch away from the lock position to disable write-protection.

HINT

This unit can use 16 MB–2 GB SD cards and 4–32 GB SDHC cards.
You can find the most recent information about compatible SD cards on the ZOOM website.
http://www.zoom.co.jp

Preventing SD card theft

Remove the screw near the slot, and screw it into the hole in the SD card cover.



☞ Reference:
Changing SD cards with the power on P.110
Formatting SD cards P.111

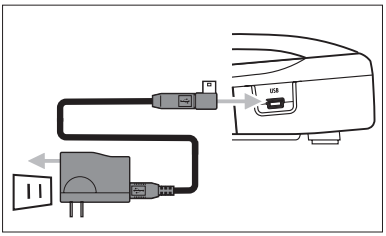
Powering the unit

Use the included AC Adapter or four AA batteries (sold separately) to power the unit.

Using ordinary power (included AC adapter)

1 **Turn the power OFF, and then plug the USB cable into the USB port on the right side of the unit.**

2 **Connect the other end of the USB cable to the AC adapter and plug the adapter into a power outlet.**

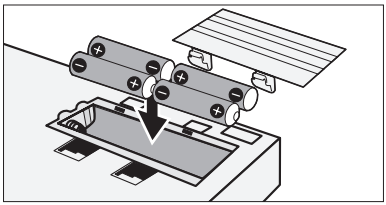


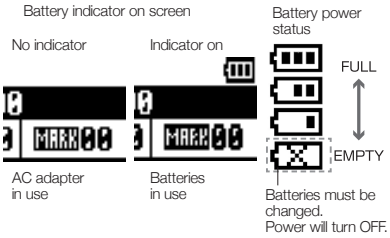
Caution Always use the included AC adapter (ZOOM AD-17), which is designed for use with the unit. Using any other adapter could damage the unit.

Using batteries

1 **Turn the power OFF and open the battery case cover on the bottom of the unit.**

2 **Install the batteries and close the cover.**





HINT

Power supply from USB

- When used with a computer connected by a USB cable, the computer supplies power to the unit.

NOTE

- Always turn the power OFF when you open or close the battery cover or connect or disconnect the AC adapter. Doing so when the power is ON might cause recording data to be lost.
- The unit can use alkaline or NiMH batteries. The approximate operation time when using alkaline batteries is about 5.5 hours.
- Replace the batteries when "Low Battery!" is shown. Turn the POWER switch to OFF immediately and install new batteries or connect the included AC adapter.
- Set the battery type to increase the accuracy of the remaining battery charge indicator.

☞ Reference: Setting the battery type P.112

Turning the power on & off/Setting the date & time

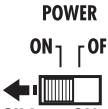
Follow these precautions for starting-up and shutting down the unit.
Follow these instruction to set the date and time for files and data.

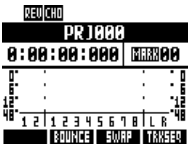
Turning the power on and off

1) Make sure all the equipment is OFF.
2) Confirm that the power, the instruments and the monitoring system (or headphones) are correctly connected.

Turn the power ON to start the unit

1

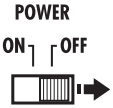




2 **In order, turn connected instruments and the monitoring system ON.**

Turn the power OFF to shut down the unit

1



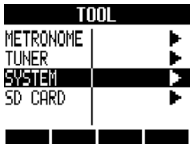
NOTE

- Before turning the **POWER ON**, turn down the ***R8*** **PHONES** and **OUTPUT** controls and volume on monitors and other connected devices.
- If no power is supplied to the ***R8*** for more than a minute, the DATE/TIME setting will be reset to the default value.

Setting the date and time
TOOL > SYSTEM > DATE/TIME

1 TOOL **Press**

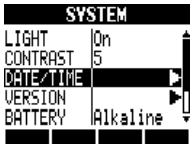
2 **Select SYSTEM.**



Change menu

ENTER **Press**

3 **Select DATE/TIME.**



Change menu

ENTER **Press**

4 **Select the date and time units and set their values in order.**

YEAR → MONTH → DAY →
(hours) → (minutes) → (seconds)

Change unit

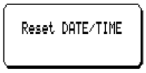
Change value

5 **Select OK.**

Move cursor

ENTER **Press**

If this message appears

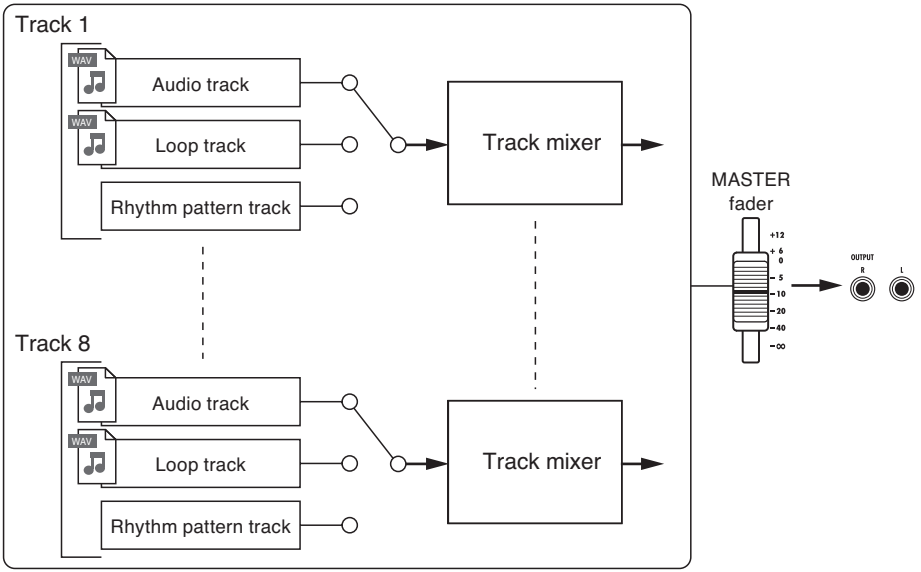


- The **DATE/TIME** setting has been set to its default value. Set the **DATE/TIME** again.

Recorder overview

The **R8** is an 8-track recorder that can record up to 2 tracks at the same time and play back up to 8 tracks at the same time. The following types of tracks are used.

Track type	Function	Reference
Audio track	Plays its audio file from beginning to end.	–
Loop track	Plays part of an audio file repeatedly.	Using the sampler function (P.60)
Rhythm pattern track	Plays a rhythm pattern.	Using the rhythm function (P.48)



Types of recording files

Depending on the recording destination track, the **R8** creates the following types of audio files.

- Mono track: mono WAV file
- Stereo linked track: stereo WAV file

The file format depends on the project and bit length settings.

Reference: Changing the recording format P.97

Types of playback files

Both mono and stereo WAV files can be assigned to **R8** audio and loop tracks. (A file cannot be assigned to a project, however, if its sampling rate is different from that of the project.)
Audio files created in DAW software can also be played by the **R8**.
There is no limit to the number of virtual tracks.
Any audio file in the same project can be assigned to a track.
When a stereo file is assigned to a track, stereo link is turned on automatically.

Preparations before recording

With the **R8** you can manage each song as a "project."
Before starting to record a new song, create a project first, and adjust the time signature (default: 4/4) and tempo (default: 120.0) as necessary.
You can also set the metronome as you wish to use as a guide during recording.

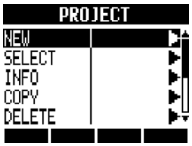
Creating a new project

Create a new project. You can choose to use the same settings as the previous project and set the sampling rate.

1 PROJECT

Press

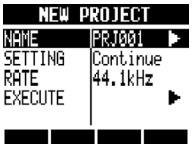
2 Select NEW.



Change menu

ENTER Press

3 Select NAME.



Change menu

ENTER Press

4 Change the name as needed.

Move cursor

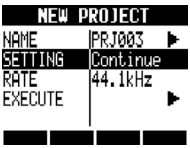
DELETE Delete character

INSERT Insert character

Change character

ENTER Press

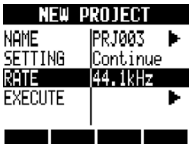
5 Set whether or not to continue using the previous settings.



Change menu

Change setting

6 Set the sampling rate.



Change menu

Change setting

7 Select EXECUTE.

Change menu

ENTER Press

NOTE

- You can continue to use the settings and values of the last project in the new one.

Settings carried over with Continue
BIT LENGTH settings
INSERT EFFECT settings
Send-return EFFECT settings
Track status (PLAY/MUTE/REC) settings
BOUNCE settings
Track parameter settings
METRONOME settings
Reset
Default settings are used for each item.

The RATE can also be set to a sampling rate that is suitable for DVD audio.

RATE: sampling rate settings	
44.1 kHz	Standard (default)
48.0 kHz	For DVD audio, etc.

When set to 48 kHz, effects cannot be used.

Changing the time signature

Use the track sequencer to set the time signature. The default is 4/4. Follow these steps to change to a different time signature.

1 TRACK

Press

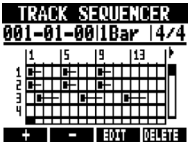
2 Select TRK SEQ.

Change menu

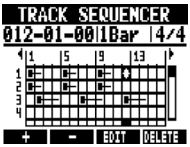
ENTER Press

3 Start step input.

REC Press



4 Move the cursor to where you want to change the time signature.



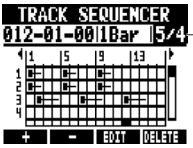
Move cursor

REW Go back 1 step

FF Go forward 1 step

Put the cursor at the beginning to change the time signature for the whole song, or at the point where you want to change it in the middle of the song.

5 Move to the time signature area and change the setting.



Move between areas

Change setting

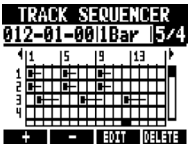
Time signature options	
Setting	
1/4–8/4	Default: 4/4

6 Complete the setting.

STOP Press

Delete an inserted time signature

1 Move the cursor to where you want to delete the time signature.

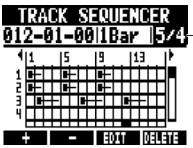


Move cursor

REW Go back 1 step

FF Go forward 1 step

2 Move to the time signature area



Move between areas

3 Press beneath DELETE.

Setting the tempo

1 **TEMPO**

Press

2 **Turn the dial to change the setting.**

OR

TEMPO **Tap repeatedly and the average tempo will be detected and set.**

Tempo setting range	
40.0–250.0	Default: 120.0

NOTE

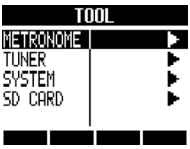
- The tempo setting is saved for each project.

Using the metronome

You can change the volume, tone and stereo position of the metronome and use its pre-count function. You can also set it to only be heard through headphones.

1 TOOL **Press**

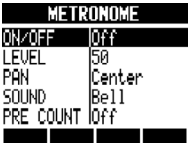
2 **Select METRONOME.**



Change menu

ENTER **Press**

3 **Select each menu item and adjust the settings.**

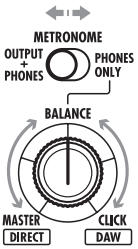


Change menu

Change setting

HINT

Use the **METRONOME** switch to change and adjust the metronome output.



OUTPUT + PHONES

The metronome sound is output through both **OUTPUT** and **PHONES** jacks.

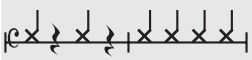
PHONES ONLY

The metronome sound is output only through the **PHONES** jack.
Use the **BALANCE** knob to adjust the relative volumes of the **MASTER** fader signal and the metronome sound.

MASTER — **CLICK** (metronome)

Metronome settings are saved for each project. You can use the metronome even when playing back the master track.

Menu settings and setting values

ON/OFF: Set when operative	
Settings	
Play Only	During playback only
Rec Only	During recording only
Play & Rec	During both playback and recording
Off (default)	No metronome sound
LEVEL: Set the volume	
Setting range	
0–100	Default: 50
PAN: Set the stereo position	
Setting range	
L100 – R100	Default: Center
SOUND: Set the sound	
Settings	
Bell (default)	Click with bell accent
Click	Click sound only
Stick	Drum stick sound
Cowbell	Cowbell
Hi-Q	Synthesized click sound
Track1 – Track8	TRACK 1–8 sound (mono)
Track1/2 – Track7/8	TRACK 1/2–7/8 sound (stereo)
PRE COUNT: Set the count-in length	
Settings	
Off	None (default)
1–8	Enable pre-count sound for 1–8 beats.
Special	

NOTE

- Be aware that if the metronome volume is set high, the accented beat of some sounds might become difficult to distinguish.
- If a track with a rhythm pattern assigned to it is selected in the **SOUND** setting, no sound will be output.
- The metronome follows the time signature used in the track sequencer.

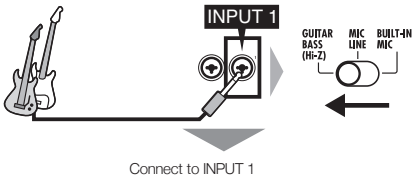
Recording the first track

After preparation, ready the recorder and start recording the first track in a project that you have created. Connect an instrument, record it and play back the recording. You can also apply various effects (insert) during recording.

Connecting instruments

Connecting passive-type guitars

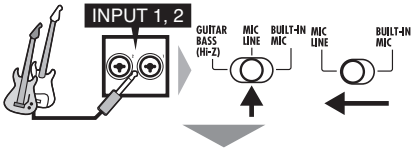
Connect a high impedance instrument to **INPUT 1**, and the set the input switch to **GUITAR BASS (Hi-Z)**.



Connect to INPUT 1

Connecting low impedance instruments

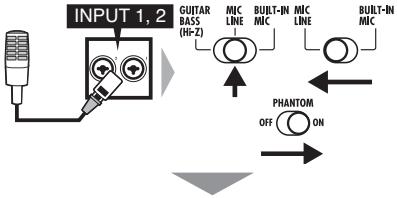
Connect a low impedance instrument to **INPUT 1** or **2** and set its **INPUT** switch to **MIC LINE**.



Connect to INPUT 1 and/or 2
For a stereo instrument, connect its left output to INPUT 1 and its right output to INPUT 2.

Using phantom power

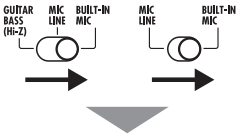
Connect a mic to an **INPUT** (**1** or **2**), and set that **INPUT** switch to **MIC LINE**. Then, set the **PHANTOM** switch to **ON**.



Supply phantom power to connected mics

Using the built-in mics

To use the left built-in mic set switch 1 to **BUILT-IN MIC**. To use the right built-in mic set switch 2 to **BUILT-IN MIC**.



Built-in mic signals on INPUT 1 and/or 2

NOTE

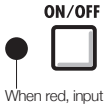
The total recordable time depends on the recording format and SD/SDHC card capacity.
The table below shows times in hours and minutes.

Recording format	SD/SDHC card capacity					
	1 GB	2 GB	4 GB	8 GB	16 GB	32 GB
16-bit/44.1 kHz	3:07	6:14	12:28	24:56	49:53	99:46
16-bit/48 kHz	2:51	5:43	11:27	22:55	45:50	91:40
24-bit/44.1 kHz	2:04	4:09	8:18	16:37	33:15	66:30
24-bit/48 kHz	1:54	3:49	7:38	15:16	30:33	61:06

- Times are estimates for mono (1-track) recording. Times are halved for stereo (2-track) recording.
- The maximum continuous recording time, regardless of the number of recording tracks, is about 6 hours for 16-bit/44.1 kHz WAV format and about 4 hours for 24-bit/44.1 kHz WAV format.

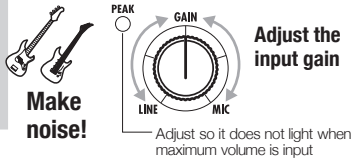
Adjusting the input gain

1 **Push the INPUT ON/OFF switch for the connected input to turn it on, lighting the indicator red.**



When red, input is possible

2 **Adjust the input GAIN.**



NOTE

- The **PEAK** indicator turns red when the signal exceeds the maximum detectable level of 0 dB, resulting in input clipping.
- If clipping happens, the recorded sound will be distorted, so you should reduce the recording level.

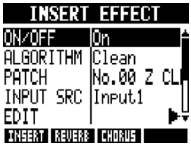
Using insert effects

1 EFFECT

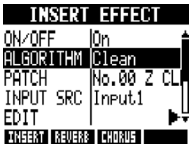
Press

2 Press  below **INSERT**.

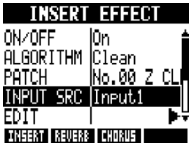
3 Select ON/OFF and set it to ON.



4 Select an algorithm and patch.



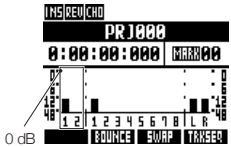
5 Select INPUT SRC and then set the connected input.



6 

Press to return to the top screen.

7 Adjust the recording level.



ON/OFF

When applying an insert effect, adjust the recording level so that the level meters do not touch the 0 dB mark and the input section **ON/OFF** switch indicators do not blink (see the following page).

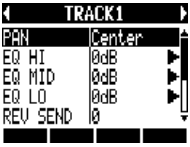
NOTE

- For more information about algorithms, patches and insert effects, see the "Guide to using effects" on P.80.
- You can also use insert effects just for monitoring while recording the unaffected signals. (See "Using effects only for monitoring" on P.89.)

Adjusting the recording level

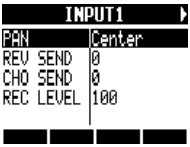
1 **PAN/EQ**

Press

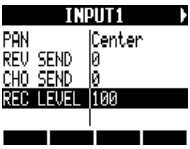


2 **ON/OFF**

Press for an INPUT to adjust its recording level.



3 **Select REC LEVEL and adjust the recording level.**

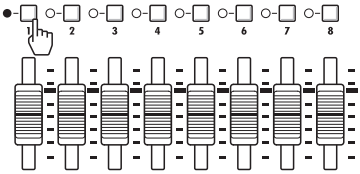


ON/OFF

Set the recording level so that the ON/OFF switch indicator does not blink.

Selecting tracks for recording

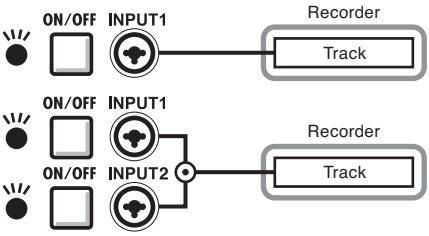
1 **Press the status key for the recording destination track until it lights red.**



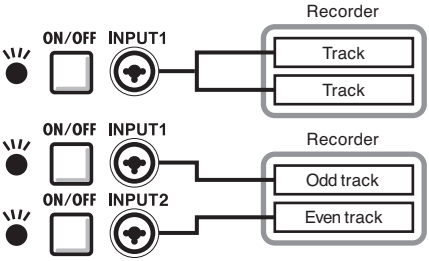
2 **Set both the MASTER and recording track faders to 0 dB once, and then raise them to adjust the monitoring volume of the instrument being recorded.**

NOTE

- The relationship between inputs and tracks is as follows.
  - When one track is selected



  - When two/stereo tracks are selected

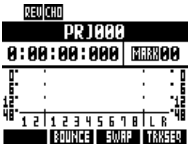


Recording

1 Return to the beginning of the song (time counter).

Press and hold ▫ STOP **and press** ◄◄ REW **to return to the beginning.**

Top screen



Counter at beginning of song (mark 00)

2 Arm the track for recording.

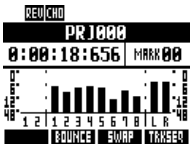
○ REC **Press**

REC Lit red

3 Start recording.

▷ PLAY **Press**

REC Lit red PLAY ▶ Lit green

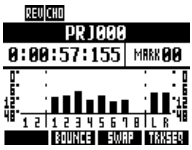


Counter starts

4 Stop recording.

▫ STOP **Press**

STOP ■ Lit green PLAY ▷ REC ○ Unlit



Counter stops but does not return to beginning

Re-recording

If you record again on the same track, the previously recorded file will be overwritten. However, you can also use the **UNDO** function to erase the previous recording.
Moreover, you can also keep the previous file and record a second take in a separate file.

HINT

- You can set whether when recording previous recordings are overwritten or saved and a new recording made. (See "Setting the recording mode" on P.97.)

Redoing the previous recording (UNDO and REDO functions)

If you are not happy with a performance or the recording level setting was incorrect, for example, use the **UNDO** and **REDO** functions to re-record.
Use the **UNDO** function to erase the recording and restore the unit to the previous state.
You can also use **REDO** to cancel the **UNDO** operation.

Press ▫ **beneath** UNDO **to UNDO.**

Press ▫ **beneath** REDO **to REDO.**

NOTE

- The **UNDO** function only affects audio data recorded on a track.
- **UNDO** can only be used to go back one recording step. Undoing more than one step is not possible.

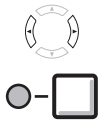
Recording to a new file

1 TRACK

Press

2 **Select the track for recording the new file.**

Select track

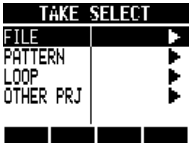


3 **Select TAKE.**

Change menu

ENTER **Press**

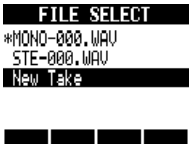
4 **Select FILE.**



Change menu

ENTER **Press**

5 **Select New Take.**



Select file

ENTER **Press**

HINT

- "TAKE" shows the file name. File names are assigned automatically in order starting with "MONO-000.WAV" (for a stereo track "STE-000.WAV") followed by "MONO-001.WAV", "MONO-002.WAV" and so on. File names can be changed as necessary. (See "Changing project and audio file names" on P.94.)

Playing back recordings

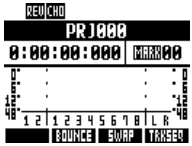
1 **Press the status key for the recording destination track until it lights green.**

Ready to PLAY when green

Playback track
Press 1-2 times until lit green

2 **Return to the beginning of the song.**

Press REW while pressing and holding STOP to return to the beginning.



3 **Start playback.**

PLAY **Press** PLAY Lit green

4 **Stop playback.**

STOP **Press** STOP Lit green

NOTE

- When the REC MODE is set to Overwrite, the recorded audio file will be overwritten on the track. If you return to the beginning of the song and record, the previous recording will be overwritten, so be careful. When a track is ready to PLAY, the file on it will be played back.

HINT

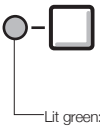
- You can change the playback file to a different take. ("Changing the playback take" on P.30.)

Overdubbing

After "Recording the first track," you can record (overdub) other instruments on other tracks while playing back the already recorded audio.

Playing an already recorded track

Press the status key for the track to playback 1–2 times until its indicator lights green.



Press for the track to playback until it lights green

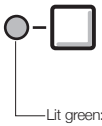
Lit green: ready to PLAY

Overdubbing

After preparing the already recorded track for playback, follow the instructions in "Recording the first track" (P.21) from "Connecting instruments" to "Recording" to record other tracks.

Playing back all tracks

1 **Press the status keys for the tracks to playback 1–2 times until their indicators light green.**



Press for the tracks to playback until they light green

Lit green: ready to PLAY

2 **Press and hold** STOP **and press** REW **to return to the beginning.**

3 PLAY **Press to start playback.**

PLAY Lit green

4 STOP **Press to stop playback.**

STOP Lit green

HINT

- If you want to record on a track that has already been recorded on, assign the recorded file to another track to make the target track empty. Refer to "Changing the playback take" (P.30).
- You can also swap recorded tracks with unrecorded tracks. Refer to "Swapping two tracks" on (P.31).
- To make a new recording on the same track used for the first recording, you must swap tracks.
- To record to a new file, set the track to New Take. (Refer to "Recording to a new file" on P.27.)

NOTE

- When you move files on tracks, confirm that tracks to be recorded on are set to “New Take” so that no files are assigned to them.
- If there is a file assigned to a track, that recording will be overwritten by new recording.
- When the REC MODE is set to Overwrite, the recorded audio file will be overwritten on the track. If you return to the beginning of the song and record, the previous recording will be overwritten, so be careful. When a track is ready to PLAY, the file on it will be played back.

Stereo recording (stereo link)

Enable stereo links to treat two adjacent tracks (1/2, 3/4, 5/6 and 7/8) as stereo tracks.
When stereo link is set to ON, INPUT 1 and 2 can be used together for stereo input and recorded to a stereo track. When recording to a stereo track, a stereo WAV file is created.

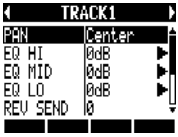
Stereo link

PAN/EQ > ST LINK

1 PAN/EQ

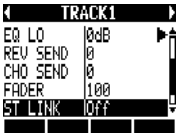
Press

2 Select a track.



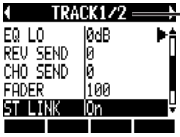
Select track

3 Select ST LINK.



Change menu

4 Select On.



Tracks with a stereo link are shown this way

On/Off

HINT

- Stereo link changes the setting from two mono tracks to one stereo track.
- Whatever track number you choose, an adjacent track will be linked. You cannot change these combinations.
- To adjust the volume of a stereo track, use the odd number fader. The even number fader has no effect. Use the pan parameter to adjust their relative volume balance.
- Stereo files can be assigned to stereo linked tracks. The left channel is on the odd track and the right is on the even track.

NOTE

- If stereo link is turned on for a track that has a mono file assigned to it, that file assignment will be canceled.

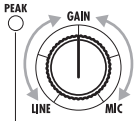
Stereo recording

1 ON/OFF

Push the INPUT 1 and 2 ON/OFF switches to turn them on, lighting their indicators red.

2 Adjust the input GAIN.

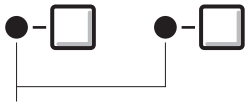
Make noise!



Adjust the input gain

Adjust so it does not light when maximum volume is input

3 Press a status key of the stereo linked tracks 1–2 times until both indicators light red.



Lit red: ready to record

4 

Set the MASTER and recording track faders to 0 dB and then use them to adjust the monitoring level of the instrument being recorded.

5 **Follow the procedures in the "Recording" section (P.26) of "Recording the first track" to record.**

- The left channel is recorded on the odd track and the right on the even track.

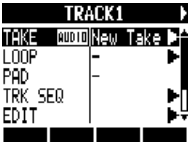
Changing playback takes

You can assign audio files to tracks freely.
By recording multiple takes of vocals, guitar solos and other parts in different files, you can later select and use the best takes (as though using virtual tracks).

1 TRACK

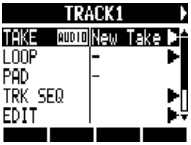
Press

2 Select the track to assign.



Select track

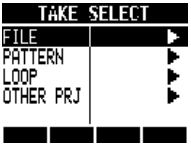
3 Select TAKE.



Change menu

ENTER Press

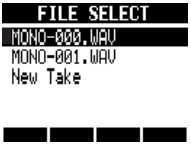
4 For an audio file, select FILE.



Change menu

ENTER Press

5 Select the audio file.



Select the file or pattern

ENTER Press

NOTE

- If you assign a stereo file to a mono track, stereo link is turned on automatically. For example, if mono files are assigned to tracks 1 and 2, the stereo file will be assigned to track 1 and the mono file on track 2 will become unassigned.
- If you assign a mono file to a stereo track, stereo link will be turned off automatically.

HINT

- You can also play the audio file being selected.

  PLAY Play

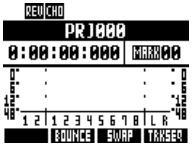
  STOP Stop

- Files that are already assigned to tracks have an * to the left of their names.

Swapping two tracks

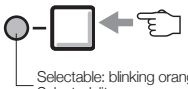
Use the swap function to exchange two tracks, including their assigned files, track sequence data and all track parameter information.

1 Press ☐ beneath SWAP.



2 Select the first track to swap.

Indicators blink orange on tracks that can be selected.
Press the status key of the track to swap.



Selectable: blinking orange
Selected: lit orange

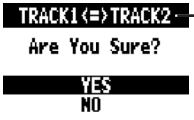
3 Select the second track to swap.

Already selected track

Indicators blink orange on tracks that can be selected.
Press the status key of the track to swap.

Selectable: blinking orange
Selected: lit orange

4 Swap the tracks.



Tracks to be swapped

Move cursor

ENTER Press

Re-recording part of a track (punch-in/out)

Punch-in and punch-out allow you to re-record a single part of a recorded file. The point when the unit switches from playback to recording is the "punch-in" and the point when the unit switches from recording to playback is the "punch-out."
The ***R8*** allows both manual punch-in/out using keys on the front panel or a ZOOM FS01 footswitch (sold separately) and automatic punch-in/out in which you designate the punch-in/out points in advance.

Manual punch-in/out

You can punch-in/out manually. During playback, press the REC key to start re-recording from that point.

Prepare the track that you want to punch-in/out

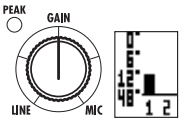
1 

Raise the fader on the track you want to re-record.

2 

Press the status key 1-2 times until lit red.

Lit red: ready to record

3 

Adjust the recording level and the GAIN to be the same as the already recorded part.

Re-record by punching in and out

4 REW **Locate to before the punch-in point.**

5 PLAY **Press PLAY to start playback.** PLAY Lit

Perform (not recording)

6 REC **Press REC to punch-in and start recording.**

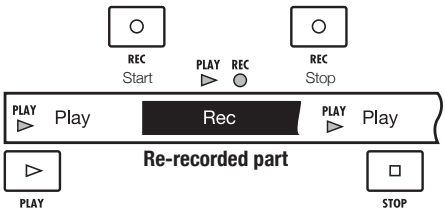
PLAY REC Lit

Perform (recording)

7 REC **Press REC to punch-out, stop recording and start playback.**

PLAY Lit REC Unlit

8 STOP **Press to stop playback (and recording if not yet stopped).** PLAY REC Unlit



NOTE

- Punch-in/out overwrites the recording on the track.
- If the track is set to `New Take`, the track will be silent before punching in and after punching out.
- If the REC MODE is set to `Always New`, a new file will be recorded.
- Use the UNDO soft key to cancel the re-recording.

Automatic punch-in/out

When punching in and out manually is difficult, you can set the points in advance to punch-in and punch-out automatically.

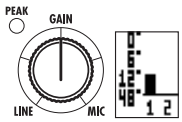
Prepare the track that you want to punch-in/out

1 **Raise the fader on the track you want to re-record.**

2 **Press the status key 1-2 times until lit red.**

Lit red: ready to record

3 **Adjust the recording level and the GAIN to be the same as the already recorded part.**



Set the punch-in/out points

4 **Locate the starting (punch-in) point.**

REW FF PLAY

5 **Press to set the punch-in point.**

AUTO PUNCH I/O

Appearance on display

6 **Locate the ending (punch-out) point.**

FF PLAY

7 **Press to set the punch-out point**

AUTO PUNCH I/O

Appearance on display

NOTE

- Once you set automatic punch-in and out points, you cannot change them. Cancel them first if you need to set them again.
- If the REC MODE is set to Always New, a new file will be recorded.

Rehearsing

1 **Locate to a time before the punch-in point.**

REW

2 **Press to start playback.**

PLAY

When the punch-in point is passed, the track is automatically muted.

PLAY Lit

Perform (not recording)

When the punch-out point is passed, the track is automatically unmuted.

3 **Press to stop playback.**

STOP

PLAY Unlit

Re-recording with punch-in and punch-out

8 **Locate to a time before the punch-out point.**

REW

9 **Press REC and PLAY in order to start recording.**

REC + PLAY

Perform

PLAY Lit, REC Blinking — **Not recording**

Punch-in point passed

PLAY REC Lit — **Recording**

Punch-out point passed

PLAY Lit, REC Blinking — **Not recording**

10 **Press to stop playback (and recording if not yet stopped).**

STOP

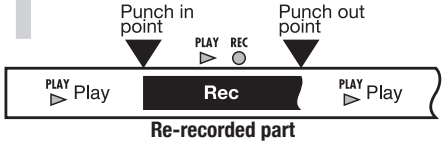
PLAY REC Unlit

Cancel punch-in/out

11 **Press**

AUTO PUNCH I/O

Indicators disappear from display



Re-recorded part

Combining multiple tracks into 1–2 tracks (bouncing)

Bounce to mix and record multiple tracks as 1–2 tracks. This is also called “ping-pong recording.”

Bounce destination track settings

PROJECT > REC > BOUNCE TR

Start from the Top Screen

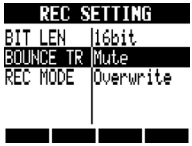
1 PROJECT **Press**

2 **Select** REC.

Change menu

ENTER **Press**

3 **Select** BOUNCE TR.



Change menu

To include the bounce destination track

4 **Select** Play.

Change setting

BOUNCE TR: bounce destination track	
Setting	
Mute	Mute the bounce destination track (default)
Play	Play and record the bounce destination track

5 **Return to the start of the project.**

Bouncing (preparation)

1 **Select the bounce source tracks (set each track to play back).**

Press 1–2 times until indicator lights green

Lit green: ready to PLAY

2 **Select bounce destination track(s).**

Press 1–2 times until indicator lights red

Lit red: ready to record

HINT

- Bouncing creates a new file in the same project.
- If you set the bounce destination to a mono track, the recorded signals are mixed to mono. If set to a stereo linked pair of tracks, the recorded signals will be mixed to stereo.
- You can also include signals input through the INPUT jacks when bouncing.
- For information about adjusting sounds and using effects while bouncing, refer to "Mixing" on P.40.

Bouncing (execution)

3 Press ☐ beneath BOUNCE.

BOUNCE ON appears on the display

Note: Press the BOUNCE soft key again to cancel bounce mode.

4 Press and hold ☐ STOP and press ◄◄ REW to return to the beginning.

5 ○ REC + ▷ PLAY Press in order to start recording.

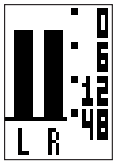
REC ● Lit red PLAY ▶ Lit green

6 ☐ STOP Press to stop playback.

Adjust the mix balance (audition)

1 ▷ PLAY Press to start playback.

2 Adjust the mix balance, including volume, pan and EQ, for each track.



Make sure that the MASTER level meters do not reach 0 dB

3 ☐ STOP Press to stop playback.

Playback the track after bouncing

1 Enable playback of bounce destination tracks.

○– ☐ Press status keys 1–2 times until indicator lights green

Lit green: ready to PLAY

2 Disable playback of bounce source tracks

○– ☐ Press status keys 1–2 times until unlit

Unlit: muted

3 Press and hold ☐ STOP and press ◄◄ REW to return to the beginning.

4 ▷ PLAY Press to start playback.

NOTE

- This operation can be undone by pressing the UNDO soft key.
- If you bounce in stereo to two mono tracks, the pan of the odd number track will be set to L100, and the even number track will be set to R100.

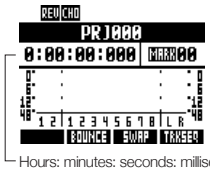
Locating to the desired part of a song

The counter on the display can be used to move (locate) to the desired time in hours: minutes: seconds: milliseconds or bars–beats–ticks (1/48 beat).
You can also set marks in a project to locate to them easily.

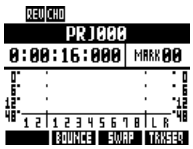
Using the counter to locate

To prepare, stop the recorder, select the project and start from the Top Screen.

1 Select the hours: minutes: seconds or bars–beats–ticks.



2 Change the values.

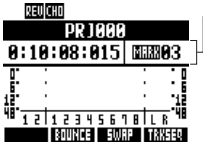


NOTE

- You cannot change the counter this way during recording or playback.

HINT

- After Step 2, you can start playback from the set counter position.
- Mark icon display
- Mark zero MARK00 is always set at counter 0 (project beginning) and cannot be changed.



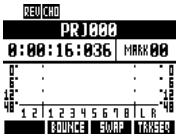
MARK **Mark set at current counter position**
MARK **No mark set at counter position**

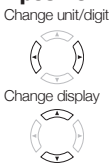
- If you add a mark at a time earlier than an existing mark, all the following marks will be automatically renumbered in order.
- One project can have a maximum of 100 marks, including the zero mark.

Adding marks

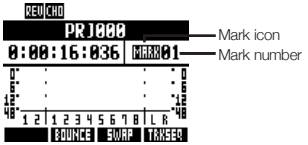
Add a mark using the counter

1 Start from the top screen. Set the counter to the desired mark position.





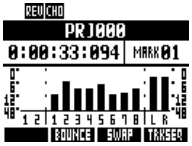
2 MARK/CLEAR **Press**



Adding a mark during recording/playback

1 Start recording or playback

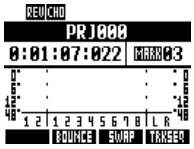
2 MARK/CLEAR **Press**



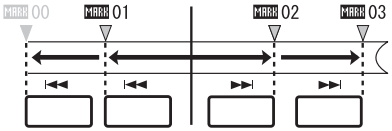
Locate to the position of a mark

Use keys to move between marks in order

1 **Press the [⏭] and [⏮] keys to set the desired mark.**

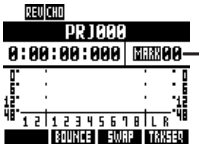


Project



Use the **DIAL** to move between marks in order

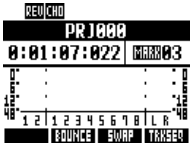
1 **Select MARK.**



Blinking

Change unit/digit

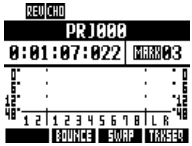
2 **Select the mark number.**



Change number

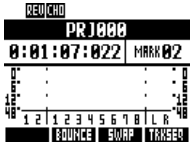
Deleting marks

1 **Press the [⏭] and [⏮] keys to set the desired mark.**



Mark icon highlighted

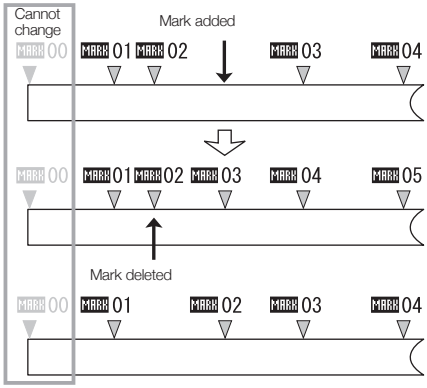
2 **MARK/CLEAR [ ] Press**



The highlighted mark is erased and the preceding mark is shown.

NOTE

- A deleted mark cannot be recovered.
- MARK00 at the beginning cannot be deleted.
- Press the **MARK/CLEAR** key when the mark icon is highlighted to delete that mark. Press **MARK/CLEAR** when the icon is not highlighted to create a new mark at that position.
- When marks are added and deleted between other marks, all the marks are automatically renumbered in order from the beginning.



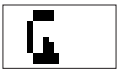
Repeat playback of a specific section (A-B repeat)

You can set a beginning (A) point and an ending (B) point in a project and repeat playback between them.

Setting A-B points

1 REW FF PLAY — **Locate the beginning point**

2 A-B REPEAT — **Press**



Appearance on display

3 FF PLAY — **Locate the end point.**

4 A-B REPEAT — **Press**

Appearance on display

Use A-B repeat to loop playback

5 PLAY — **Press to start playback.**

6 STOP — **Press to stop playback.**

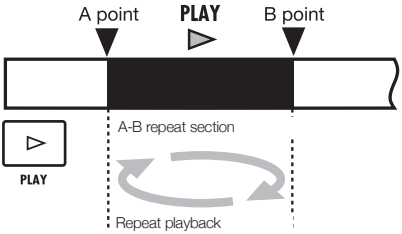
Cancel repeat and clear points

7 A-B REPEAT — **Press to cancel**

Indicators disappear from display

HINT

- When playback reaches point B, it automatically returns to point A and continues playback.
- While the A–B REPEAT icon appears, playback repeats continuously
- These settings can be made both during playback and when stopped.
- If you set point B at a time before point A, repeat playback will occur from point B to point A.
- To change the settings, press the **A-B REPEAT** key to cancel them once and then follow the procedures to set new ones.



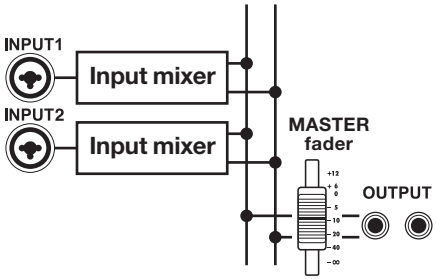
Mixing overview

The ***R8*** has two built-in mixers. Input signals are sent to the input mixer, and track playback signals are sent to the track mixer.
Using the built-in mixer, you can adjust the volume and pan for each input signal and track, as well as use a 3-band parametric equalizer on the tracks.

Input mixer

This mixer adjusts the input gain of each signal input through an **INPUT** jack, and sends each signal individually or both mixed together to a recorder track.
You can control the following **INPUT** parameters and monitor up to 8 playback tracks at the same time.

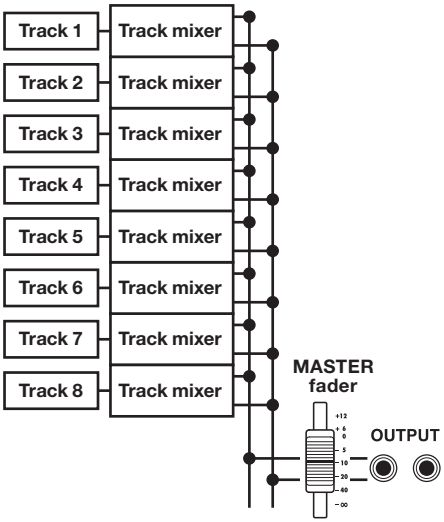
- Input signal pan (PAN)
- Send-return effect levels (REV SEND, CHO SEND)
- Input signal recording level (REC LEVEL)



Track mixer

This mixer mixes the output signals of recorder tracks to stereo.
Use the faders to adjust the volume. You can also adjust the pan and equalizer, for example, for each track.
You can control the following types of parameters using the track mixer.

- Track volume (FADER)
- Track pan (PAN)
- Equalizer (EQ HI, EQ MID, EQ LO) (EQ cannot be adjusted for rhythm pattern tracks)
- Send-return effect levels (REV SEND, CHO SEND)
- Stereo link settings (for mono audio tracks)
- Track phase (INVERT) (the phase of rhythm pattern tracks cannot be adjusted)

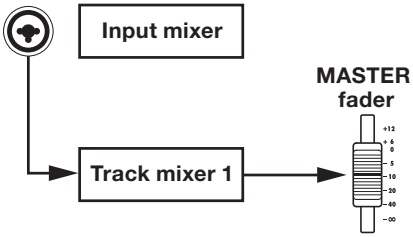


Input signals and mixers

If recording destination track is set

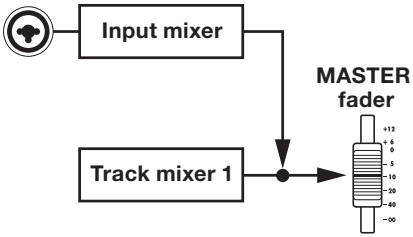
When the recording destination track has been set, the input signal does not pass through the input mixer. Instead, after passing through the REC LEVEL, the signal passes through the track mixer and is output.

Example: track 1 selected



If recording destination track is not set

When the recording destination track has not been set, the input signal passes through the input mixer and is output.



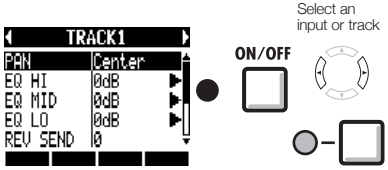
Setting track level, EQ and pan

Use the input and track mixers to set track parameters that, for example, adjust pan and effect send levels for each track. Here, we explain the adjustment of track parameters.

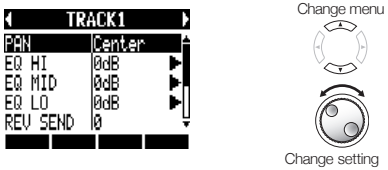
1 PAN/EQ

Press

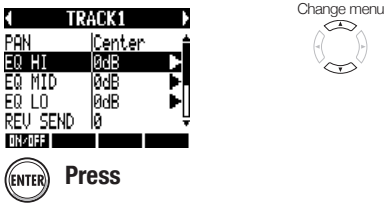
2 **Select an input or track.**



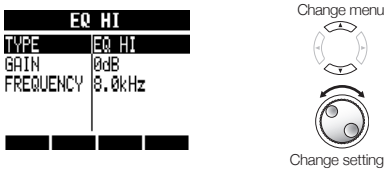
3 **Select a menu item and its setting.**



4 **Select** EQ HI, EQ MID **or** EQ LO.



5 **Select each item and change settings.**



NOTE

- Except for phase settings (INVERT), both left and right channels of stereo tracks share the same parameter values.
- Settings are stored separately for each project.
- The only setting for the MASTER track is volume (FADER level).
- Rhythm pattern tracks do not have EQ HI, EQ MID, EQ LO, ST LINK or INVERT settings.

The parameters that can be set for each type of track are as follows.

Mono tracks: 1–8
Stereo tracks: 1/2–7/8

Display	Parameter	Setting range (default value)	Explanation	Mono tracks	Stereo tracks	Master track
PAN	PAN	L100~R100 (Center)	Adjusts a track's PAN. For stereo tracks adjusts the volume balance between the left and right channels.	○	○	
EQ HI	High-frequency range boost/cut					
EQ HI	TYPE	EQ HI, HI CUT (EQ HI)	Set whether to boost/cut the high-frequency range (EQ HI) or clearly cut unnecessary high frequencies (HI CUT). This parameter can only be accessed when EQ HI is on.	○	○	
	GAIN	–12dB~12dB (0dB)	Adjust amount of boost/cut of high frequencies by -12 ~ +12 dB. This parameter is shown only when the TYPE is set to EQ HI. When set to HI CUT, it is not shown.	○	○	
	FREQUENCY	500Hz~18kHz (8.0kHz)	Adjust the EQ boost/cut frequency of high frequencies. This parameter can only be accessed when EQ HI is on.	○	○	
EQ MID	Middle-frequency range boost/cut					
EQ MID	GAIN	–12dB~+12dB (0dB)	Adjust amount of boost/cut of middle frequencies by -12 ~ +12 dB. This parameter can only be accessed when EQ MID is on.	○	○	
	FREQUENCY	40Hz~18kHz (1.0kHz)	Adjust EQ boost/cut frequency of middle frequencies. This parameter can only be accessed when EQ MID is on.	○	○	
	Q	0.1~2.0 (0.5)	Adjust the width of the middle frequency band affected. This parameter can only be accessed when EQ MID is on.	○	○	
EQ LOW	Low-frequency range boost/cut					
EQ LO	TYPE	EQ LO, LO CUT (EQ LO)	Set whether to boost/cut the low-frequency range (EQ LO) or clearly cut unnecessary low frequencies (LO CUT). This parameter can only be accessed when EQ LO is on.	○	○	
	GAIN	–12dB~+12dB (0dB)	Adjust amount of boost/cut of low frequencies by -12 ~+12 dB. This parameter is shown only when the TYPE is set to EQ LO. When set to LO CUT, it is not shown.	○	○	
	FREQUENCY	40Hz~1.6kHz (125Hz)	Adjust EQ boost/cut frequency of low frequencies. This parameter can only be accessed when EQ LO is on.	○	○	
Effect send levels						
REV SEND	REVERB SEND LEVEL	0~100 (0)	Adjust the signal level sent from the track to the reverb effect.	○	○	
CHO SEND	CHORUS/ DELAY SEND LEVEL	0~100 (0)	Adjust the signal level sent from the track to the chorus/delay effect.	○	○	
FADER	FADER	0~127 (100)	Adjust the current volume.	○	○	○
ST LINK	STEREO LINK	On/Off (Off)	Switch on/off to set the stereo link function that connects two mono tracks together.	○	○	
INVERT	INVERT	On/Off (Off)	Set whether the phase of a track is inverted or not. Set it to Off to use normal phase or ON to invert the phase.	○	○	

NOTE

- Use the ON/OFF soft key to turn EQ HI, EQ MID, EQ LO, REV SEND, CHO SEND and INVERT parameters ON/OFF.
- When a stereo link is ON, the INVERT parameter is shown as INVERT L for the odd track, and as INVERT R for the even track.

Using send-return effects

Send-return effects, which are routed internally by the mixers, can be applied to signals input to the input and track mixers. You can adjust the send-return effect levels for each input and track using their send levels, which set the amount of signal sent to the effect.
Here we explain how to select the send-return effect patch and adjust the amount applied to each track.

Select an effect and patch

1 **EFFECT**

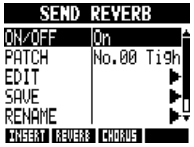
Press

2 **Press** ☐ **beneath** REVERB.

OR

Press ☐ **beneath** CHORUS.

3 **Select** ON/OFF **and set it to** ON.



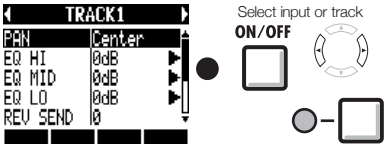
4 **Select** PATCH **and choose the patch.**

Adjust the send-return effect levels for each track

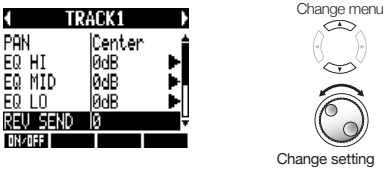
1 **PAN/EQ**

Press

2 **Select an input or track.**



3 **Select** REV SEND **or** CHO SEND **and adjust the setting.**



Using insert effects on tracks

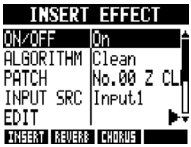
You can use an insert effect on already recorded tracks.

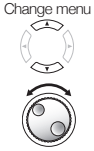
1 EFFECT Press

Accessing the effect settings

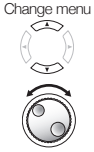
Press beneath INSERT to access the insert effect

2 Select ON/OFF and set it to On.



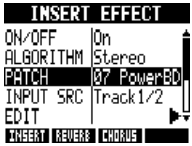


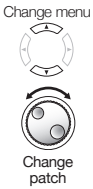
3 Select INPUT SRC and set the track.



Display	Signal source
Input1, Input2	One input
Input1/2	Both inputs
Track1–Track8	Output of one mono track
Track1/2–Track7/8	Output of one stereo track or two mono tracks
Master	Signal before the MASTER fader

4 Select PATCH and set it.





You can select the patch while playing back to hear the effect.

5 Press

Using a mastering effect

Use a mastering effect as an insert effect to process the final stereo signal when mixing down to the master track.
Select a MASTERING algorithm to apply the effect to the signal before the MASTER fader.

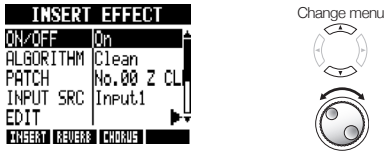
Insert an insert effect before the MASTER fader

1 EFFECT **Press**

Accessing the effect settings

Press beneath INSERT to access the insert effect

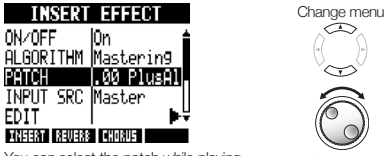
2 **Select ON/OFF and set it to ON.**



3 **Select ALGORITHM and set it to Mastering.**

4 **Select INPUT SRC and set it to Master.**

5 **Select PATCH and set it.**



You can select the patch while playing back to hear the effect.

6 EXIT **Press**

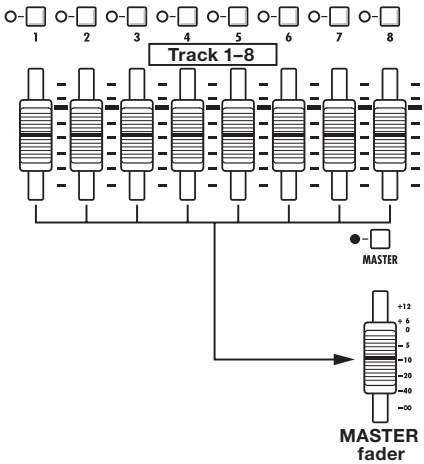
NOTE

- When the insert effect is applied before the MASTER fader in advance, the insert effect cannot also be applied to other tracks, either during recording or playback.
- At step 5, if you hear distortion when the mastering effect is applied to the signal, check the sound of the playback tracks and lower and readjust their faders. (If a track sound is distorted, adjust that track.)
- You can select Stereo, Dual, Mic or Mastering algorithms. If you set another algorithm, the insert position changes to Input 1.

HINT

- Use a MASTERING algorithm effect to process the final stereo mix signal.

Master track recording signal flow



Mixing down to the master track

Record the "final" stereo mix on the MASTER track, which is specifically for mixing down.
Signals are sent to the master track after passing through the MASTER fader.

Recording to the MASTER track

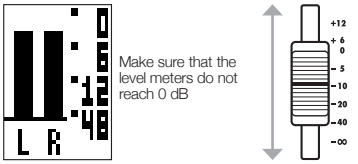
Prepare by adjusting the signal levels

1 **Press and hold STOP and press REW to return to the beginning.**

Press PLAY to start playback.

Adjust the balance of the tracks during playback.

2 **Adjust the level of the signal that passes through the master fader.**



Make sure that the level meters do not reach 0 dB

3 **Press to stop playback.** (STOP)

Record to the master track

4 **Press the MASTER status key 1-2 times until the indicator lights red.**

Lit red: ready to record

5 **Press and hold STOP and press REW to return to the beginning.**

6 **Press in order to start recording.** (REC + PLAY)

7 **Press to stop playback.** (STOP)

NOTE

- The pan, balance, insert and send-return effects of each track affect the signals sent to the MASTER track.

Play the master track

1 **Press the MASTER status key 1-2 times until the indicator lights green.**

Lit green: ready to PLAY

Doing this mutes all other tracks and disables all effects.

2 **Press and hold STOP and press REW to return to the beginning.**

Press to start playback. (PLAY)

3 **Press to stop playback.** (STOP)

Disable MASTER track playback

4 **Press the MASTER status key 1-2 times until the indicator is unlit.**

Unlit: disabled

Other tracks are unmuted and their status lights become as they were before.

HINTS

- Each project can only have one active MASTER track at a time.
- You can assign an already recorded file to the MASTER track.
- Even if you mix down from the middle of a song, a new file will always be recorded.
- The signals that have passed through the MASTER fader are the same as those sent from the OUTPUT jacks.
- This operation can be undone by pressing the UNDO soft key.
- The final stereo mix recorded to the master track is saved as a WAV file. This file can be saved on a computer and, using disc writing software, for example, be written to a CD. (See "Exchanging data with a computer (card reader)" on P.103.)

☞ Reference: Sequential playback of projects (sequence play) P.98

Overview of rhythm functions

With the ***R8***, you can perform rhythm parts using the built-in drum sounds.
Rhythm patterns can be assigned to tracks, and you can repeat simple patterns in place of a metronome, or perform rhythm parts for an entire song using the track sequencer function (see P.72), for example.

Drum kits

The ***R8*** has 10 types of drum kits – sets of 16 types of percussion instruments, including kicks, snares and hi-hats.
Use the pads to play each different sound and create rhythm parts from them.

R8 drum kits
BASIC
STUDIO
LIVE
ROCK
POP
FUNK
JAZZ
ACOUSTIC
TECHNO
URBAN

Rhythm patterns

In one project, you can use 511 types of rhythm patterns. (Each pattern contains a drum performance of 1–99 bars in length.) You can edit parts of existing patterns and even create new rhythm patterns.

Rhythm pattern tracks

To use a rhythm pattern in a song, assign the rhythm pattern to a track.
Tracks that have rhythm patterns assigned to them are called rhythm pattern tracks.
You can do the following with rhythm pattern tracks.

- Play them with the pads and set how they are played back (See "Using the pads to play rhythm patterns" on P.50.)
- Control them with the track sequencer (See "Using the track sequencer" on P.72.)
- Play back rhythm pattern tracks (See "Track playback overview" in "Using the sampler" on P.61.)

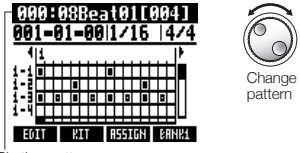
Rhythm pattern selection

Changing the playback pattern

Select a rhythm pattern and play it.

1 RHYTHM **Press**

2 **Rhythm pattern selection**



3 **Press to play.**

PLAY

Press to stop playback.

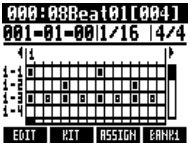
STOP

Press and hold STOP **and press** REW **to return to the beginning.**

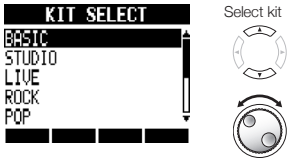
Changing the drum kit

Change the drum sounds.

1 **Press** ☐ **beneath** KIT.



2 **Select a drum kit.**



ENTER **Press**

NOTE

- The drum kit setting is saved with each project.

Using the pads to play rhythm patterns

You can play the velocity-sensitive pads beneath each of the track faders, adding accents in real time.

1 RHYTHM **Press**

2 **Play the pads.**

KICK SNARE CLOSED HAT OPEN HAT CRASH RIDE TOM1 TOM2

Switching banks

You can change the sounds of the pads.

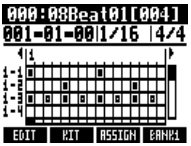
Press beneath BANK1.

Select BANK1 for drum kit sounds and BANK2 for percussion sounds.

Repeating sounds (drum rolls)

You can set a pad sound to play repeatedly at a set interval.
This is convenient when entering hi-hat 16th notes, for example.

1 **Press beneath EDIT.**



2 **Select PAD ROLL and set the repeat rate.**

Change menu

Change setting

PAD ROLL: repeat interval	
Settings	
2/4–16/4	1/4 notes x 2~16
3/8, 1/3, 1/4, 3/16, 1/6, 1/8, 1/12, 1/16, 1/24, 1/32	Dotted 1/4 notes, 1/2 note triplets, 1/4 notes, dotted 8th notes, 1/4 note triplets, 8th notes, 8th note triplets, 16th notes, 16th note triplets, 32nd notes

3 REPEAT/STOP **Press and hold REPEAT/STOP, and press the pad to play the roll.**

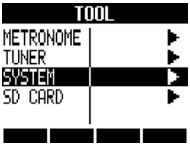
If you release **REPEAT/STOP** before the pad, that sound continues rolling after the pad is released. Press the pad again to stop it.

Adjusting the pad sensitivity

Set the pad sensitivity. You can set pads to respond to playing strength or to trigger sounds at a consistent volume regardless of how hard they are played.

1 TOOL **Press**

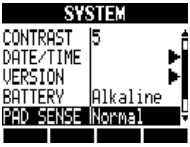
2 **Select SYSTEM.**



Change menu

ENTER **Press**

3 **Select PAD SENSE and set it.**



Change menu

Change setting

PAD SENSE: pad sensitivity	
Setting	
Soft	Regardless of playing strength, sounds are triggered with a soft volume.
Medium	Regardless of playing strength, sounds are triggered with a medium volume.
Loud	Regardless of playing strength, sounds are triggered with a loud volume.
Lite	Highest sensitivity—even light playing produces loud volume.
Normal	Medium sensitivity.
Hard	Low sensitivity—must play the pads hard to trigger with loud volume.
EX Hard	Lowest sensitivity—must play the pads very hard to trigger with loud volume.

Assigning rhythm patterns to tracks

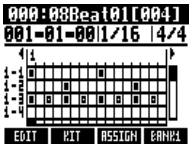
To use a rhythm pattern in a song, you must assign it to a track. A track that a rhythm pattern is assigned to is called a rhythm pattern track.
Rhythm pattern tracks can be played using the pads and controlled with the track sequencer.

Assigning from the RHYTHM menu

1 RHYTHM

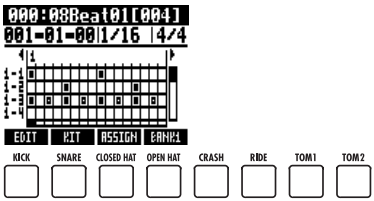
Press

2 Select a rhythm pattern



Change pattern

3 While pressing beneath ASSIGN, press the pad of the track where you want to assign it.



NOTE

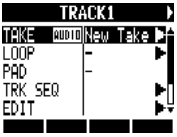
- If rhythm patterns are assigned to multiple tracks and played back simultaneously, or patterns with numerous note-on events are played, they might not all play as expected due to the maximum polyphony limitation of the unit.
- When a rhythm pattern is assigned to a track, it cannot be set to loop.
- When you press the ASSIGN soft key, the pads of tracks currently set to New Take blink.
- When you play a rhythm pattern track, the status key indicator changes from green to orange.

Assigning from the TRACK menu

1 TRACK

Press

2 Select the destination track.



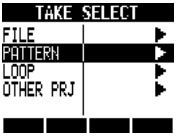
Select track

3 Select TAKE.

Change menu

ENTER Press

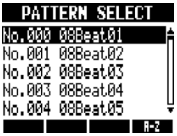
4 Select PATTERN.



Change menu

ENTER Press

5 Select a rhythm pattern



Select pattern

ENTER Press

HINT

- You can play the selected rhythm pattern.

PLAY Play the pattern

STOP Stop pattern playback

Creating a rhythm pattern

You can create your own original rhythm patterns. After preparing, you can create a rhythm pattern using real-time or step input.

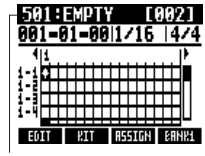
Preparing to create a rhythm pattern

Select an empty rhythm pattern and set the number of bars, time signature and quantization. You can also check the memory remaining for rhythm patterns.

1 RHYTHM

Press

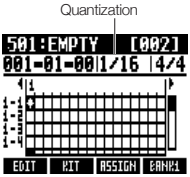
2 Select an empty rhythm pattern (name is EMPTY).



Change pattern

Rhythm pattern name

3 Move to the quantization area and set the value.



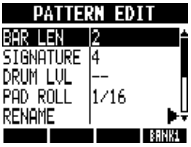
Move cursor

Change setting

Quantization	
Setting	
1/4	Quarter note
1/8	8th note
1/8T	8th note triplet
1/16	16th note
1/16T	16th note triplet
1/32	32nd note
Hi	Tick

4 Press beneath EDIT.

5 Set number of bars and time signature.

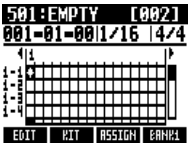


Change menu

Change setting

BAR LEN: number of bars	
Setting range	
1–99	Number of bars
SIGNATURE: time signature	
Setting	
1–8	Time signature (number of beats)
MEMORY	
Shows current amount of memory used	

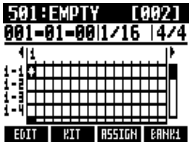
6 EXIT Press



Inputting a pattern in real-time

After preparing, play the pads along with the rhythm (metronome) to create a rhythm pattern with real-time input.

1 **Start input. Press** ▷ (PLAY) **while pressing and holding** ○ (REC).



2 **Play the pads in time with the rhythm to record the pattern.**

3 **To delete sounds:**

Press and hold ▭ **under DELETE and press a pad. While that pad is being pressed, data that has already been input for that pad will be erased.**

Press ▭ **beneath ALL DEL to erase data that has already been input for all pads.**

4 **End input.**

Press □ (STOP)

NOTE

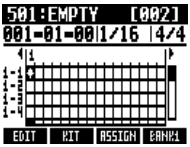
- If your timing playing the pads is slightly off, it will be corrected to the rhythm in accordance with the quantize setting.
- Depending on the pad sensitivity setting, the force used to play the pads is also recorded.
- You can also set a metronome pre-count (see P.20).

Step input of a rhythm pattern

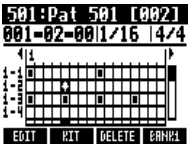
After preparing, you can input notes one at a time (step input) to create a rhythm pattern.

1 Start input.

Press REC



2 Move the cursor to the position where you want to input or delete notes.



Move cursor

Go back one beat REW

Advance one beat FF

The horizontal axis shows the bars and the vertical axis shows the pads by number. One step (one box) is the length of the quantize setting.

3 Play a pad to input a note at the current position. Its volume will correspond to the strength you play it (and the sensitivity setting).

Press ENTER

Press ENTER to add a note with a fixed volume level at that position.

4 To delete an input a note or change its volume:

Press beneath DELETE to delete the note at that position.

Turn to change the volume of the note at that position.

Loud (high velocity)

Quiet (low velocity)

Press and hold beneath DELETE and press the lit pad to erase the note at that position.

5 End input.

Press STOP

NOTE

- Notes that are at locations that cannot be moved to with the current quantize setting cannot be deleted. A note at such a position appears as an "X".
- In Step 4, you can also use the dial to input and delete notes.

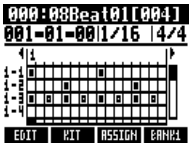
Copying rhythm patterns

You can copy a rhythm pattern to create a new one based on it, for example.

1 **RHYTHM** **Press**

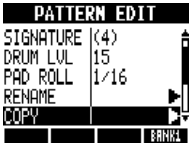
2 **Select the rhythm pattern that you want to copy.**

Press **beneath** **EDIT**.



Change pattern

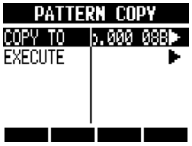
3 **Select** COPY.



Change menu

Press

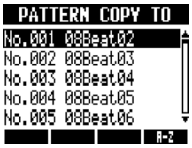
4 **Select** COPY TO.



Change menu

Press

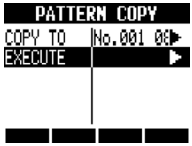
5 **Select the copy destination.**



Select pattern

Press

6 **Select** EXECUTE.



Change menu

Press

HINT

- In step 5, you can change the order of the pattern list.
- Press the A-Z soft key to list the patterns in alphabetical order.
- Press the No. soft key to list the patterns in numerical order.

Deleting rhythm patterns

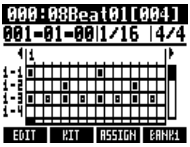
Rhythm patterns can be deleted.

1 **RHYTHM**

Press

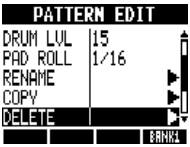
2 **Select the rhythm pattern that you want to delete.**

Press beneath **EDIT**.



Change pattern

3 **Select** DELETE.



Change menu

Press

4 **Select** YES.

Move cursor

Press

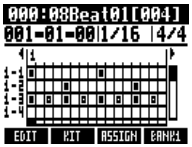
Renaming rhythm patterns

You can change the names of rhythm patterns.

1 **RHYTHM** **Press**

2 **Select the rhythm pattern that you want to rename.**

Press **beneath** **EDIT**.



Change pattern

3 **Select** RENAME.

Change menu

Press

4 **Change the name.**

Move cursor

Change character

DELETE

Delete character

INSERT

Insert character

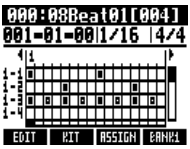
Press

Importing rhythm patterns from other projects

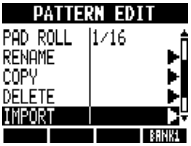
You can import rhythm patterns from other projects.
You can import all the rhythm patterns (All) at once or one at a time (Each).

1 **RHYTHM** **Press**

2 **Press** **beneath** **EDIT**.



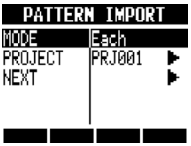
3 **Select** IMPORT.



Change menu

Press

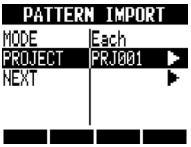
4 **Select** MODE **and set it to** All **or** Each.



Change menu

Change setting

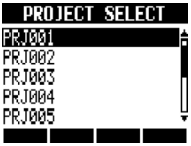
5 **Select** PROJECT.



Change menu

Press

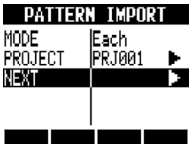
6 **Select the source project.**



Select project

Press

7 **Select** NEXT.



Change menu

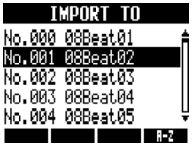
Press

8 **Select the rhythm pattern to import (only when set to** Each**).**

Select pattern

Press

9 **Select the destination rhythm pattern to import (only when set to** Each**).**



Select pattern

Press

10 **Select** YES.

Move cursor

Press

NOTE

- Destination rhythm patterns will be overwritten. When set to All, all the original rhythm patterns in the project will be deleted. When set to Each, the rhythm pattern selected as the destination will be deleted.
- In step 8 or 9, you can change the order of the pattern list.
- Press the A-Z soft key to list the patterns in alphabetical order.
- Press the No. soft key to list the patterns in numerical order.

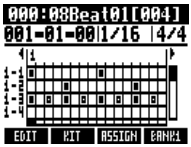
Setting volume and stereo placement

You can change the volume of a rhythm pattern and the stereo placement of the drum kit.

1 **RHYTHM** **Press**

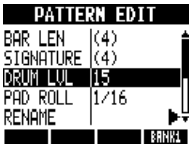
2 **Select the rhythm pattern for which you want to make settings.**

Press **beneath** **EDIT**.



Change pattern

3 **Select a menu item and change the setting.**



Change menu

Change setting

DRUM LVL: drum volume	
Setting	
1–15	Drum volume
POSITION: drum placement	
Setting	
Listener	Drums are placed from left to right as heard by the audience
Player	Drums are placed from left to right as heard by the drummer

NOTE

- POSITION settings are saved for each project.

Using the sampler to make songs

You can use the ***R8*** sampler functions to easily create backing tracks, rhythm parts and other foundation tracks that have high sound quality. These features can be used to make a wide variety of music, from demo songs to produced recordings.

1 Make a loop for the basic rhythm of the entire song.

Assign the included loops to tracks (pads) and set them to loop.
For example, you can develop a vision for an entire song by selecting drum loops and other materials that inspire you.

Reference:
Assigning included drum loops to tracks P.63
Setting loops P.64

2 As you listen to the rhythm loop that you prepared, record guitar, bass, keyboard and other instruments to create more loops.

Keep recording until you are satisfied with the performance of the riff, backing part or other musical phrase. You can loop only the parts of the recordings that you like.

Reference: Setting loops P.64

3 Repeat step 2 to record other phrases to use as loops.

Prepare all the phrases that are necessary to make your song.

4 When the loops are ready, play them with the pads while considering the structure of the entire song.

Play the pads with the rhythm while considering the flow of the entire song and how the loops combine.

Reference: Playing the pads P.66

5 After determining the structure of the song, create a sequence (loop performance data) for the entire song.

A sequence can be input by playing the pads along with a rhythm (metronome) in real time or input step by step. You can create basic tracks, including backing parts and rhythm parts, for an entire song this way.

Reference: Creating a sequence P.73

6 Record vocals, guitar solos and other parts as you listen to the sequence.

Record the main vocals and instruments in time with the basic tracks.

Using the sampler

The **R8** has a sampler function that allows audio files to be played with the pads. You can use the included loops or other commercially-available loops to easily create high-quality rhythm tracks.

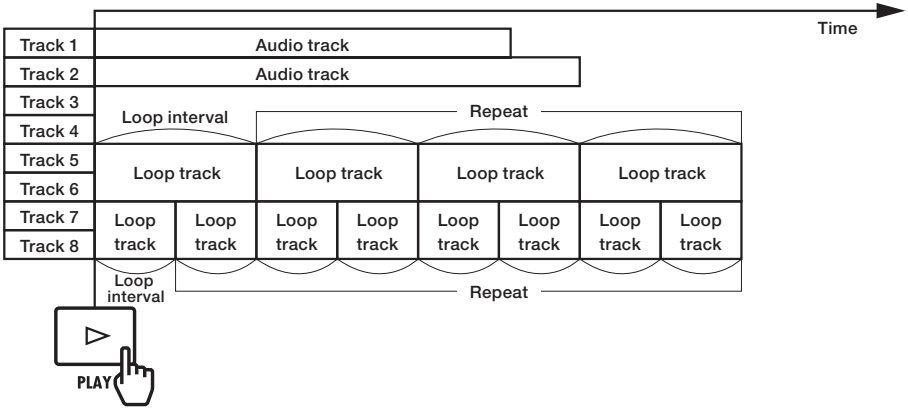
Loop tracks

To use the sampler function, you must first set audio tracks to loop. When set to loop, we call these tracks “loop tracks.” You can do the following with loop tracks.

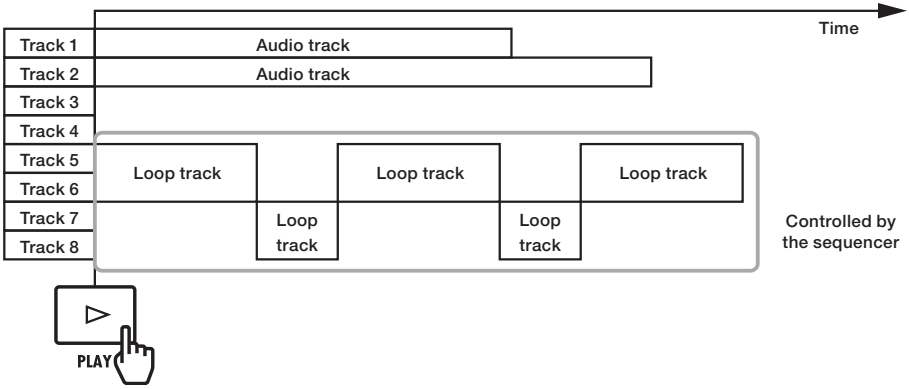
- Play them with pads, and set how the loops playback when played (see “Playing the pads” on P.66)
- Conduct loop playback of a designated interval (see “Setting loops” on P.64)
- Control them with the track sequencer (see “Using the track sequencer” on P.72)

Track playback overview

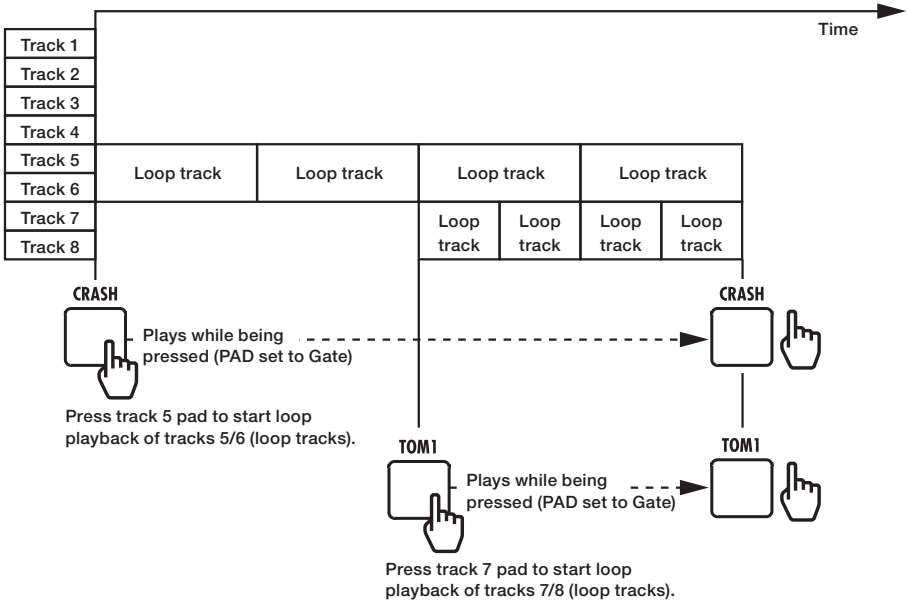
When you play audio tracks with the PLAY key, the files will usually be played until they end, but with loop tracks and rhythm pattern tracks, the designated loop interval will play back repeatedly.



When the track sequencer is on, loop tracks and rhythm pattern tracks play back according to the sequence.



When using the pads for playback, press the pad for a loop track or rhythm pattern track to start playback of that track.
In the illustration below, after a pad for tracks 5/6 (loop track) is pushed to start playback, a pad for tracks 7/8 (loop track) is pushed to start playback of that loop.
In addition, how each loop track pad is played can be set individually (PAD parameter). In this example, they are set to “Gate”, which causes playback to stop when the pad is released (see “Playing the pads” on P.66).



Assigning included drum loops to tracks

To use the sampler function, first assign audio files and rhythm patterns to tracks.
In this example, we explain how to assign loops that are on the included SD card.

1 TRACK **Press**

2 **Select the track to assign.**

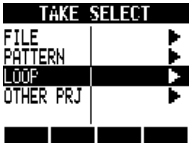
Select track

3 **Select** TAKE.

Change menu

ENTER **Press**

4 **Select** LOOP.

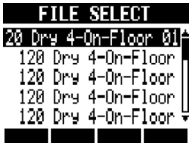


Change menu

FILE	Audio files in the current project
PATTERN	Rhythm patterns
LOOP	Loops on the SD card
OTHER PRJ	Audio files in other projects

ENTER **Press**

5 **Select a loop.**



Select file

ENTER **Press**

NOTE

- In a new project, the BPM (tempo) of the first audio file assigned to a track will set the BPM of the project.
- From the LOOP menu, you can select loop files in the LOOP folder on the SD card.
- The loops on the SD card are 44.1 kHz WAV files. For this reason, if the project sampling rate is set to 48 kHz, “Invalid File” appears and they cannot be assigned to tracks.

HINT

- You can also play audio files and rhythm patterns as you select them.

Start playback

Stop playback

Setting loops

To use the sampler function, you must set a track to loop, making it a loop track. Here we explain how to make this setting.

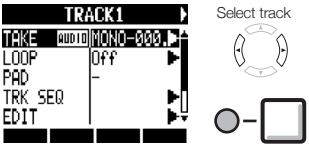
Setting a track to loop

Tracks can be individually set to loop.

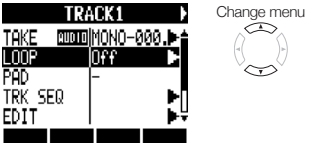
1 **TRACK**

Press

2 **Select the track to loop.**

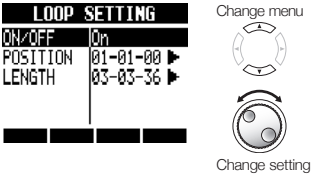


3 **Select** LOOP.



Press

4 **Select** ON/OFF **and set it to** On **to enable loop playback.**



NOTE

- The status key indicator of a track set to loop lights orange instead of green when enabled for playback. A track set to loop cannot be used to record (indicator will not light red). In addition, the following functions can be used when a track is set to loop.
  - The pad can be used to trigger the loop.
  - Pressing **PLAY** starts loop playback.
  - Sequence data can be recorded.
- When a rhythm pattern is assigned to a track, it cannot be set to loop.

Setting the loop interval

The loop interval (starting point and length) can be set for loop tracks.

1 **TRACK**

Press

2 **Select the track to be looped.**

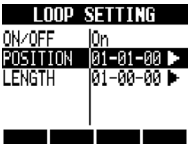
Select track

3 **Select** LOOP.

Change menu

ENTER **Press**

4 **Select** POSITION.



Change menu

ENTER **Press**

5 **Set the loop starting point.**

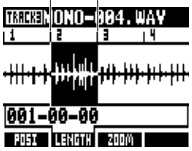
Starting point

Locate

Change setting

6 **Press ☐ beneath LENGTH to set the length of the loop.**

Length



Locate

Change setting

HINT

- You can use the **POSI** and **LENGTH** soft keys to switch between setting the loop starting point and length.
- You can also play the audio file that you are setting.

PLAY **Start playback**

STOP **Stop playback**

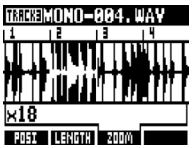
FF **Fast forward**

REW **Rewind**

Zooming in on the waveform

When setting the loop starting point and length, you can zoom in on the waveform that is displayed. Zooming up to 32x is possible.

Press ☐ beneath ZOOM to zoom.

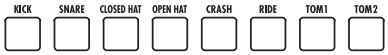


Change setting

Playing the pads

For loop tracks and rhythm pattern tracks, press the pad beneath a fader to play the audio file or rhythm pattern assigned to that track.

1 **Press a pad.**



Press a pad while holding REPEAT/STOP to enable loop playback.

Press the pad again while holding REPEAT/STOP to stop loop playback.

Setting the playback method

Set how the pads function when played.

1 **TRACK**

Press

2 **Select PAD and set the playback method.**

Change menu

Change setting

PAD: playback method	
Setting	
Repeat	Play loop repeatedly
Gate	Stop playback as soon as the pad is released
1Shot	Play the file once completely even if the pad is released

NOTE

- When you press a pad, the sound will be delayed until it is in time with the set quantization (bar, note).
- The pad blinks during playback
- When you stop playback, the operation is delayed until it is in time with the set quantization (bar, note).

Set global quantization to control sound timing

The unit can be set to correct timing errors when playing the pads or inputting sequence data in real time so that sounds are aligned with bars and beats.

1 **TRACK**

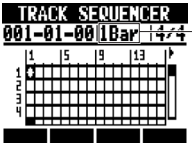
Press

2 **Select TRK SEQ.**

Change menu

Press

3 **Move to the global quantization area, and change the setting.**



Move cursor

Change setting

Global quantization	
Setting	
8Bars, 4Bars, 2Bars, 1Bar (default)	8 bars, 4 bars, 2 bars, 1 bar
1/2, 1/2T, 1/4, 1/4T, 1/8, 1/8T, 1/16, 1/16T, 1/32	Half-note, half-note triplet, quarter-note, quarter-note triplet, eighth-note, eighth-note triplet, sixteenth-note, sixteenth-note triplet, thirty-second note
Hi	1 tick (1/48 of a quarter-note)

NOTE

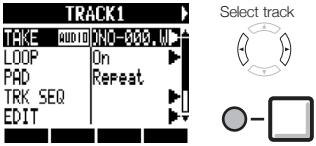
- This setting is set for the entire project.

Changing the BPM of a track

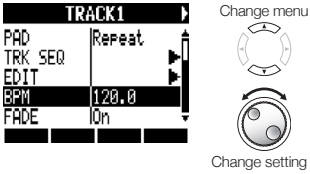
The BPM of each track is automatically calculated when an audio file is assigned to it. Depending on the file, however, the calculated result might differ from the actual BPM.
If this occurs, use the following procedures to adjust the BPM. The set BPM is used as the standard tempo when changing the tempo of the audio without changing its pitch.

1 TRACK **Press**

2 **Select the track where you want to change the setting.**



3 **Select BPM and change the setting.**



NOTE

- BPM is calculated for an audio file assuming 4/4 time.
- When a track is recorded, the current BPM value is used.

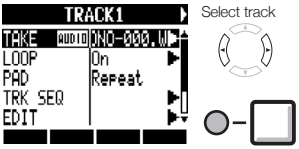
Changing audio tempo without changing pitch

TRACK

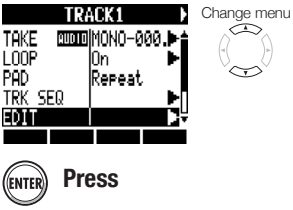
When an audio file is assigned to a track, you can change its tempo without changing its pitch (time-stretching). You can change all tracks at once or individual tracks. Be aware that this operation will overwrite the original audio file.

1 TRACK **Press**

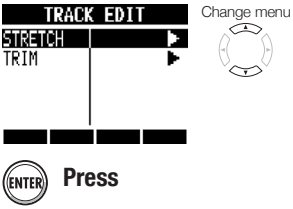
2 **Select a track you want to change (or any track to change all).**



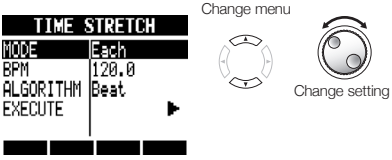
3 **Select** EDIT.



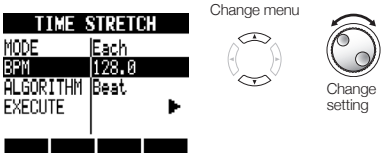
4 **Select** STRETCH.



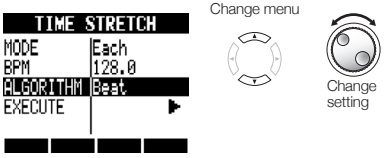
5 **Select** MODE **and set it to** Each **to change only the current track or** All **to change all the tracks.**



6 **Select** BPM **and set the new tempo after time-stretching.**

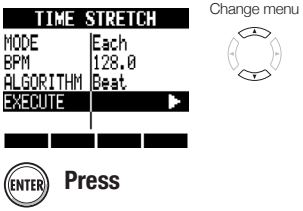


7 **Select** ALGORITHM **and set it according to the audio file.**

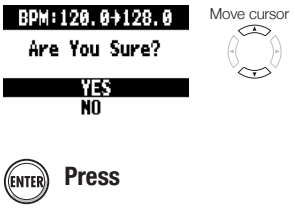


ALGORITHM	
Setting	
Beat	Stretching algorithm suitable for rhythmic sources and other sounds that have short notes
Tone	Stretching algorithm suitable for songs and sound sources with long notes

8 **Select** EXECUTE.



9 **Select** YES.



NOTE

- STRETCH operations cannot be undone (UNDO).
- STRETCH operations overwrite the original audio files. If you want to save the original files, make a copy of the project and files in advance (see P.93).
- The BPM of each track is automatically calculated when an audio file is assigned. Depending on the file material, however, the calculated result might differ from the actual BPM. Set the BPM of each track (TRACK > BPM) if this occurs (see P.67). The set BPM of a track is used as the standard tempo when changing the tempo without changing the pitch of the audio.
- The tempo of an audio file can be adjusted in a range from 50% to 150% of the original. If the stretched tempo value is outside this range, an error message appears, “TRACK X is out of the setting range” (X is the track number) and stretching is stopped.
- If a rhythm pattern has been assigned to a track, the rhythm pattern screen opens after Step 3.

HINT

- You can listen to a preview of the results of time-stretching for individual tracks.

Press to start playback

Press to stop playback

TRACK

Trimming unnecessary parts of audio files

You can designate the necessary audio data by setting the starting and ending points of a file, and delete the audio data that is outside these points. Be aware that this operation overwrites the original audio file.

1 TRACK **Press**

2 **Select the track that you want to trim.**

Select track

3 **Select** EDIT.

Change menu

ENTER **Press**

4 **Select** TRIM.

Change menu

ENTER **Press**

5 **Set the starting point.**

Locate

Change setting

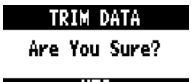
6 **Press** ▭ **beneath** END **to set the ending position.**

Locate

Change setting

7 **Press** ▭ **beneath** EXEC.

8 **Select** YES.



Move cursor

ENTER **Press**

NOTE

- The TRIM operation cannot be undone (UNDO).
- The TRIM operation overwrites the original file. If you want to save the original files, make a copy of the project and files in advance (see P.93).
- If a rhythm pattern has been assigned to a track, the rhythm pattern screen opens after Step 3.

HINT

- You can switch between setting the trim starting and ending points by using the START and END soft keys.
- Use the ZOOM soft key to view the waveform more closely.
- You can also play the audio file while setting its starting and ending points.

▷ PLAY **Start playback**

□ STOP **Stop playback**

►► FF **Fast forward**

◄◄ REW **Rewind**

□ STOP + ◄◄ REW **Return to starting point**

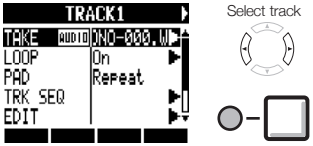
Setting fade-ins and fade-outs

When playing normal audio files, there are short fade-ins and fade-outs at their beginnings and ends. You can turn these off, however, for rhythm tracks and other sounds where the attack is important.

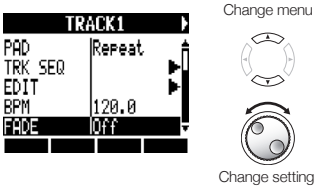
1 **TRACK**

Press

2 **Select a track to change its settings.**

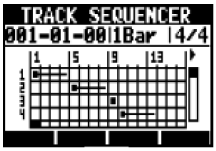


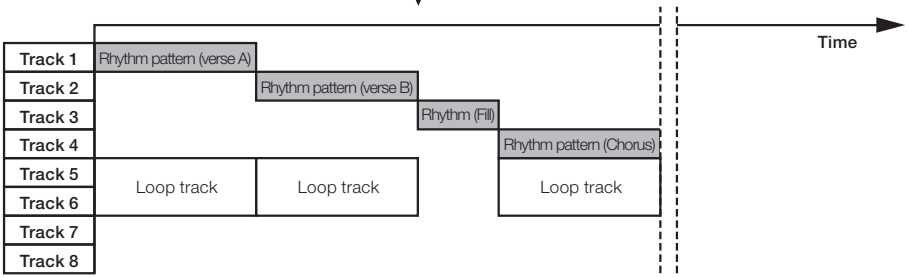
3 **Select FADE and set it to Off if you want to disable it.**



Track sequencer overview

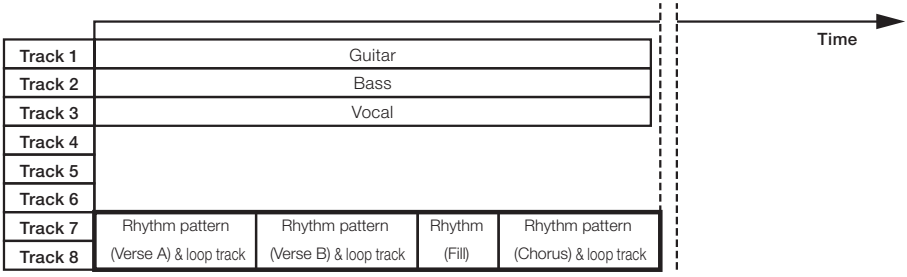
Using the track sequencer, you can arrange rhythm pattern tracks and loop tracks into performance order to play an entire song.
Each project can have only one set of track sequencer data.





While playing back the track sequencer, you can bounce or record to the master track. You can use this feature when you are running out of tracks to open up some tracks.
When creating a sequence, you can include time signature changes. When the time signature changes, this affects the bars–beats–ticks on the top screen.

In the example shown above, the track sequencer data is played back and bounced in stereo to tracks 7/8, as shown in the illustration below.
After bouncing, a stereo audio file that is a combination of tracks 1–6 is created on tracks 7/8.
Since tracks 1–6 are no longer necessary, they can be used for new parts.
In this example, tracks 1–3 are used for audio tracks to record guitar, bass and vocals. (See “Recording to a new file” on P.27.)



One stereo file

Creating a sequence

Combine rhythm pattern tracks and loop tracks to create sequence data, including backing parts and rhythms, for an entire track. You can create a sequence with real-time or step input.

Creating a sequence in real-time

You can create a sequence by playing the pads along with a rhythm (metronome) in real-time.

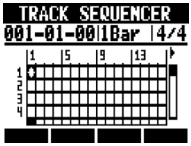
1 **TRACK** **Press**

2 **Select** TRK SEQ.

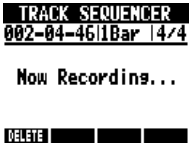
Change menu

Press (ENTER)

3 **Start real-time input by pressing and holding** (REC) **and pressing** (PLAY).



4 **Play the pads in time with the rhythm to input data.**



5 **To delete input, press and hold beneath DELETE.**

Data that has already been input for a track will be deleted while its pad is being pressed.

6 **End input.**

Press (STOP)

NOTE

- If your timing playing the pads is slightly off, it will be corrected in accordance with the quantize setting
- You can also be set a metronome pre-count (see P.20).

Creating a sequence using step input

You can create a sequence one step at a time.

1 **TRACK**

Press

2 **Select** TRK SEQ.

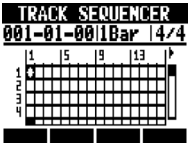
Change menu

Press

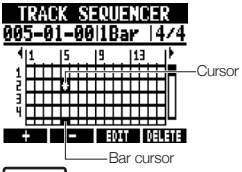
3 **Start step input.**

Press

REC



4 **Move the cursor to the position where you want to input or delete data.**



Move cursor

Go back 1 step

REW

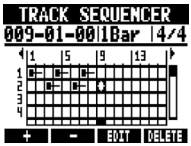
Go forward 1 step

FF

Press beneath + or − to change the length of one step to a bar, beat or 16th note.

5 **To input data, press a pad or ENTER.**

OR



Note-on

Length of loop or rhythm pattern

6 **To delete data at the cursor, press beneath DELETE.**

7 **End input.**

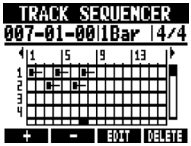
Press

STOP

Deleting data

When using step input, you can delete the data before or after the cursor at once.

1 **Move the cursor to the position of the data that you want to delete.**



Move cursor

REW **Go back 1 step**

FF **Go forward 1 step**

2 **Press** ☐ **beneath** EDIT.

3 **Select** DEL EVENT.

Change menu

ENTER **Press**

4 **Select** MODE **and set it to** Before **or** After **to delete data to the left or right of the cursor.**

Change menu

Change setting

5 **Select** EXECUTE.

Change menu

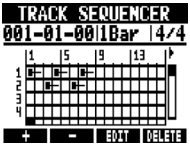
ENTER **Press**

Inserting and deleting beats

When using step input for a sequence, you can insert and delete beats.
You can even insert and delete a number of beats that differ from the project time signature, changing the time signature for only that part.

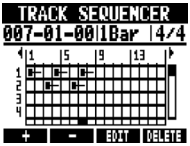
1 **Start step input.**

REC **Press**



2 **Press ▢ beneath + or - to change the length of one step to a bar, beat or 16th note.**

3 **Move the cursor to the position where you want to insert or delete beats.**



Move cursor

◄◄ REW **Go back 1 step**

►► FF **Go forward 1 step**

4 **Press ▢ beneath EDIT.**

5 **Select INS BEAT to insert beats or DEL BEAT to delete beats.**

Change menu

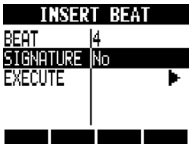
ENTER **Press**

6 **Select BEAT and set the number of beats that you want to insert or delete.**

Change menu

Change setting

7 **Select SIGNATURE and set it to No to not change the time signature or Add to change the time signature.**



Change menu

Change setting

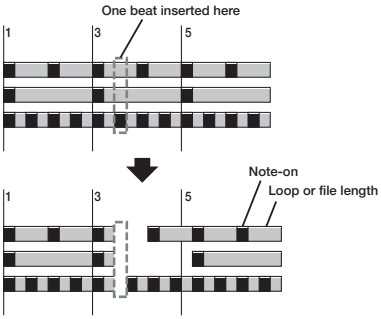
8 **Select EXECUTE.**

Change menu

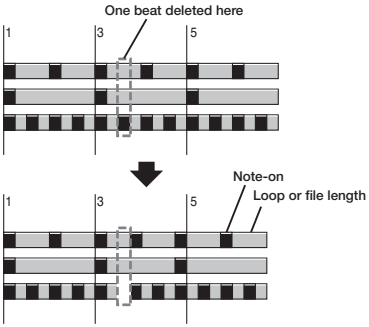
ENTER **Press**

NOTE

- When you insert beats, the sounds of loops and files playing back will be cut at that point.

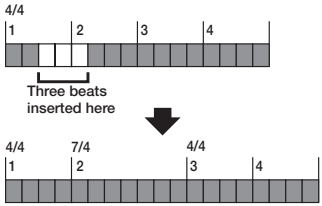
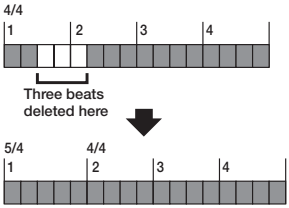


- When you delete beats, the sounds of loops and files playing back at that time will become shorter by the same amount.



- If you insert or delete beats that differ from the set time signature, the time signature for that part might change depending on the SIGNATURE setting as follows.

SIGNATURE: time signature settings

Setting	
No	The time signature does not change. The beats are shifted by the amount inserted or deleted.
Add	If you insert beats, the time signature of the bar that contains the last inserted beat will change. For example, if 3 beats are inserted into a song with a 4/4 time signature, the bar where the 3rd beat is added will become 7/4.  If you delete beats, the time signature of the bar that they are deleted from will change. For example, if 3 beats are deleted from a song with a 4/4 time signature, that bar will become 5/4.  The time signature of only 1 bar changes, time signatures of other bars do not change.

Playing back a sequence

TRACK

Use the following procedures to play back the sequence that you made.

Playback from track sequencer screen

1 TRACK

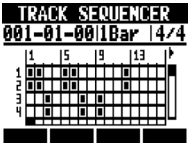
Press

2 Select TRK SEQ.

Change menu

ENTER Press

3 PLAY Press

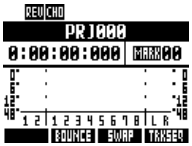


STOP Press to stop playback

Press and hold STOP and press REW to return to the beginning.

Playback from the Top Screen

1 Press beneath TRKSEQ to turn the track sequencer ON/OFF.



2 PLAY Press

Track sequencer ON

STOP Press to stop playback

FF Press to fast forward

REW Press to rewind

Press and hold STOP and press REW to return to the beginning.

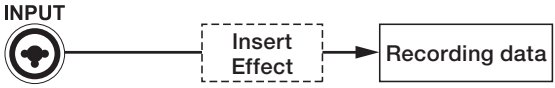
Overview of effects

The **R8** has two types of built-in effects: insert effects and send-return effects. These can be used at the same time.
Effects can only be used when the project sampling rate is 44.1 kHz.

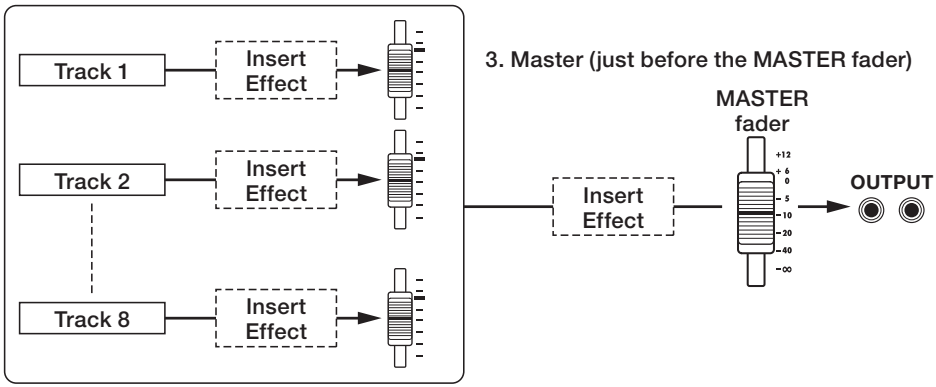
Insert effects

The **R8** has a variety of insert effects that are useful when recording, including for guitar, bass and mastering. Insert effects are applied to specific signal paths.
Insert effects can be placed in the following places according to the application.

1. Input (enabled inputs)



2. Track (enabled tracks)

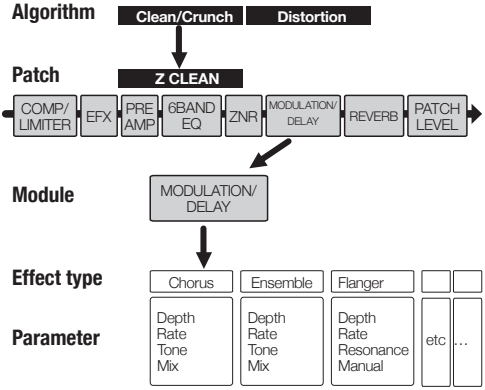


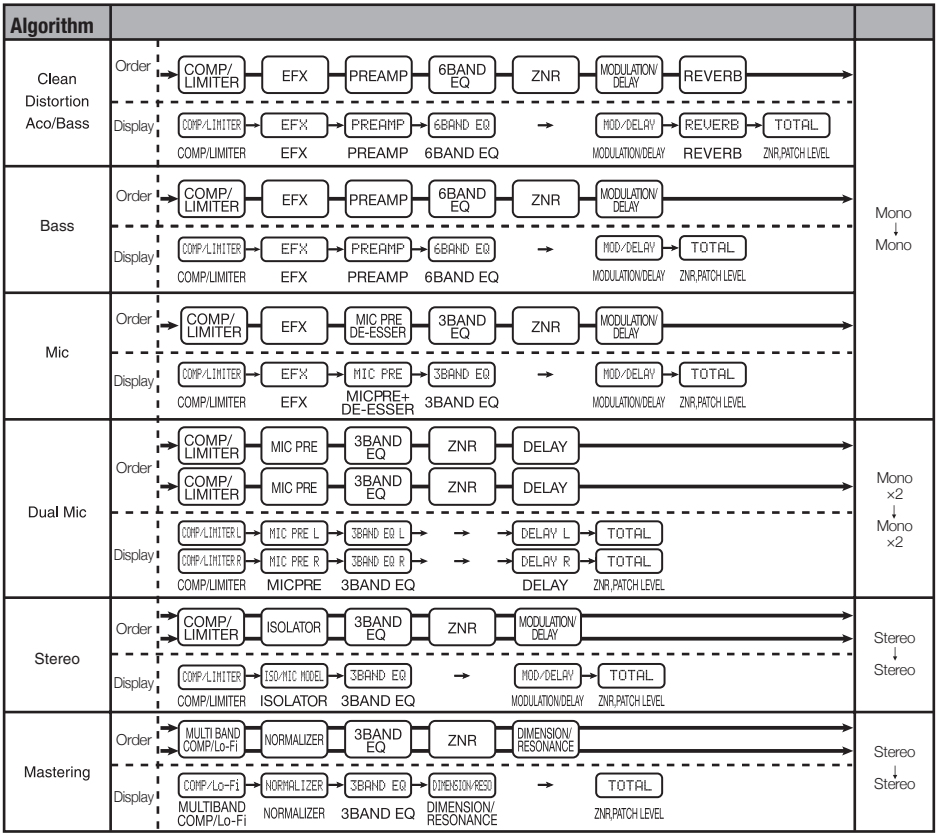
1. Input: Inserted after the input, you can record the input signal with the effect.
(See “Applying insert effects” on P.23.)
2. Track: Inserted on a track, you can hear the effect during playback of that audio track.
(See “Using the insert effects on tracks” on P.45.)
3. Master: Inserted just before the MASTER fader, you can apply the effect when mixing down (recording a final stereo mix to the master track).
(See “Using a mastering effect” on P.46.)

Algorithms and patches

Insert effects are arranged in groups called “algorithms” according to the instrument or application. An algorithm is a linear series of a variety of effect modules, such as compression, distortion and delay.
An effect module consists of two elements—the effect type and its parameters.
A “patch” is the saved combination of the effect types and parameters of each module.

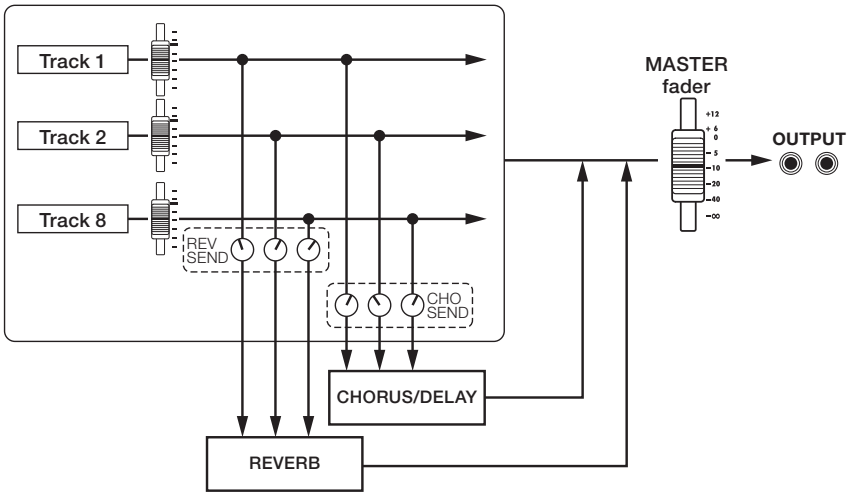
Algorithm name	Display name	Number of patches (preprogrammed)
▼Clean and crunchy sounds that are suitable for guitars		
Clean/Crunch	Clean	30 (21)
▼Overdrive and other distorted sounds suitable for guitars		
Distortion	Distortion	50 (45)
▼Instrument simulation algorithm that is suitable for guitars		
Aco/Bass SIM	Aco/Bass	20 (10)
▼Algorithm that is suitable for recording bass guitars		
Bass	Bass	30 (20)
▼Algorithm that is suitable for vocals and other mic recordings		
Mic	Mic	50 (30)
▼Algorithm for two completely independent mic channels		
Dual Mic	Dual Mic	50 (30)
▼Algorithm for synths, built-in mics and other stereo recording		
Stereo	Stereo	50 (40)
▼Algorithm for processing final stereo mix signals		
Mastering	Mastering	30 (21)





Send-return effects

Send-return effects are connected internally to the track mixer send/return bus. The depth of the send-return effects can be adjusted with the track send levels (amounts of signal sent to the effect). When you raise a track's send level from 0, its signal is sent (input) to the send-return effect. The signal passes through the effect and is returned (routed) to before the MASTER fader, and mixed with the original sound of that track.



Algorithm (Display name)	Number of patches (already programmed patches)
REVERB (SEND REVERB)	30 (22)
CHORUS/DELAY (SEND CHORUS/DELAY)	30 (18)

Selecting effect patches

Select the effect patch that you want to use. For the insert effect, choose an algorithm that is suitable for the instrument or application.

1 EFFECT Press

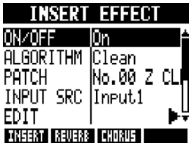
Accessing the effect settings

Press beneath INSERT to select an insert effect.

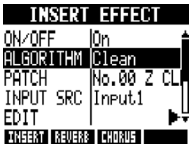
Press beneath REVERB to select a reverb send-return effect.

Press beneath CHORUS to select a chorus/delay send-return effect.

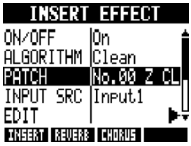
2 Select ON/OFF and set it to ON.



3 Select an algorithm (when setting an insert effect).



4 Select a patch.



Editing patches

You can change effect types and adjust effect parameters to create your own patches.

1 EFFECT Press

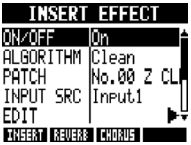
Accessing the effect settings

Press beneath INSERT to select an insert effect.

Press beneath REVERB to select a reverb send-return effect.

Press beneath CHORUS to select a chorus/delay send-return effect.

2 Select ON/OFF and set it to On.



Change menu

Change setting

3 Select an algorithm and patch.

Change menu

Change setting

4 Select EDIT.

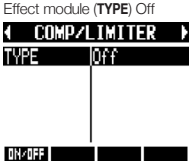
Change menu

ENTER Press

Editing effect modules

5 Turn the effect type On to edit it.

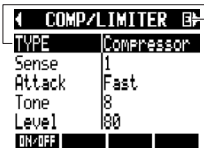
Effect module (**TYPE**) Off



Press ENTER or the ON/OFF soft key to turn the module on or off.

ENTER ON/OFF

Effect module (**TYPE**) on

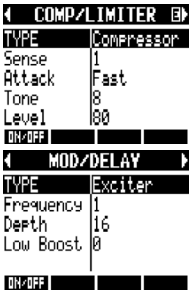


Effect type

E: Edit mark shown when a patch has been edited or changed

Selecting effect modules

6 Select the effect module.



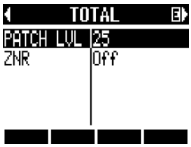
Change module

Adjust the patch level (final patch volume)

7 Select the TOTAL effect module.

Change module

8 Select PATCH LVL and set the value.



Change menu

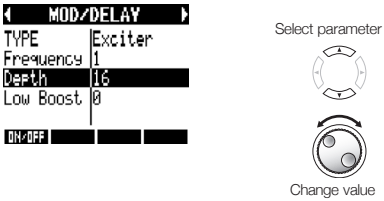
Change value

9 Return to the main effect screen.

EXIT Press

Adjusting effect parameters

1 Select a parameter and set it.



HINTS

- In “Empty” patches none of the modules have been set yet.
- Adjust the ZNR module level on the TOTAL module screen.
- With the DUAL MIC ALGORITHM, you can edit the modules in the left and right channels separately. The left channel is selected when “L” appears in the effect module name and the right channel is selected when “R” appears.

NOTE

- You cannot edit algorithms themselves, including their combinations and arrangements of effect modules.
- When you turn an effect module OFF, all its settings, including the type and parameters are disabled.
- If you switch to another patch without saving a patch that has been edited (showing the ‘E’ mark), changes will be lost. For information about how to save patches, see “Saving patches” on P.86.

Saving patches

You can save a patch at any patch number within the same algorithm. You can also copy an existing patch to a different location.

1 **EFFECT** **Press**

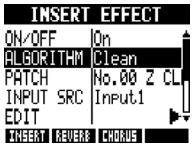
Accessing the effect settings

Press beneath **INSERT** to select an insert effect.

Press beneath **REVERB** to select a reverb send-return effect.

Press beneath **CHORUS** to select a chorus/delay send-return effect.

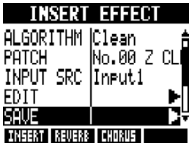
2 **Select the algorithm/patch.**



Change menu

Change setting

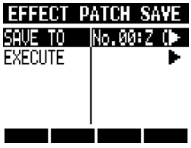
3 **Select** SAVE.



Change menu

ENTER **Press**

4 **Select** SAVE TO.



Change menu

ENTER **Press**

5 **Select where to save it.**

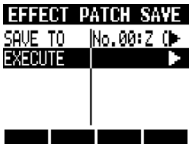
Patch number and name where it will be saved

Set save location

ENTER **Press**

See next page to import a patch

6 **Select** EXECUTE.



Change menu

ENTER **Press**

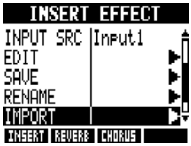
NOTE

- These procedures are the same for both insert and send-return effects.
- If you switch to another patch without saving a patch that has been edited (showing the 'E' mark), changes will be lost. Always save patches.
- The import source and the import destination are different projects when using PATCH IMPORT.

Importing patches from other projects

You can import one or all patches that have been created in another project for use in the current project.

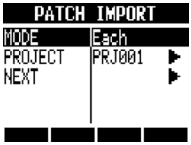
3 **Select** IMPORT.



Change menu

ENTER **Press**

4 **Select** MODE **and set it to** All **or** Each.



Change menu

Change setting

All	Import all patches from the source project
Each	Select and import one patch from the source

Import all patches

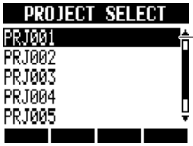
IMPORT > All

1 **Select** PROJECT.

Change menu

ENTER **Press**

2 **Select the project to import from.**



Import source project name

Select project

ENTER **Press**

3 **Select** NEXT.

Change menu

ENTER **Press**

4 **Select** YES.

Move cursor

ENTER **Press**

Import one patch

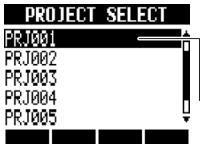
IMPORT > Each

1 **Select** PROJECT.

Change menu

ENTER **Press**

2 **Select the project to import from.**



Import source project name

Select project

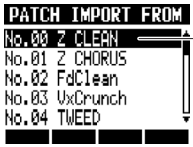
ENTER **Press**

3 **Select** NEXT.

Change menu

ENTER **Press**

4 **Select the patch to import.**

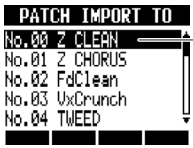


Import source patch number and name

Change patch

ENTER **Press**

5 **Select the destination patch.**



Import destination patch number and name

Change patch

ENTER **Press**

6 **Select** YES.

Move cursor

ENTER **Press**

Changing patch names

You can change the name of the patch that is currently selected.

Changing patch names

Change the name of the current patch.

1 EFFECT **Press**

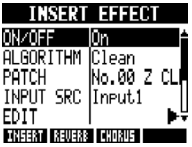
Accessing the effect settings

Press beneath **INSERT** to select an insert effect.

Press beneath **REVERB** to select a reverb send-return effect.

Press beneath **CHORUS** to select a chorus/delay send-return effect.

2 **Select** ON/OFF **and set it to** On.



Change menu

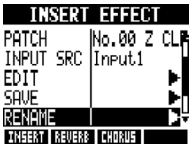
Change setting

3 **Select the algorithm and patch.**

Change menu

Change setting

4 **Select** RENAME.



Change menu

ENTER **Press**

5 **Change the name.**

Move cursor

Change character

DELETE Delete character

INSERT Insert character

ENTER **Press**

Using effects only for monitoring

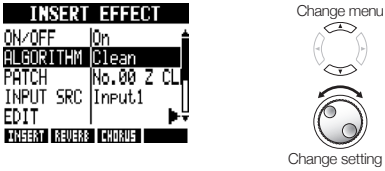
When an insert effect is applied to an input, usually the sound with the effect applied is recorded to the track. By applying an insert effect only to monitoring, input signals can be recorded without effects to tracks.
For example, you can record vocals without an effect, but use a mic insert effect on the monitoring signal to make it easier for the vocalist to sing.

1 EFFECT **Press**

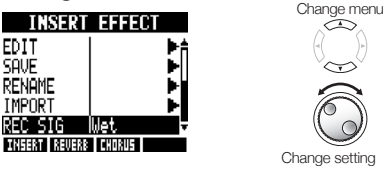
Accessing the effect settings

Press beneath INSERT to select an insert effect.

2 **Select the algorithm and patch.**



3 **Select REC SIG and make the setting.**



Wet	Input signals are recorded to tracks after being processed by the insert effect. (Default)
Dry	Input signals are recorded to tracks before being processed by the insert effect. The input signal monitored from the **OUTPUT** and **PHONES** jacks, however, is processed by the insert effect.

HINT

- The settings made here are stored for each project separately.
- If necessary, reset to Wet. before recording other parts.

Projects and audio files

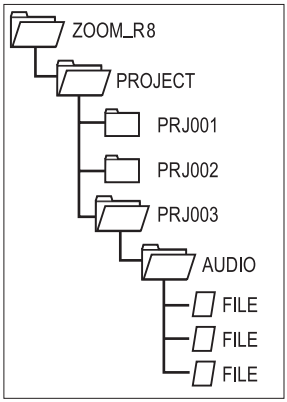
The R8 manages the data and settings that are necessary to play back songs that you have created in units called “projects.” Track audio recordings are saved as WAV files.

Data saved in a project

- Audio data for every track including the master
- Mixer settings
- Effect settings
- Mark information
- Metronome settings
- Tuner settings
- Sampler settings
- Rhythm settings
- Track sequencer settings
- Recorder settings

Projects on the SD cards

When a project is created, a folder with the same name is created inside the PROJECT folder on the SD card.
All the data for that project is saved inside that folder. The audio data for that project is saved in the AUDIO subfolder inside that project's folder.



Protecting and selecting projects

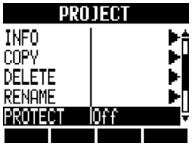
Protecting a project

PROJECT > PROTECT

You can protect the currently loaded project to prevent it from being saved or deleted so that its contents cannot be changed.

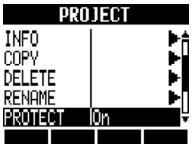
1 PROJECT **Press**

2 **Select** PROTECT.



Change menu

3 **Select** On.



Change

NOTE

- When a project is protected, you cannot record in it or edit it, and any changes will not be saved to the SD card. Set PROTECT to Off if you want to record in it or edit it again.
- Projects that are not protected will be automatically saved to the SD card when you turn the **POWER** switch **OFF** or load another project.
- We recommend setting PROTECT to On once you complete a piece of music to avoid mistakenly saving unwanted changes later.

HINT

- This icon appears when a project is protected.

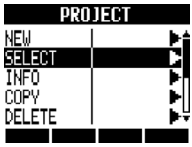
Selecting a project

PROJECT > SELECT

Load a project saved on the SD card.

1 PROJECT **Press**

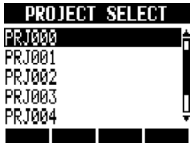
2 **Select** SELECT.



Change menu

ENTER **Press**

3 **Select the project.**



Change project

ENTER **Press**

NOTE

- You can only playback and record to the project that is currently loaded. You cannot use multiple projects at the same time.

HINT

- When you turn the ***R8*** power ON, the project loaded the last time the unit was used will be loaded automatically.

PROJECT

Viewing project and audio file information

You can display information about the currently loaded project and audio files, including their names, creation dates, sizes and recording times.

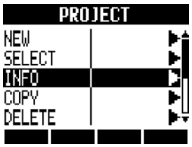
Project information

PROJECT > INFO

Follow these procedures after opening the project with the information you want to see.

1 PROJECT **Press**

2 **Select** INFO.



Change menu

ENTER **Press**

3 **Check the information.**

Scroll

PROJECT INFO: project information	
NAME	Project name
DATE	Year/month/date of creation
SIZE	Card capacity used
TIME	Recording time
RATE	Sampling rate

HINT

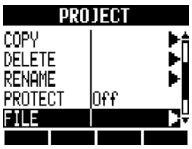
- Project and file information can only be viewed on the PROJECT INFO screen. It cannot be edited.

Audio file information

PROJECT > FILE > INFO

1 PROJECT **Press**

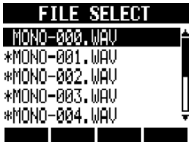
2 **Select** FILE.



Change menu

ENTER **Press**

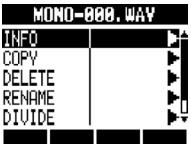
3 **Select the file.**



Change file

ENTER **Press**

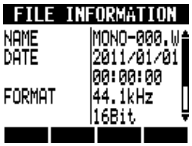
4 **Select** INFO.



Change menu

ENTER **Press**

5 **Check the information.**



Scroll

FILE INFORMATION	
NAME	File name
DATE	Year/month/date of creation
FORMAT	File format
SIZE	File size
TIME	Length of recording

Copying projects and audio files

You can copy a saved project as a new project.
An audio file can be copied within a project after changing the file name.

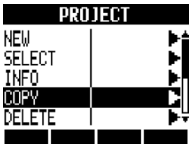
Copying a project

PROJECT > COPY

Follow these procedures after opening the project that you want to copy.

1 PROJECT **Press**

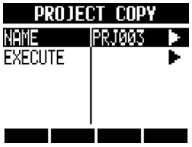
2 **Select** COPY.



Change menu

ENTER **Press**

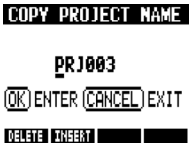
3 **Select** NAME.



Change menu

ENTER **Press**

4 **Change the project name.**



Move cursor

DELETE Delete character

INSERT Insert character

Change character

ENTER **Press**

5 **Select** EXECUTE.

ENTER **Press**

NOTE

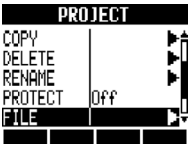
- You cannot make a copy without changing the name to something different from the original.

Copying an audio file

PROJECT > FILE > COPY

1 PROJECT **Press**

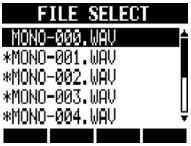
2 **Select** FILE.



Change menu

ENTER **Press**

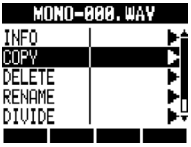
3 **Select the file to copy.**



Change file

ENTER **Press**

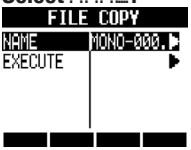
4 **Select** COPY.



Change menu

ENTER **Press**

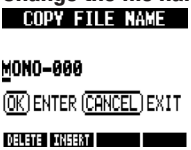
5 **Select** NAME.



Change menu

ENTER **Press**

6 **Change the file name.**



Move cursor

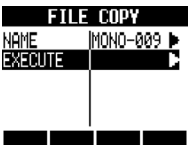
DELETE Delete character

INSERT Insert character

Change character

ENTER **Press**

7 **Select** EXECUTE.



ENTER **Press**

Changing project and audio file names

PROJECT

You can change the names of the currently loaded project and audio files.

Changing a project name

PROJECT > RENAME

Open the project that you want to change the name of and follow these procedures.

1 PROJECT **Press**

2 **Select** RENAME.

Change menu

ENTER **Press**

3 **Change the characters.**

Move cursor

DELETE Delete character

INSERT Insert character

Change character

ENTER **Press**

NOTE

- You cannot change the name to the same name as that of another project.
- The project name is also given to the corresponding project folder in the ZOOM_R8/PROJECT folder on the SD card.

HINT

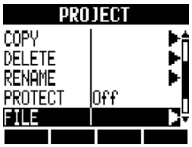
- Project names
  Max. number of characters: 8
  Alphabet: A-Z (uppercase)
  Symbols: _ (underscore)
  Numerals: 0-9
- File names
  Max. number of characters: 219
  (not incl. extension)
  Alphabet: A-Z, a-z
  Symbols: (space) ! # $ % & ‘ ( ) +, - ; = @ [ ]
  ^ _ ` { } ~
  Numerals: 0-9

Changing an audio file name

PROJECT > FILE > RENAME

1 PROJECT **Press**

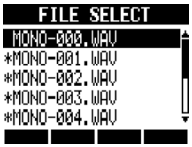
2 **Select** FILE.



Change menu

ENTER **Press**

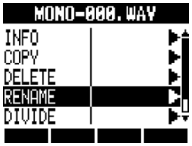
3 **Select the file name.**



Change file

ENTER **Press**

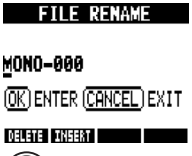
4 **Select** RENAME.



Change menu

ENTER **Press**

5 **Change the characters.**



Move cursor

DELETE Delete character

INSERT Insert character

Change character

ENTER **Press**

Deleting projects and audio files

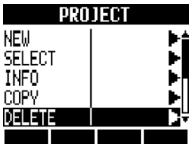
You can delete a selected project or file.

Deleting a project

PROJECT > DELETE

1 PROJECT **Press**

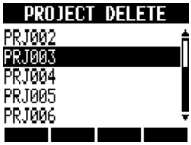
2 **Select** DELETE.



Change menu

ENTER **Press**

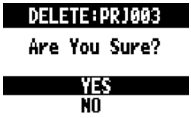
3 **Select the project to delete.**



Change project

ENTER **Press**

4 **Select** YES.



Move cursor

ENTER **Press**

Deleting an audio file

PROJECT > FILE > DELETE

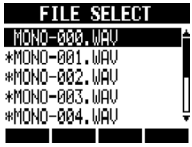
1 PROJECT **Press**

2 **Select** FILE.

Change menu

ENTER **Press**

3 **Select the file name.**



Change file

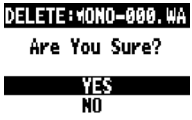
ENTER **Press**

4 **Select** DELETE.

Change menu

ENTER **Press**

5 **Select** YES.



Move cursor

ENTER **Press**

NOTE

- Once a project or file is deleted, it cannot be recovered. Please delete with care.
- If PROTECT is On for a project, that project and its files cannot be deleted.

Dividing audio files

You can divide an audio file at any point to make two files.
Do this to delete unnecessary portions of recordings or to divide long recordings.

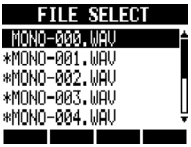
1 PROJECT **Press**

2 **Select** FILE.

Change menu

ENTER **Press**

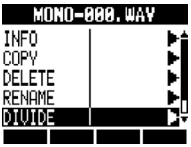
3 **Select the file.**



Select file

ENTER **Press**

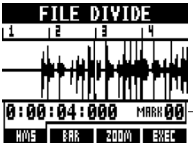
4 **Select** DIVIDE.



Change menu

ENTER **Press**

5 **Set the division point.**

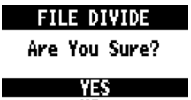


Change value

Set division point

6 **Press** ☐ **beneath** EXEC.

7 **Select** YES.



Move cursor

ENTER **Press**

You can use the following keys to listen to a file and to set the division point.

PLAY	Press to start playback
STOP	Press to stop playback
FF	Press to fast forward
REW	Press to rewind
STOP + REW	Press together to return to the beginning of the file
	Use the mark keys to move to marks

HINT

- When a file is divided, files with new names will be created automatically in the same folder. “A” is added to the end of the name of the file of the part before the dividing point. “B” is added to the end of the name of the file of the part after the dividing point.
- The original divided file is deleted.

Reference:
Locating to the desired part of a song P.36

Setting the recording format and mode

Setting the recording format (bit length)

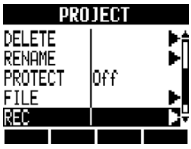
PROJECT > REC > BIT LEN

You can record at 16-bit, which is ordinary CD quality, or higher-quality 24-bit format.

1 PROJECT **Press**

2 **Select** REC.

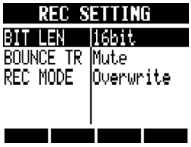
Change menu



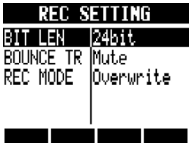
ENTER **Press**

3 **Select** BIT LEN.

Change menu



4 **Set the bit length.**



16-bit/24-bit

HINT

- When overwriting, recording will be at the bit rate of the original file. For example, you cannot overwrite a file recorded at 16-bit with a 24-bit file.
- Settings are stored separately for each project.
- The default value is 16bit.
- If you record at 44.1kHz/24bit, 48kHz/16bit or 48kHz/24bit formats, you will have to convert files to 44.1kHz/16bit to create an audio CD.

Setting the recording mode

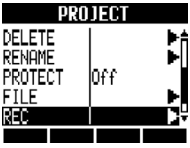
PROJECT > REC > REC MODE

When recording, you can either overwrite the previous recording or keep it and create a new recording.
This is convenient for recording band performances and drums, for example, when you want to record multiple takes.

1 PROJECT **Press**

2 **Select** REC.

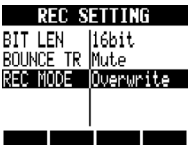
Change menu



ENTER **Press**

3 **Select** REC MODE.

Change menu



4 **Set the recording mode.**

Change setting

REC MODE: recording mode	
Setting	
Overwrite	Previous recordings are overwritten (default)
Always New	Previous recordings are always saved and new recordings are always made

Sequential playback of projects

The playback order of multiple projects can be registered and managed in playlists.
Use these to play songs consecutively, for live performance accompaniment and when outputting to an external recorder, for example.

Playing back a playlist

PROJECT > SEQ PLAY > PLAY

1 PROJECT **Press**

2 **Select** SEQ PLAY.

Change menu

ENTER **Press**

3 **Select the playlist.**

Number of projects in list

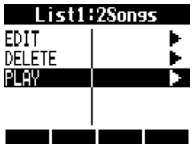
"Empty" shown when no songs in list

Playlist number

Select list

ENTER **Press**

4 **Select** PLAY.



Change menu

ENTER **Press**

Screen appearance during playback

Playlist number

Project name

Elapsed playback time

Playback (track) number

Playback stops at the end of the last project.

HINT

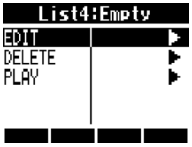
Key operation during playback

PLAY	Play from the beginning of the current project
STOP	Stop playback and return to the beginning of the current project
REW + STOP	Play from the beginning of the first project (TR001)
FF	Stop playback and start playback from the beginning of the next project
REW	Stop playback and start playback from the beginning of the previous project

Editing playlists

PROJECT > SEQ PLAY > EDIT

4 **Select** EDIT.



Change menu

ENTER **Press**

Register projects or edit a playlist

5 **Select the first project (or the project to change).**

End of list indication

Change tracks

DELETE INSERT

6 **Register project to be played.**

Change project

DELETE INSERT

7 **Select and register more projects.**

Change tracks

DELETE INSERT

Change project

DELETE INSERT

8 EXIT **Press to return to the previous menu.**

Remove a project from a list

5 **Select a project to remove.**

Change tracks

6 **Press ☐ beneath DELETE.**

Insert a project into a list

5 **Select the track number to insert to.**

Change tracks

6 **Press ☐ beneath INSERT.**

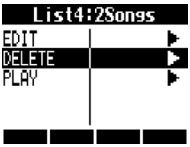
This inserts the currently selected project

Delete a playlist

PROJECT > SEQ PLAY > DELETE

Follow steps 1–3 in "Playing back a playlist" on the previous page to select a playlist and then delete it as follows.

4 **Select** DELETE.



Change menu

ENTER **Press**

5 **Select** YES.

Move cursor

ENTER **Press**

NOTE

- If the master track or the file assigned to the master track is deleted, the playlist will become empty.
- Assign the recordings that you want to hear to the master tracks of the projects that you register in a playlist.
- To change the file of a registered project, set its master track and edit the playlist.
- The maximum number of playlists is 10. Each playlist can have a maximum of 99 projects.
- A project cannot be registered if its master track is not set or its file is less than 4 seconds long.

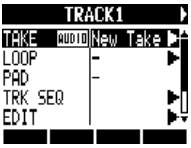
Reference:
Mixing down to the master track P.47

Loading audio files from other projects

You can copy audio files from other projects saved on the SD card and import them into the current project.

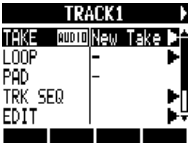
1 TRACK **Press**

2 **Select the track that you want to assign the file to.**



Select track

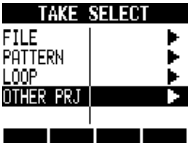
3 **Select** TAKE.



Change menu

ENTER **Press**

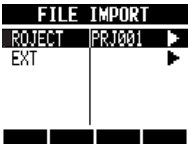
4 **Select** OTHER PRJ.



Change menu

ENTER **Press**

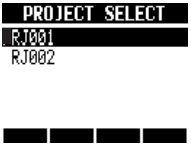
5 **Select** PROJECT.



Change menu

ENTER **Press**

6 **Select the project that contains the file you want to load.**



Select project

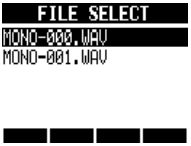
ENTER **Press**

7 **Select** NEXT.

Change menu

ENTER **Press**

8 **Select the file that you want to load.**



Select file

ENTER **Press**

9 **Change the file name.**

Move cursor

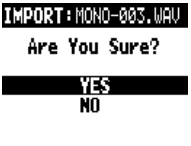
DELETE Delete character

INSERT Insert character

Change character

ENTER **Press**

10 **Select** YES.



Move cursor

ENTER **Press**

HINT

- Projects with sampling rates that differ from the current project will not be shown. If there are no projects with the same sampling rate, “No Project” will be shown.

USB function overview

The **R8** has a USB jack (mini-B type) on its right side.
In addition to connecting the included USB adapter to an electrical outlet to power the **R8**, you can also connect it with a computer and use the it as a card reader, audio interface and control surface.

Card reader

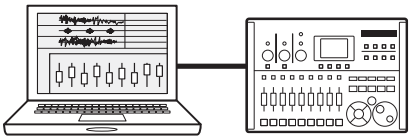
You can access the SD card in the **R8** using a computer to backup and restore projects.
In addition, audio data on the **R8** can be saved on a computer, and WAV files on a computer can be loaded to the **R8**.

Audio interface

The **R8** can be used as an interface between a computer and instruments and other audio equipment
You can also connect high impedance instruments and microphones that require phantom power when used as an audio interface.

Control surface

You can use the **R8** to control DAW software. Use its faders and keys to control transport and mixer operations in your DAW software.



For details about use with a computer, refer to the Audio Interface Manual on the included SD card

NOTE

- To import an audio file into the **R8**, its format must be WAV with a sampling rate of 44.1 or 48 kHz and a bit rate of 16 or 24.
- To use a WAV file in a project, it must use the sampling rate as set for the project when it was created (RATE).
- File names can have up to 219 characters (not including the extension). The following characters are allowed
  Alphabet: A-Z, a-z
  Numerals: 0-9
  Symbols: (space) ! # $ % & ‘ ( ) +, - ; = @ [ ] ^ _ ` { } ~
- If the name of an imported file includes double-byte characters, its file name will be shown with "R8_" as a prefix in this format: "R8_xxxxxx.WAV".
- You can connect the **R8** with a computer by USB when either has its power ON.
- When using the **R8** as a card reader or as an audio interface, it cannot be used as a recorder at the same time.

HINT

- Card reader OS compatibility
  Windows: Windows XP and later
  Macintosh: Mac OS x 10.5 and later
- Project data is saved to the corresponding PROJECT folder in the ZOOM_R8 folder on the SD card. Folders are created and managed for each project.
- Audio data is saved as WAV files inside the AUDIO folder of its project folder.
- The “PRJINFO.TXT” file inside each AUDIO folder shows the names of files assigned to tracks.
- MASTER tracks and stereo tracks are stereo WAV files.

Exchanging data with a computer (card reader)

You can access the R8 SD card using a computer to backup and restore projects and audio files and import audio data created in DAW software, for example.

Backing up a project on a computer

R8 project data is saved in project folders on the SD card. To backup a project, copy its project folder to the computer hard disk.
The folders on the SD card are organized as follows:
"ZOOM_R8" folder
> "PROJECT" folder
> (Project) folder*
*Project folders have the same names as their projects.

Restoring a project from its backup

To restore a project that has been backed up on a computer, copy its project folder from the computer to the "PROJECT" folder on the SD card in the R8.
The folders on the SD card are organized as follows:
"ZOOM_R8" folder
> "PROJECT" folder
> (Project) folder*
*Project folders have the same names as their projects.

Saving audio data from the R8 to a computer

Audio recordings on the R8 are stored as WAV files in "AUDIO" folders on the SD card.
The folders on the SD card are organized as follows:
"ZOOM_R8" folder
> "PROJECT" folder
> (Project) folder*
"AUDIO" folder
*Project folders have the same names as their projects.
To copy WAV files to the computer, copy the WAV files in the "AUDIO" folder to the computer hard disk.
The "PRJINFO.TXT" file inside each "AUDIO" folder shows the names of files assigned to tracks.

Copying WAV files from a computer to the R8

To copy WAV files from a connected computer to the R8, copy the WAV files to an "AUDIO" folder on the SD card.
The folders on the SD card are organized as follows:
"ZOOM_R8" folder
> "PROJECT" folder
> (Project) folder*
"AUDIO" folder
*Project folders have the same names as their projects.
To play back these WAV files on the R8, select that project and assign the copied WAV files to tracks.
(See "Changing the playback take" on P.30.)

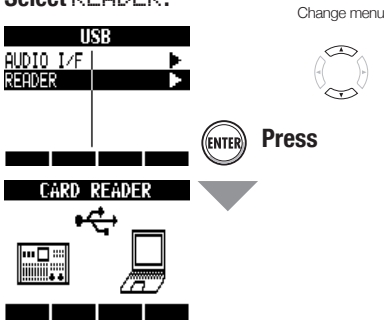
Using the card reader function

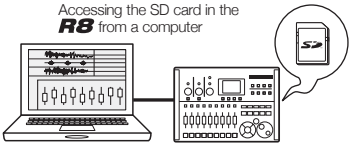
USB > READER

1 **Connect the *R8* and computer with the USB cable and turn the power on.**

2 USB **Press**

3 **Select** READER.





HINT

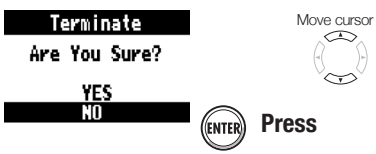
- To import WAV files from a computer, copy them to the “AUDIO” folder in the project folder where you want to use them. Use the ***R8*** to assign the files to tracks.

Disconnecting

1 **Eject the *R8* volume icon from your computer to end the connection.**

2 **Press** EXIT **or** USB **to disconnect.**

3 **Select** YES.



NOTE

- To import an audio file into the ***R8***, its format must be WAV with a sampling rate of 44.1 or 48 kHz and a bit rate of 16 or 24.
- To use a WAV file in a project, it must use the sampling rate that was set for the project when it was created (RATE).
- File names can have up to 219 characters (not including the extension). The following characters are allowed.
  Alphabet: A-Z, a-z
  Numerals: 0-9
  Symbols: (space) ! # $ % & ‘ ( ) +, - ; = @ [ ] ^ _ ` { } ~
- If the name of an imported file includes double-byte characters, its file name will be shown with “R8_” as a prefix in this format: “R8_xxxxxx.WAV”.

HINT

- Card reader OS compatibility
  Windows: Windows XP and later
  Macintosh: Mac OS x 10.5 and later
- The “PRJINFO.TXT” file inside each AUDIO folder shows the names of files assigned to tracks.
- MASTER tracks and stereo tracks are stereo WAV files.

Audio interface and control surface functions

Connect the R8 to a computer to use it to input and output sound and as a controller for DAW software.

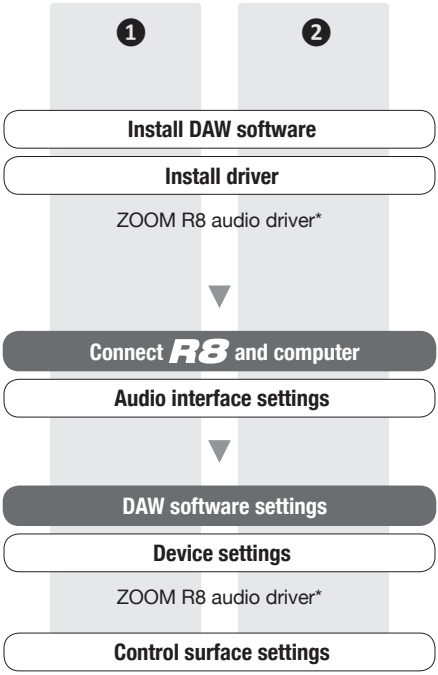
Connecting as an audio interface or control surface

❶ Audio interface

The R8 can be used as an interface between a computer and instruments and other audio equipment, allowing audio to be recorded in DAW software, for example. You can even connect high-impedance instruments and microphones that require phantom power.

❷ Control surface

You can use the faders and keys on the R8 to control transport and mixer operations in computer DAW software.



*No driver is necessary for use with a Macintosh

Connecting the R8 to a computer for the first time

1 Install the ZOOM R8 Audio Driver on the computer.

(No driver is necessary for use with a Macintosh.)

☞ Reference: Cubase LE5 Startup Guide

2 Connect the R8 to the computer.

Set and connect the R8

(See the next page)

3 Make DAW software settings.

Device settings

Control surface settings

NOTE

- To use the R8 as an audio interface for DAW software (for example, Cubase LE 5) it is necessary to install the “ZOOM R8 Audio Driver”. (No driver is necessary for use with a Macintosh.) Install it correctly according to the directions given in the included installation guide.
- Download the latest R8 audio driver from the ZOOM website.
  http:// www.zoom.co.jp

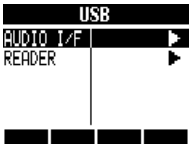
Connecting and setting the *R8*

Follow these procedures after the first time

1 **Connect the *R8* and computer with a USB cable and turn the power ON.**

2 USB **Press**

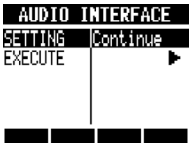
3 **Select** AUDIO I/F.



Change menu

ENTER **Press**

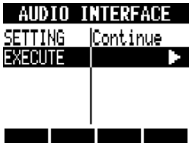
4 **Select whether or not to use the settings of the previous project.**



Change menu

Change setting

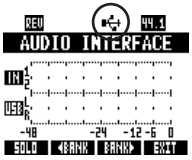
5 **Select** EXECUTE.



Change menu

ENTER **Press**

A USB icon appears when connection completes.



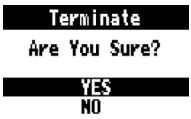
Disconnecting

1 USB **Press**

Or, press beneath EXIT.

2 **Select** YES.

Move cursor



ENTER **Press**

NOTE

Select "Continue" to use the same settings as last time.
• Insert effect settings • Send-return effect settings • Mixer settings • Tuner settings
Reset
Restore default settings for each item

- The audio interface and control surface functions can be used while powered through the USB cable.
- We recommend always using the latest *R8* system software. If you use an *R8* running an older system, a computer might not recognize it properly.

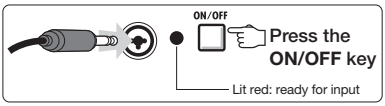
For details about use with a computer, refer to the Audio Interface Manual on the included SD card

Using the tuner

The **R8** has a multifunction tuner that includes chromatic tuning, which detects notes by semitones, standard guitar/bass tuning and half-step-down tuning.

1 TOOL **Press**

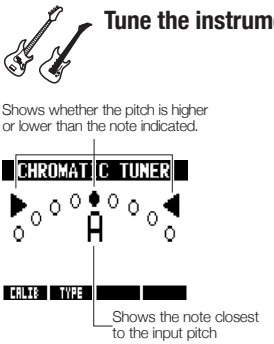
2 **Press the ON/OFF key for the INPUT that the instrument is connected too until its indicator lights red.**



3 **Select** TUNER.

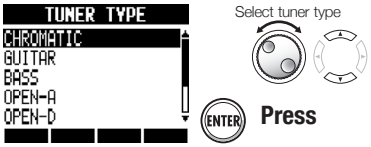
Chromatic tuner

4 **Tune the instrument**

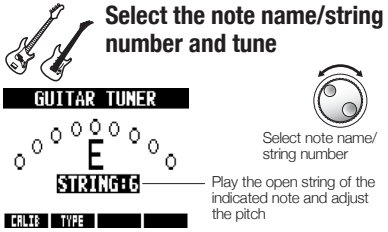


Other tuner types

5 **Press** ☐ **beneath** TYPE.

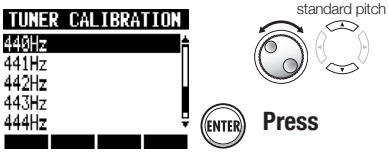


6 **Select the note name/string number and tune**



Changing the standard pitch

7 **Press** ☐ **beneath** CALIB **and set the standard pitch.**



HINT

- The pitch indicator responds to an **INPUT** when its **ON/OFF** indicator lights red.
- The standard pitch can be set between 435–445 Hz in 1 Hz units. The default setting is 440 Hz.
- With the tuner types other than chromatic, the calibration can be used to lower the pitch by 1–3 semitones (♭–♭♭♭).
- The standard pitch setting is saved with each project.

Tuner type		GUITAR	BASS	OPEN A	OPEN D	OPEN E	OPEN G	DADGAD
String/ note	String:1	E	G	E	D	E	D	D
	String:2	B	D	C#	A	B	B	A
	String:3	G	A	A	F#	G#	G	G
	String:4	D	E	E	D	E	D	D
	String:5	A	B	A	A	B	G	A
	String:6	E		E	D	E	D	D
	String:7	B						

Adjusting the display

You can adjust the backlight and contrast of the display.

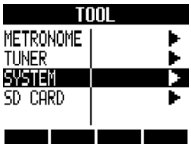
Turning the backlight ON/OFF

TOOL > SYSTEM > LIGHT

1 TOOL **Press**

2 **Select** SYSTEM.

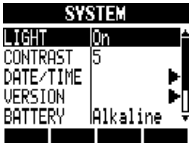
Change menu



ENTER **Press**

3 **Select** LIGHT.

Change menu



4 **Select the setting.**

Change value

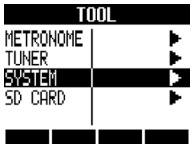
On	Backlight lit (default)
Off	Backlight unlit
15sec	Backlight darkens if the unit is not used for 15 seconds
30sec	Backlight darkens if the unit is not used for 30 seconds

Adjusting the contrast

TOOL > SYSTEM > CONTRAST

1 TOOL **Press**

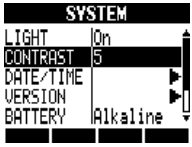
2 **Select** SYSTEM.



Change menu

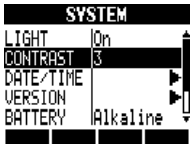
ENTER **Press**

3 **Select** CONTRAST.



Change menu

4 **Set the value.**



Change value

1	Low contrast
2	
3	
4	
5	(Default value)
6	
7	
8	High contrast

HINT

- Turn the backlight off to conserve batteries.

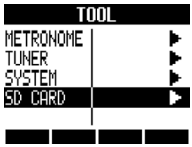
Changing the SD card while the power is on

TOOL

You can change the SD card while the power is on. Do this if the remaining capacity of the inserted card is low or if you need to import previously recorded data from a different SD card.

1 TOOL **Press**

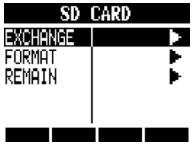
2 **Select** SD CARD.



Change menu

ENTER **Press**

3 **Select** EXCHANGE.



Change menu

ENTER **Press**

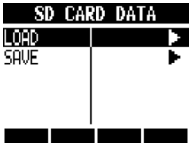
Card replacement possible

4 **Remove the SD card.**

5 **Insert the other SD card.**

Load data from another SD card

6 **Select** LOAD.

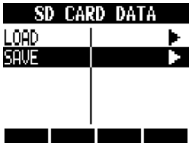


Change menu

ENTER **Press**

Save data to another SD card

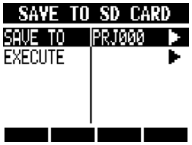
6 **Select** SAVE.



Change menu

ENTER **Press**

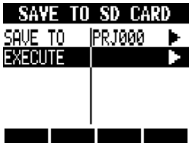
7 **Select** SAVE TO**, and choose the destination project.**



Change menu

Change setting

8 **Select** EXECUTE.



ENTER **Press**

NOTE

- If the inserted SD card is already formatted for the ***R8***, proceed to Step 6 of “Load data from another SD card” or “Save data to another SD card”.
- If you insert an SD card that has not been formatted follow the procedures in “Formatting an SD card” on the next page.

See NOTE on the next page

Formatting SD cards/Checking card capacities

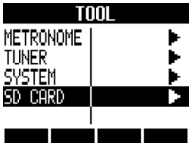
Formatting an SD card

TOOL > SD CARD > FORMAT

You should follow these steps to format SD cards for use with the ***R8***. All card contents will be erased during formatting.

1 TOOL **Press**

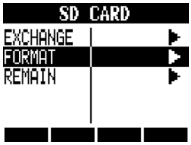
2 **Select** SD CARD.



Change menu

ENTER **Press**

3 **Select** FORMAT.



Change menu

ENTER **Press**

4 **Select** YES.

Move cursor

ENTER **Press**

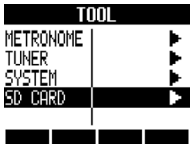
Checking remaining card capacity

TOOL > SD CARD > REMAIN

You can check the remaining capacity of the SD card.

1 TOOL **Press**

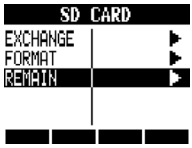
2 **Select** SD CARD.



Change menu

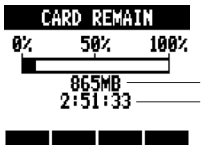
ENTER **Press**

3 **Select** REMAIN.



Change menu

ENTER **Press**



Card open space

Remaining recording time for the current recording format

NOTE

- Disable write-protection on an SD card before inserting it.
- SAVE includes various data for the project in use, but no audio data is saved.

NOTE

- If you format an SD card, all its data will be permanently erased.
- When you format an SD card, all the data on the card is deleted and folders and files that are exclusively for ***R8*** use are created.
- If the remaining capacity of the SD card is less than the amount of the data being recorded, recording will fail. Change the card before you run out of space.

Setting the battery type and phantom power voltage

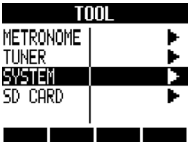
Setting the battery type

TOOL > SYSTEM > BATTERY

Set the battery type that you are currently using to make display of the remaining battery charge more accurate.

1 TOOL **Press**

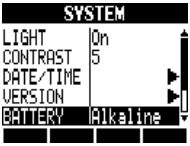
2 **Select** SYSTEM.



Change menu

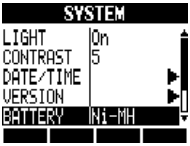
ENTER **Press**

3 **Select** BATTERY.



Change menu

4 **Set the battery type.**



Change type

Alkaline	Alkaline batteries (default)
Ni-MH	Nickel-metal hydride batteries

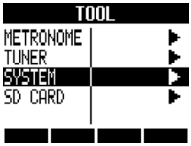
Setting phantom power voltage

TOOL > SYSTEM > PHANTOM

Set the **PHANTOM** switch to **ON** to supply phantom power to **INPUT 1** and **2**.
To conserve batteries, you can reduce the voltage to 24 V.

1 TOOL **Press**

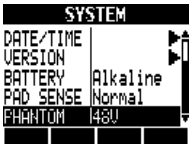
2 **Select** SYSTEM.



Change menu

ENTER **Press**

3 **Select** PHANTOM **and set the value.**



Change menu

Change setting

NOTE

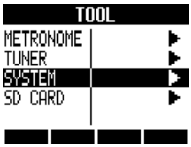
- Use only alkaline or nickel-metal hydride batteries.

Using a footswitch

Connect a ZOOM FS01 footswitch (sold separately) to the **CONTROL IN** jack to start and stop playback, punch-in and out manually and change effect patches with your foot.

1 TOOL **Press**

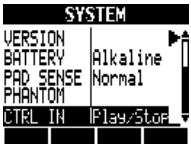
2 **Select** SYSTEM.



Change menu

ENTER **Press**

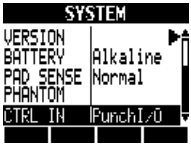
3 **Select** CTRL IN.



Change menu

ENTER **Press**

4 **Choose the setting.**



Change setting

CTRL IN: CONTROL IN setting	
Play/Stop	Each footswitch press alternately starts or stops playback.
Play/Rew	Each footswitch press alternately starts playback or rewinds
PunchI/O	Allows manual punch-in and punch-out (pressing the footswitch has the same effect as pressing the REC key)
PatchUp	Pressing the footswitch increases the selected insert effect patch number by one
PatchDown	Pressing the footswitch decreases the selected insert effect patch number by one

Checking and upgrading the firmware

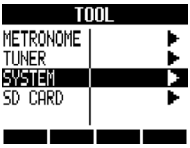
Checking the firmware version

TOOL > SYSTEM > VERSION

You can check the current firmware versions.

1 TOOL **Press**

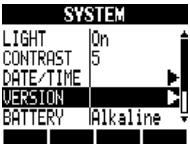
2 **Select** SYSTEM.



Change menu

ENTER **Press**

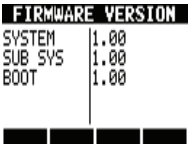
3 **Select** VERSION.



Change menu

ENTER **Press**

4 **Check the versions.**



Upgrading the firmware

You can upgrade the firmware when necessary.
You must connect the AC adapter before upgrading.

1 **Put the upgrade file in the root directory of an SD card.**

2 **Put the SD card with the upgrade file in the *R8*.**

3 **Connect the *R8* with the AC adapter.**

4 **Press and hold** ▷ PLAY **and turn the POWER switch ON.**

5 **Select** OK.

Move cursor

ENTER **Press**

The upgrade starts.

6 **When a message shows that the upgrade has been completed, turn the *R8* power off once and restart it.**

NOTE

- For the latest upgrade files, check the ZOOM website.
  http://www.zoom.co.jp

Rhythm pattern list

Patterns 35 ~ 234 are typical patterns and fills for various genres.

No.	Pattern	Bars
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
20	04JAZZ02	4
30	04JAZZ03	4
31	04JAZZ04	4
32	DANCE	2
33	CNTRY	2
34	68BLUS	4
No.	Pattern	Bars
Genre fills/variations		
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
203	JAZZs1Vb	1
204	JAZZs1FB	1
205	AFROs1VA	2
206	AFROs1Va	1
207	AFROs1FA	1
208	AFROs1VB	2
209	AFROs1Vb	1
210	AFROs1FB	1
211	REGGs1VA	2
212	REGGs1Va	1
213	REGGs1FA	1
214	REGGs1VB	2
215	REGGs1Vb	1
216	REGGs1FB	1
217	LATNs1VA	2
218	LATNs1Va	1
219	LATNs1FA	1
220	LATNs1VB	2
221	LATNs1Vb	1
222	LATNs1FB	1
223	LATNs2VA	2
224	LATNs2Va	1
225	LATNs2FA	1
226	LATNs2VB	2
227	LATNs2Vb	1
228	LATNs2FB	1
229	MidEs1VA	2
230	MidEs1Va	1

231	MidEs1FA	1
232	MidEs1VB	2
233	MidEs1Vb	1
234	MidEs1FB	1
No.	Pattern	Bars
Standard		
235	ROCK01	2
236	ROCK02	2
237	ROCK03	2
238	ROCK04	2
239	ROCK05	2
240	ROCK06	2
241	ROCK07	2
242	ROCK08	2
243	ROCK09	2
244	ROCK10	2
245	ROCK11	4
246	ROCK12	2
247	ROCK13	2
248	ROCK14	2
249	ROCK15	2
250	ROCK16	2
251	ROCK17	2
252	ROCK18	2
253	ROCK19	2
254	ROCK20	2
255	ROCK21	2
256	ROCK22	2
257	ROCK23	2
258	ROCK24	2
259	ROCK25	2
260	ROCK26	2
261	ROCK27	2
262	ROCK28	2
263	HRK01	2
264	HRK02	2
265	HRK03	2
266	HRK04	2
267	HRK05	2
268	HRK06	2
269	HRK07	2
270	MTL01	2
271	MTL02	2
272	MTL03	2
273	MTL04	2
274	THRS01	2
275	THRS02	2
276	PUNK01	2
277	PUNK02	2
278	FUS01	2
279	FUS02	2
280	FUS03	2

281	FUS04	2
282	FUS05	2
283	FUS06	2
284	FUS07	2
285	FUS08	2
286	POP01	2
287	POP02	2
288	POP03	2
289	POP04	2
290	POP05	2
291	POP06	2
292	POP07	2
293	POP08	2
294	POP09	2
295	POP10	2
296	POP11	2
297	POP12	2
298	RnB01	2
299	RnB02	2
300	RnB03	2
301	RnB04	2
302	RnB05	2
303	RnB06	2
304	RnB07	2
305	RnB08	2
306	RnB09	2
307	RnB10	2
308	FUNK01	2
309	FUNK02	2
310	FUNK03	2
311	FUNK04	2
312	FUNK05	2
313	FUNK06	2
314	FUNK07	2
315	FUNK08	2
316	FUNK09	2
317	FUNK10	2
318	FUNK11	2
319	FUNK12	2
320	HIP01	2
321	HIP02	2
322	HIP03	2
323	HIP04	2
324	HIP05	2
325	HIP06	2
326	HIP07	2
327	HIP08	2
328	HIP09	2
329	HIP10	2
330	HIP11	2
331	HIP12	2
332	HIP13	2

333	HIP14	2
334	HIP15	2
335	HIP16	2
336	HIP17	2
337	HIP18	2
338	HIP19	2
339	HIP20	2
340	HIP21	2
341	HIP22	2
342	HIP23	2
343	DANC01	2
344	DANC02	2
345	DANC03	2
346	DANC04	2
347	DANC05	2
348	DANC06	2
349	HOUS01	2
350	HOUS02	2
351	HOUS03	2
352	HOUS04	2
353	TECH01	2
354	TECH02	2
355	TECH03	2
356	TECH04	2
357	TECH05	2
358	TECH06	2
359	TECH07	2
360	TECH08	2
361	TECH09	2
362	TECH10	2
363	DnB01	2
364	DnB02	2
365	DnB03	2
366	DnB04	2
367	DnB05	2
368	DnB06	2
369	TRIP01	2
370	TRIP02	2
371	TRIP03	2
372	TRIP04	2
373	AMB01	2
374	AMB02	2
375	AMB03	2
376	AMB04	2
377	BALD01	2
378	BALD02	2
379	BALD03	2
380	BALD04	2
381	BALD05	2
382	BALD06	2
383	BALD07	2
384	BALD08	2

385	BALD09	2
386	BALD10	2
387	BALD11	4
388	BLUS01	2
389	BLUS02	2
390	BLUS03	2
391	BLUS04	2
392	BLUS05	2
393	BLUS06	2
394	CNTR01	2
395	CNTR02	2
396	CNTR03	2
397	CNTR04	2
398	JAZZ01	2
399	JAZZ02	2
400	JAZZ03	2
401	JAZZ04	2
402	JAZZ05	2
403	JAZZ06	2
404	JAZZ07	4
405	SHFL01	2
406	SHFL02	2
407	SHFL03	2
408	SHFL04	2
409	SHFL05	2
410	SKA01	2
411	SKA02	2
412	SKA03	2
413	SKA04	2
414	REGG01	2
415	REGG02	2
416	REGG03	2
417	REGG04	2
418	AFRO01	2
419	AFRO02	2
420	AFRO03	2
421	AFRO04	2
422	AFRO05	2
423	AFRO06	2
424	AFRO07	2
425	AFRO08	2
426	LATN01	2
427	LATN02	2
428	LATN03	2
429	LATN04	2
430	LATN05	2
431	LATN06	2
432	LATN07	2
433	LATN08	2
434	LATN09	2
435	LATN10	2
436	LATN11	2

437	LATN12	2
438	BOSSA01	4
439	BOSSA02	4
440	SAMBA01	4
441	SAMBA02	4
442	MidE01	2
443	MidE02	2
444	MidE03	2
445	MidE04	2
446	INTRO01	1
447	INTRO02	1
448	INTRO03	1
449	INTRO04	1
450	INTRO05	1
451	INTRO06	1
452	INTRO07	1
453	INTRO08	1
454	INTRO09	1
455	INTRO10	1
456	INTRO11	1
457	INTRO12	1
458	INTRO13	1
459	INTRO14	1
460	INTRO15	1
461	INTRO16	1
462	INTRO17	1
463	INTRO18	1
464	ENDING01	1
465	ENDING02	1
466	ENDING03	1
467	ENDING04	1
468	ENDING05	1
469	ENDING06	1
470	ENDING07	1
471	COUNT	2
472 – 510	EMPTY	2

Effect types and parameters 1

INSERT effects

Clean/Crunch, Distortion, Aco/Bass SIM algorithms

• COMP/LIMITER module

Type	Parameters			
Compressor	**Sense**	**Attack**	**Tone**	**Level**
	MXR Dynacomp type compressor.			
Rack Comp	**Threshold**	**Ratio**	**Attack**	**Level**
	Compressor with more detailed adjustments.			
Limiter	**Threshold**	**Ratio**	**Release**	**Level**
	Limiter for suppressing signal peaks above a certain level.			

Parameter Explanations

Parameters	Setting range	Explanation
Sense	**0 ~ 10**	Adjusts compressor sensitivity.
Attack	**Compressor: Fast, Slow**	Selects compressor response speed.
	Rack Comp: 1 ~ 10	Adjusts compressor response speed.
Tone	**0 ~ 10**	Adjusts tonal quality.
Level	**2 ~ 100**	Adjusts signal level after passing module.
Threshold	**0 ~ 50**	Adjusts threshold for compressor/limiter action.
Ratio	**1 ~ 10**	Adjusts compressor/limiter compression ratio.
Release	**1 ~ 10**	Adjusts delay until compressor/limiter release from time when signal level falls below threshold level.

Effect types and parameters 2

□ EFX module

Type	Parameters						
Auto Wah	Position	Sense	Resonance	Level			
	Auto wah dependent on dynamics of input signal.						
Tremolo	Depth	Rate	Wave	Level			
	Periodically varies the volume level.						
Phaser	Position	Rate	Color	Level			
	Produces a swooshing sound.						
Ring Modulator	Position	Frequency	Balance	Level			
	Produces a metallic ringing sound. Adjusting the Frequency parameter results in a drastic change of sound character.						
Slow Attack	Position	Time	Curve	Level			
	Slows down the attack rate of the sound.						
Fix-Wah	Position	Frequency	Dry Mix	Level	RTM Mode	RTM Wave	RTM Sync
	Changes the wah frequency according to rhythm tempo.						
Booster	Range	Tone	Level				
	Increases signal gain to make the sound more powerful.						

Parameter Explanations

Parameters	Setting range	Explanation
Position	Before, After	Sets connection position of EFX module to before or after preamp.
Sense	–10 ~ –1, 1 ~ 10	Adjusts auto wah sensitivity.
Resonance	0 ~ 10	Adjusts resonance intensity.
Level	2 ~ 100	Adjusts signal level after passing through module.
Depth	0 ~ 100	Adjusts modulation depth.
Rate	0 ~ 50 ♪ (P.127 Table 1)	Adjusts modulation rate. Can be set in rhythm tempo note units.
Wave	4Up 0 ~ 9, Down 0 ~ 9, Tri 0 ~ 9	Sets modulation waveform to “Up” (rising sawtooth), “Down” (falling sawtooth) or “Tri” (triangular). Higher values result in stronger clipping, emphasizing the effect.
Color	4Stage, 8Stage, Invert4, Invert8	Selects sound type.
Frequency	Ring Modulator: 1 ~ 50	Adjusts frequency used for modulation.
	Fix-Wah: 1 ~ 50	Adjusts wah center frequency.
Balance	0 ~ 100	Adjusts balance between original sound and effect sound.
Time	1 ~ 50	Adjusts rise time for sound.
Curve	0 ~ 10	Adjusts volume rise curve.
Dry Mix	0 ~ 10	Adjusts original sound mix ratio.
RTM Mode	P.127 Table 2	Adjusts change range and direction.
RTM Wave	P.127 Table 3	Selects control waveform.
RTM Sync	♪ (P.127 Table 4)	Adjusts control wave frequency.
Range	1 ~ 5	Selects frequency range to boost.
Tone	0 ~ 10	Adjusts tone.

Effect types and parameters 3

• PREAMP module

Type	Parameters			
FD Combo	Modeled sound of Fender Twin Reverb ('65 model) favored by guitarists of many music styles			
VX Combo	Modeled sound of combo amp VOX AC-30 operating in class A			
US Blues	Crunch sound of FENDER Tweed BASSMAN			
BG Crunch	Crunch sound of Mesa Boogie MkIII combo amp			
HW Stack	Modeled sound of legendary all-tube Hiwatt Custom 100 from Britain			
MS Crunch	Crunch sound of legendary Marshall 1959			
MS Drive	High gain sound of Marshall JCM2000 stack amp			
PV Drive	High gain sound of Peavey 5150 developed in cooperation with a world-famous hard rock guitarist			
DZ Drive	High gain sound using channel 3 the Diezel Herbert hand-made German guitar amp with three separately controllable channels			
BG Drive	High gain sound of Mesa Boogie Dual Rectifier red channel (vintage mode)			
OverDrive	Modeling of BOSS OD-1 effect pedal that was the world's first overdrive effect of its kind			
T Scream	Simulation of the Ibanez TS808, which is loved by many guitarists as a booster and has inspired numerous clones			
Governor	Simulation of the Guv'nor distortion effect from Marshall			
Dist +	Simulation of the MXR distortion+ effect that made distortion popular worldwide			
Dist 1	Simulation of the Boss DS-1 distortion pedal, which has been a long-seller			
Squeak	Simulation of the PROCO Rat famous for its edgy distortion sound			
FuzzSmile	Simulation of the Fuzz Face, which has made rock history with its humorous panel design and smashing sound			
GreatMuff	Simulation of the Electro-Harmonix Big Muff, which is loved by famous artists around the world for its fat, sweet fuzz sound			
MetalWRLD	Simulation of the Boss Metal Zone, which is characterized by long sustain and a powerful lower midrange			
HotBox	Simulation of the compact Matchless Hotbox pre-amplifier with a built-in tube			
Z Clean	ZOOM original unadorned clean sound			
Z Wild	A high gain sound with even more overdrive boost.			
Z MP1	An original sound created by merging characteristics of an ADA MP1 and a MARSHALL JCM800.			
Z Bottom	A high gain sound that emphasizes low and middle frequencies			
Z Dream	A high gain sound for lead playing based on the Mesa Boogie Road King Series II Lead channel			
Z Scream	An original high gain sound balanced from low to high frequencies			
Z Neos	A crunch sound modeled on the sound of a modified VOX AC30			
Lead	A bright and smooth distortion sound			
ExtremeDS	This distortion effect boasts the highest gain in the world			
	Gain	**Tone**	**Cabinet**	**Level**
	FD Combo ~ ExtremeDS types have the same parameters			
Acoustic Sim	**Top**	**Body**	**Level**	
	Makes an electric guitar sound like an acoustic guitar			
Bass Sim	**Tone**	**Level**		
	Makes an electric guitar sound like a bass guitar			

Parameter Explanations

Parameters	Setting range	Explanation
Gain	0 ~ 100	Adjusts preamp gain (distortion intensity).
Tone	0 ~ 30	Adjusts tonal quality.
Cabinet	Matched	Optimizes cabinet settings according to the drive effect type.
	Combo	Simulates 2x12 Fender combo amp cabinet.
	Tweed	Simulates 4x10 Fender Tweed amp cabinet.
	Stack	Simulates 4x12 Marshall stack amp cabinet.
Level	1 ~ 100	Adjusts signal level after passing through module.
Top	0 ~ 10	Adjusts characteristic acoustic guitar string resonance.
Body	0 ~ 10	Adjusts characteristic acoustic guitar body resonance.

• 6BAND EQ module

Type	Parameters						
6Band EQ	**Bass**	**Low-Mid**	**Middle**	**Treble**	**Presence**	**Harmonics**	**Level**
	This is an equalizer with 6 frequency bands						

Parameter Explanations

Parameters	Setting range	Explanation
Bass	-12 dB ~ 12 dB	Adjusts low frequency range (160 Hz) boost/cut.
Low-Mid	-12 dB ~ 12 dB	Adjusts mid-low-frequency range (400 Hz) boost/cut.
Middle	-12 dB ~ 12 dB	Adjusts middle-frequency range (800 Hz) boost/cut.
Treble	-12 dB ~ 12 dB	Adjusts high-frequency range (3.2 kHz) boost/cut.
Presence	-12 dB ~ 12 dB	Adjusts super-high-frequency range (6.4 kHz) boost/cut.

Effect types and parameters 4

Parameters	Setting range	Explanation
Harmonics	-12 dB ~ 12 dB	Adjust harmonics (12 kHz) boost/cut.
Level	2 ~ 100	Adjusts signal level after passing through module.

• MOD/DELAY module

Type	Parameters			
Chorus	Depth	Rate	Tone	Mix
	Mixes a variable pitch-shifted component with the original sound, resulting in full-bodied resonating tone			
Ensemble	Depth	Rate	Tone	Mix
	Chorus ensemble features three-dimensional movement			
Flanger	Depth	Rate	Resonance	Manual
	Produces a resonating and strongly undulating sound			
Pitch	Shift	Tone	Fine	Balance
	Shifts the pitch up or down			
Vibe	Depth	Rate	Tone	Balance
	Adds automatic vibrato			
Step	Depth	Rate	Resonance	Shape
	Special effect makes sound changes in steps			
Cry	Range	Resonance	Sense	Balance
	Changes sound like a talking modulator			
Exciter	Frequency	Depth	Low Boost	
	Enhances the sound outline, making it more prominent			
Air	Size	Reflex	Tone	Mix
	Recreates the airy ambience of a room, adding a feeling of depth			
Delay	Time	Feedback	Hi Damp	Mix
	Delay effect with a maximum setting of 2000 ms			
Analog Delay	Time	Feedback	Hi Damp	Mix
	Warm analog delay simulation with up to 2000 msec delay length			
Reverse Delay	Time	Feedback	Hi Damp	Balance
	Reverse delay with a maximum length of 1000 msec			
ARRM Pitch	Type	Tone	RTM Wave	RTM Sync
	Changes pitch of original sound in time with the rhythm tempo			

Parameter Explanations

Parameters	Setting range	Explanation
Depth	Exciter: 0 ~ 30	Adjusts depth of effect.
	Other: 0 ~ 100	Adjusts modulation depth.
Rate	Chorus, Ensemble: 1 ~ 50	Adjusts modulation speed.
	Flanger, Vibe, Step: 0 ~ 50 ♪ (P.127 Table 1)	Adjusts modulation speed. Using the rhythm tempo as reference, setting in note units is also possible.
Tone	0 ~ 10	Adjusts tonal quality.
Mix	0 ~ 100	Adjusts mix ratio of effect sound to original sound.
Resonance	Flanger: –10 ~ 10	Adjusts resonance intensity. Negative values result in the effect sound phase being emphasized.
	Step, Cry: 0 ~ 10	Adjusts resonance intensity.
Manual	0 ~ 100	Adjust the frequency range that is effected.
Shift	–12 ~ 12, 24	Sets pitch shift in semitones.
Fine	–25 ~ 25	Sets pitch shift in cents (1/100 semitone).
Balance	0 ~ 100	Adjusts balance between original sound and effect sound.
Shape	0 ~ 10	Sets effect sound envelope.
Range	1 ~ 10	Adjusts the frequency range that is affected.
Sense	–10 ~ –1, 1 ~ 10	Sets the sensitivity of the effect.
Frequency	1 ~ 5	Adjusts the frequencies that are effected.
Low Boost	0 ~ 10	Emphasizes low-frequency range.
Size	1 ~ 100	Sets size of simulated space.
Reflex	0 ~ 10	Adjusts the amount of reflections from the walls.
Time	Delay, Analog Delay: 1 ~ 2000 ms ♪ (P.127 Table 1)	Adjusts delay time.
	Reverse Delay: 10 ~ 1000 ms ♪ (P.127 Table 1)	
Feedback	0 ~ 100	Adjusts feedback amount.
Hi Damp	0 ~ 10	Adjusts the high-frequency attenuation of the delay sound.
Type	P.127 Table 5	Selects the type of pitch change.
RTM Wave	P.127 Table 3	Selects the wave shape of the effect.
RTM Sync	P.127 Table 4	Sets the frequency of the wave.

Effect types and parameters 5

• REVERB module

Type	Parameters			
Hall	**Decay**	**PreDelay**	**Tone**	**Mix**
	Simulates the acoustics of a concert hall			
Room	**Decay**	**PreDelay**	**Tone**	**Mix**
	Simulates the acoustics of a room			
Spring	**Decay**	**PreDelay**	**Tone**	**Mix**
	Simulates a spring reverb			
Arena	**Decay**	**PreDelay**	**Tone**	**Mix**
	Simulates the acoustics of an arena-sized venue			
TiledRoom	**Decay**	**PreDelay**	**Tone**	**Mix**
	Simulates the acoustics of a tiled room			

Parameter Explanations

Parameters	Setting range	Explanation
Decay	1 ~ 30	Adjusts reverb time.
PreDelay	1 ~ 100	Adjusts pre-delay time.
Tone	0 ~ 10	Adjusts tonal quality.
Mix	0 ~ 100	Adjusts effect sound level.

• ZNR module

Type	Setting range	Explanation
ZNR	Off, 1 ~ 30	Adjusts sensitivity. Set value as high as possible without causing unnatural decay to reduce noise.
	ZOOM original noise reduction for reducing noise during playing pauses without affecting the overall tone.	

Bass algorithm

• COMP/LIMITER module

Type	Parameters
Rack Comp	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.
Limiter	

• EFX module

Type	Parameters				
Auto Wah	**Position**	**Sense**	**Resonance**	**Dry Mix**	**Level**
	This effect varies the wah action according to the intensity of the input signal.				
Tremolo	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.				
Phaser					
Ring Modulator					
Slow Attack					
Fix-Wah					

Parameter Explanations

Parameters	Setting range	Explanation
Position	Before, After	Sets insert position of module to before or after PREAMP module.
Sense	–10 ~ –1, 1 ~ 10	Adjusts auto wah sensitivity.
Resonance	0 ~ 10	Adjusts resonance intensity.
Dry Mix	0 ~ 10	Adjusts original sound mix ratio.
Level	2 ~ 100	Adjusts signal level after passing through module.

• PREAMP module

Type	Parameters				
SVT	Simulation of Ampeg SVT sound.				
Bassman	Simulation of Fender Bassman 100 sound.				
Hartke	Simulation of Hartke HA3500 sound.				
Super Bass	Simulation of Marshall Super Bass sound.				
SANSAMP	Simulation of Sansamp Bass Driver DI sound.				
Tube Preamp	ZOOM original tube preamplifier sound.				
	Gain	**Tone**	**Cabinet**	**Balance**	**Level**
	All preamp modules have the same parameters.				

Effect types and parameters 6

Parameter Explanations

Parameters	Setting range	Explanation
Gain	0 ~ 100	Adjusts preamp gain (distortion depth).
Tone	0 ~ 30	Adjusts tonal quality of effect.
Cabinet	0 ~ 2	Adjusts intensity of speaker cabinet sound.
Balance	0 ~ 100	Adjusts mix balance of signal before and after module.
Level	1 ~ 100	Adjusts signal level after passing through module.

• 6BAND EQ module

Type	Parameters						
6Band EQ	Sub-Bass	Bass	Low-Mid	Hi-Mid	Treble	Presence	Level
	This is an equalizer with 6 frequency bands.						

Parameter Explanations

Parameters	Setting range	Explanation
Sub-Bass	-12 dB ~ 12 dB	Adjusts super-low frequency range (70 Hz) boost/cut.
Bass	-12 dB ~ 12 dB	Adjusts low frequency range (150 Hz) boost/cut.
Low-Mid	-12 dB ~ 12 dB	Adjusts mid-low-frequency range (450 Hz) boost/cut.
Hi-Mid	-12 dB ~ 12 dB	Adjusts high-mid-frequency range (1 kHz) boost/cut.
Treble	-12 dB ~ 12 dB	Adjusts high-frequency range (3 kHz) boost/cut.
Presence	-12 dB ~ 12 dB	Adjusts super-high-frequency range (6 kHz) boost/cut.
Level	2 ~ 100	Adjusts signal level after passing through module.

• MOD/DELAY module

Type	Parameters
Chorus ~ ARRM Pitch	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

• ZNR module

Type	Parameters
ZNR	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

Mic algorithm

• COMP/LIMITER module

Type	Parameters
Rack Comp	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.
Limiter	

• EFX module

Type	Parameters
Tremolo	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.
Phaser	
Ring Modulator	
Slow Attack	
Fix-Wah	

• MIC PRE module

Type	Parameters				
Mic Pre	Type	Tone	Level	De-Esser	Low Cut
	This is a preamplifier for use with external microphones.				

Parameter Explanations

Parameters	Setting range	Explanation
Type	Vocal, AcousticGt, Flat	Selects preamp characteristics.
Tone	0 ~ 10	Adjusts tonal quality of effect.
Level	1 ~ 100	Adjusts signal level after passing through module.
De-Esser	Off, 1 ~ 10	Sets the reduction of sibilant sounds.
Low Cut	Off, 80 ~ 240 Hz	Sets frequency of filter that reduces low-frequency noise easily picked up by mics.

Effect types and parameters 7

• 3BAND EQ module

Type	Parameters			
3Band EQ	Bass	Middle	Treble	Level
	This is a 3-band equalizer.			

Parameter Explanations

Parameters	Setting range	Explanation
Bass	–12 dB ~ 12 dB	Boosts/cuts low-frequency range.
Middle	–12 dB ~ 12 dB	Boosts/cuts middle-frequency range.
Treble	–12 dB ~ 12 dB	Boosts/cuts high-frequency range.
Level	2 ~ 100	Adjusts signal level after passing through module.

• MOD/DELAY module

Type	Parameters
Chorus ~ ARRM Pitch	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

• ZNR module

Type	Parameters
ZNR	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

Dual Mic algorithm

• COMP/LIMITER L module

Type	Parameters			
Compressor	Threshold	Ratio	Attack	Level
	Reduces variation in signal level.			
Limiter	Threshold	Ratio	Release	Level
	Attenuates signals that exceed a certain level.			

Parameter Explanations

Parameters	Setting range	Explanation
Threshold	–24 ~ 0	Adjusts threshold level of compressor/limiter.
Ratio	Compressor: 1 ~ 26 Limiter: 1 ~ 54, ∞	Adjusts compression ratio of compressor/limiter.
Attack	0 ~ 10	Adjusts speed that at which the compressor is activated.
Level	2 ~ 100	Adjusts module output level.
Release	0 ~ 10	Adjusts speed of limiter release after signal falls below threshold level.

• MIC PRE L module

Type	Parameters
Mic Pre	For an explanation of types and parameters, see Mic algorithm.

• 3BAND EQ L module

Type	Parameters
3Band EQ	For an explanation of types and parameters, see Mic algorithm.

• DELAY L module

Type	Parameters		
Delay	Time	Feedback	Mix
	Delay effect with a maximum setting of 2000 ms.		
Echo	Time	Feedback	Mix
	Warm delay effect with a maximum setting of 2000 ms.		
Doubling	Time	Tone	Mix
	Doubling effect that creates body by adding a short delay.		

Parameter Explanations

Parameters	Setting range	Explanation
Time	Delay, Echo: 1 ~ 2000 ms ♪ (P.127 Table 1) Doubling: 1 ~ 100 ms	Adjusts delay time.
Feedback	0 ~ 100	Adjusts feedback amount.
Tone	0 ~ 10	Adjusts tonal quality.
Mix	0 ~ 100	Adjusts mix ratio of effect sound to original sound.

Effect types and parameters 8

• COMP/LIMITER R module

Type	Parameters
Compressor	For an explanation of types and parameters, see COMP/LIMITER L module.
Limiter	

• MIC PRE R module

Type	Parameters
Mic Pre	For an explanation of types and parameters, see Mic algorithm.

• 3BAND EQ R module

Type	Parameters
3Band EQ	For an explanation of types and parameters, see Mic algorithm.

• DELAY R module

Type	Parameters
Delay	For an explanation of types and parameters, see DELAY L module.
Echo	
Doubling	

• ZNR module

Type	Parameters
ZNR L	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.
ZNR R	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

Stereo algorithm

• COMP/LIMITER module

Type	Parameters					
Compressor	For an explanation of types and parameters, see Dual Mic algorithms.					
Limiter						
Lo-Fi	**Character**	**Color**	**Dist**	**Tone**	**EFX Level**	**Dry Level**
	This effect intentionally reduces the quality of the sound.					

Parameter Explanations

Parameters	Setting range	Explanation
Character	0 ~ 10	Adjusts filter characteristics.
Color	1 ~ 10	Adjusts sound color.
Dist	0 ~ 10	Adjusts distortion.
Tone	0 ~ 10	Adjusts tonal quality of effect.
EFX Level	0 ~ 100	Adjusts effect sound level.
Dry Level	0 ~ 100	Adjusts original sound level.

• ISO/MIC MODEL module

Type	Parameters				
Isolator	**Xover Lo**	**Xover Hi**	**Mix High**	**Mix Mid**	**Mix Low**
	Divides the signal into three frequency bands and allows the mix amount of each band to be adjusted separately.				
Mic Modeling	**Mic Type**				
	Changes built-in mi characteristics.				

Parameter Explanations

Parameters	Setting range	Explanation
Xover Lo	50 Hz ~ 16 kHz	Adjusts low-to-mid crossover frequency.
Xover Hi	50 Hz ~ 16 kHz	Adjusts mid-to-high crossover frequency.
Mix High	Off, –24 ~ 6	Adjusts high frequency range mix level.
Mix Mid	Off, –24 ~ 6	Adjusts mid frequency range mix level.
Mix Low	Off, –24 ~ 6	Adjusts low frequency range mix level.
Mic Type	SM57	Simulation of SM57 mic, which is great for recording electric guitars and other analog instruments.
	MD421	Simulation of MD421, which is a professional standard mic that is indispensable in broadcasting, recording and live performances.
	U87	Simulation of U87, a "go-to" condenser microphone that is used in studios worldwide.
	C414	Simulation of C414, a famous microphone highly trusted in recording situations.

Effect types and parameters 9

• 3BAND EQ module

Type	Parameters
3Band EQ	For an explanation of types and parameters, see Mic algorithm.

• MOD/DELAY module

Type	Parameters							
Chorus	Depth	Rate	Mix					
	Mixes a variable pitch-shifted component with the original sound, resulting in full-bodied resonating tone.							
Flanger	Depth	Rate	Resonance					
	Produces a resonating and strongly undulating sound.							
Phaser	Rate	Color	LFO Shift					
	Produces a swooshing sound.							
Tremolo	Depth	Rate	Clip					
	Periodically varies the volume level.							
Auto Pan	Width	Rate	Clip					
	Pans the sound alternately left and right.							
Pitch	Shift	Tone	Fine	Balance				
	Shifts the pitch up or down.							
Ring Modulator	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.							
Delay	Time	Feedback	Mix					
	Delay effect with a maximum setting of 2000 ms.							
Echo	Time	Feedback	Mix					
	Warm delay effect with a maximum setting of 2000 ms.							
Doubling	Time	Tone	Mix					
	Doubling effect which creates body by adding a short delay.							
Dimension	Rise1	Rise2						
	Expands sound spatially.							
Resonance	Depth	Freq OFST	Rate	Filter	Resonance	EFX Level	Dry Level	
	Resonant filter with LFO.							

Parameter Explanations

Parameters	Setting range	Explanation
Depth	0 ~ 100	Adjusts modulation depth.
Resonance	–10 ~ 10	Adjusts resonance intensity. Negative values result in the effect sound phase being emphasized.
Color	4Stage, 8Stage, Invert4, Invert8	Selects sound type.
LFO Shift	0 ~ 180	Adjusts left/right phase shift.
Width	0 ~ 10	Adjusts auto pan width.
Rate	Chorus: 1 ~ 50	Adjusts modulation speed.
	Flanger, Phaser, Tremolo, Auto Pan: 0 ~ 50 ♪ (P.127 Table 1)	Adjusts modulation speed. Using the rhythm tempo as reference, setting in note units is also possible
	Resonance: 1 ~ 50 ♪ (P.127 Table 1)	
Clip	0 ~ 10	Adds emphasis by clipping the modulation waveform.
Shift	–12 ~ 12, 24	Adjusts the pitch shift in semitones.
Time	Delay, Echo: 1 ~ 2000 ms ♪ (P.127 Table 1)	Adjusts delay time.
	Doubling: 1 ~ 100 ms	
Feedback	0 ~ 100	Adjusts feedback amount.
Mix	0 ~ 100	Adjusts mix ratio of effect sound to original sound.
Tone	0 ~ 10	Adjusts tonal quality.
Fine	–25 ~ 25	Adjusts the pitch shift in cents (1/100 semitone).
Balance	0 ~ 100	Adjusts balance between original sound and effect sound.
Rise1	0 ~ 30	Adjusts stereo component intensity.
Rise2	0 ~ 30	Adjusts width including mono elements.
Freq OFST	1 ~ 30	Adjusts LFO offset.
Filter	HPF, LPF, BPF	Selects filter type.
Resonance	1 ~ 30	Adjusts resonance intensity.
EFX Level	0 ~ 100	Adjusts effect sound level.
Dry Level	0 ~ 100	Adjusts original sound level.

• ZNR module

Type	Parameters
ZNR	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

Effect types and parameters 10

Table 1 Parameters marked with ♪ allow values to be set in note units, using the song/pattern tempo as reference. The note durations for the setting values are shown below.

𝅘𝅥𝅯	32nd note	𝅘𝅥𝅯.	Dotted 16th note	𝅘𝅥𝅮.	Dotted 8th note	♩×2	Delay, Analog Delay and Echo can use up to x8. Reverse Delay can use up to x4.
𝅘𝅥𝅰	16th note	𝅘𝅥𝅮	8th note	♩	Quarter note	:	
♩3	Quarter note triplet	𝅗𝅥3	Half note triplet	𝅗𝅥.	Dotted quarter note	♩×20	

NOTE

• The note range actually available depends on the parameter.

• Depending on the combination of tempo setting and selected note symbol, the parameter variation range could be exceeded. In such a case, the value is automatically halved (or set to 1/4 if the range is still exceeded).

Table 2

Setting	Explanation
Off	Frequency does not change.
Up	Frequency changes from minimum to maximum along with the controlling waveform.
Down	Frequency changes from maximum to minimum along with the controlling waveform.
Hi	Frequency changes from patch setting to maximum along with the controlling waveform.
Lo	Frequency changes from minimum to patch setting along with the controlling waveform.

Table 3

Setting	Explanation	Setting	Explanation
Up Saw	Rising sawtooth wave	**Tri**	Triangular wave
Up Fin	Rising fin wave	**TrixTri**	Squared triangular wave
DownSaw	Falling sawtooth wave	**Sine**	Sine wave
DownFin	Falling fin wave	**Square**	Square wave

Table 4

Setting	Explanation	Setting	Explanation
♪	8th note	**1 bar**	1 measure
♩	Quarter note	**2 bars**	2 measures
𝅗𝅥	Half note	**3 bars**	3 measures
𝅗𝅥.	Dotted half note	**4 bars**	4 measures

Table 5

Setting	Explanation
1	1 semitone lower → original sound
2	Original sound → 1 semitone lower
3	Doubling → detune + original sound
4	Detune + original sound → doubling
5	Original sound → 1 octave higher
6	1 octave higher → original sound
7	Original sound → 2 octaves lower
8	2 octaves lower → original sound
9	1 octave lower + original sound – 1 octave higher + original sound
10	1 octave higher + original sound – 1 octave lower + original sound
11	Complete fifth down + original sound → complete fourth up + original sound
12	Complete fourth up + original sound → complete fifth down + original sound
13	0 Hz + original sound – 1 octave up
14	1 octave up – 0 Hz + original sound
15	0 Hz + original sound – 1 octave up + original sound
16	1 octave up + original sound – 0 Hz + original sound

Mastering algorithm

• COMP/Lo-Fi module

Type	Parameters							
3Band Comp	**Xover Lo**	**Xover Hi**	**Sense Hi**	**Sense Mid**	**Sense Low**	**Mix High**	**Mix Mid**	**Mix Low**
	Compressor that divides signal into 3 bands that can be compressed and mixed separately.							
Lo-Fi	For an explanation of types and parameters, see Stereo algorithm.							

Parameter Explanations

Parameters	Setting range	Explanation
Xover Lo	50 Hz ~ 16 kHz	Adjusts low-to-mid crossover frequency.
Xover Hi	50 Hz ~ 16 kHz	Adjusts mid-to-high crossover frequency.
Sense Hi	0 ~ 24	Adjusts high range compressor sensitivity.
Sense Mid	0 ~ 24	Adjusts mid range compressor sensitivity.
Sense Low	0 ~ 24	Adjusts low range compressor sensitivity.
Mix High	Off, –24 ~ 6	Adjusts high frequency range mix level.
Mix Mid	Off, –24 ~ 6	Adjusts mid frequency range mix level.
Mix Low	Off, –24 ~ 6	Adjusts low frequency range mix level.

Effect types and parameters 11

• NORMALIZER module

Type	Parameters	
Normalizer	Gain	
	Adjusts COMP/Lo-Fi module input level.	

Parameter Explanations

Parameters	Setting range	Explanation
Gain	–12 ~ 12	Adjusts level.

• 3BAND EQ module

Type	Parameters
3Band EQ	For an explanation of types and parameters, see Mic algorithm.

• DIMENSION/RESO module

Type	Parameters
Dimension	For an explanation of types and parameters, see Stereo algorithm.
Resonance	

• ZNR module

Type	Parameters
ZNR	For an explanation of types and parameters, see Clean/Crunch, Distortion, Aco/Bass SIM algorithms.

Send-return effect

• CHORUS/DELAY module

Type	Parameters					
Chorus	LFO Type	Depth	Rate	Pre Delay	EFX Level	
	Mixes a variable pitch-shifted component with the original sound, resulting in full-bodied resonating tone.					
Delay	Time	Feedback	Hi Damp	Pan	EFX Level	Rev Send
	Delay effect with a maximum setting of 2000 ms.					

Parameter Explanations

Parameters	Setting range	Explanation
LFO Type	Mono, Stereo	Sets LFO phase to mono or stereo.
Depth	0 ~ 100	Adjusts effect depth.
Rate	1 ~ 50	Adjusts modulation speed.
Pre Delay	1 ~ 30	Adjusts pre-delay time.
EFX Level	0 ~ 100	Adjusts effect sound level.
Rev Send	0 ~ 30	Adjusts delay sound reverb send level.
Time	1 ~ 2000 ms ♪ (P.127 Table 1)	Adjusts delay time.
Feedback	0 ~ 100	Adjusts feedback amount.
Hi Damp	0 ~ 10	Adjusts amount high-frequency range in delay sound is reduced.
Pan	Left10 ~ Left1, Center, Right1 ~ Right10	Adjusts delay sound panning.

• REVERB module

Type	Parameters					
Hall	Simulates the acoustics of a concert hall.					
Room	Simulates the acoustics of a room.					
	Pre Delay	Decay	EQ High	EQ Low	E.R.Mix	EFX Level
	Hall and Room have the same parameters.					
Spring	Simulates a spring reverb.					
Plate	Simulates a plate reverb.					
	Pre Delay	Decay	EQ High	EQ Low	EFX Level	
	Spring and Plate have the same parameters.					

Parameter Explanations

Parameters	Setting range	Explanation
Pre Delay	1 ~ 100	Adjusts pre-delay time.
Decay	1 ~ 30	Adjusts reverb time.
EQ High	–12 ~ 6	Adjusts volume of high-frequency range effect sound.
EQ Low	–12 ~ 6	Adjusts volume of low-frequency range effect sound.
E.R.Mix	0 ~ 30	Adjusts mix ratio of early reflections.
EFX Level	0 ~ 30	Adjusts effect sound level.

Effect patch list 1

Insert effect

Clean/Crunch algorithm

No.	Patch name	Description
0	**Z CLEAN**	ZOOM original unadorned clean sound
1	**Z CHORUS**	Sound combines "Z CLEAN" with "Chorus" for a clear sound that is great for arpeggios
2	**FdClean**	Clean-crunch sound of Fender Twin Reverb black panel loved by guitarists of various genres
3	**VxCrunch**	British crunch sound of a VOX AC30 operating in Class A
4	**TWEED**	Fender Bassman recreation dry crunch sound with a suitable amount of sustain
5	**BgCrunch**	Mesa/Boogie MKIII combo amp crunch sound
6	**HwLight**	Hiwatt Custom 100 from clean to crunch
7	**MsCrunch**	Marshall 1959 crunch sound becomes cleaner as the guitar volume is reduced
8	**HwCrunch**	Hiwatt Custom 100 fat crunch sound
9	**JM Lead**	Compressed lead sound of John Mayer's "Gravity"
10	**BS Riff**	Brian Setzer's rockabilly sound from the Stray Cats' "Rock This Town"
11	**BROTHER**	George Benson's unique fat jazz sound is mellow but with an attack
12	**Edge**	Bright and clean sound with U2 guitarist The Edge's finely calculated delay added
13	**ClnStep**	Special effect sound that imagines water using "Z CLEAN" and "Step"
14	**CutPhase**	Phase sound with great attack is perfect for cutting guitar and other playing techniques
15	**Ambient**	Combination of "Slow Attack" and delay to create an ambient sound
16	**Space**	Combination of "Reverse Delay" and phaser creates a clean sound with width
17	**FdComp**	Fender Twin Reverb and compressor clean sound great for cutting guitar
18	**Fd Wah**	Auto-wah patch with the natural distortion of an FD Combo amp added as the secret ingredient
19	**60sSPY**	Bizarre sound similar to a 60's spy movie
20	**Flower**	Combination of phaser and "Vibe" crates a psychedelic worldly sound
21-29	**Empty**	

Distotion algorithm

No.	Patch name	Description
0	**MsDrive**	Marshall 1959 drive sound that follows volume changes and provides outstanding dynamics
1	**MdRhythm**	Marshall JCM2000 sound for backing parts is very heavy, but still has the unique Marshall character
2	**PvRhythm**	Peavey 5150 backing part sound with bite that stands out when riffing fast
3	**DzRhythm**	Diezel Herbert sound for heavy backing parts
4	**Recti**	Unique powerful thick sound of the MESA/BOOGIE Rectifier
5	**FullVx**	Sound of Vox AC30 at full volume with room reverb that creates a boxy feeling.
6	**TexasMan**	Texas blues sound of a Fender Bassman with the volume all the way up
7	**BgLead**	MESA/BOOGIE MKIII beautiful drive sound great for lead play with long sustain
8	**FatOd**	Natural overdriven sounds like OD-1 with EQ and can be used backing part and solos
9	**TsDrive**	Tube Screamer overdrive good for all around use
10	**GvDrive**	Guv'nor pedal is great for hard rock sound
11	**dist+**	Drive sound with distortion
12	**DS1**	DS-1 sound modified with extra low end
13	**RAT**	Well sustained lead sound of RAT
14	**FatFace**	Fuzz sound with enhanced FUZZ FACE low end
15	**MuffDrv**	BIG MUFF high gain sound
16	**M World**	Shrapnel-style guitarist sound using Metal Zone
17	**HOT DRV**	Mild driven sound with the tube saturation of HOT BOX tubes
18	**Z NEOS**	Recreation of modified VOX AC30 creamy crunch sound.
19	**Z WILD**	ZOOM's original hard overdrive sound with extra boost creates a compressed feeling
20	**Z MP1**	Hybrid sound from combination of ADA MP1 and Marshall JCM800
21	**Z Bottom**	ZOOM original high gain sound with rich mids and lows that is great for 80's metal
22	**Z DREAM**	ZOOM original high gain sound great for leads
23	**Z SCREAM**	ZOOM original high gain sound with balanced low to high frequencies that cuts through mix
24	**LEAD**	ZOOM's classic lead sound with strong mid-boost and long sustain necessary for soloing
25	**EXT DS**	Extreme digital distortion that pushes the limits
26	**EC LEAD**	Recreation of Eric Clapton's "Layla" lead Fender crunch sound is great sound for guitars with single-coil pickups.
27	**JimiFuzz**	Jimi Hendrix phase sound simulates Octavia using pitch-shifting
28	**DT Slide**	Tight tube-amp sound of ''Leaving Trunk" by Derek Trucks
29	**KC Solo**	Nirvana "Smells Like Teen Spirit" sound

Effect patch list 2

30	**Every BG**	Buddy Guy's blues sound is dry and overdriven and adds color to any blues lick
31	**EVH1959**	Early Eddie Van Halen sound
32	**BrianDrv**	Brian May drive sound recreated using "Z Neos"
33	**RitchStd**	Sound that Deep Purple's Ritchie Blackmore used recording "Machine Head"
34	**Carlos**	Smooth sound used by Carlos Santana in album recording recreated using "BG Crunch"
35	**PeteHW**	Pete Townshend crunch sound using Hiwatt with clean amp turned all the way up for a powerful tone
36	**JW Talk**	Recreation of the talkbox sound used by Joe Walsh in his "Rocky Mountain Way" solo
37	**Kstone**	Keith Richards's classic intro sound can be heard in The Rolling Stones' "Satisfaction"
38	**RR Mtl**	80's Metal sound with distinctive midrange based on the Metal Zone
39	**SV LEAD**	Stack sound that boldly cuts through the midrange is good for huge guitar solos
40	**Monster**	Weird tone that mixes a heavy sound with doubling an octave down
41	**FatMs**	Drive sound with detuning added to thicken the sound is great for power chords and backing parts
42	**SlowFlg**	Jet sound combining slow attack with flanger
43	**DmgFuzz**	Psychedelic tone that adds ring modulator to fuzz sound that drastically cuts low frequencies
44	**RectiWah**	Bold high gain sound with auto-wah and a short delay added
45-49	**Empty**	

Aco/Bass SIM algorithm

No.	Patch name	Description
0	**Ensemble**	Gorgeous sound with deep ensemble effect.
1	**Delay LD**	Lively acoustic guitar sound for lead playing.
2	**Chorus**	Chorus sound suitable for everything from rhythm guitar to lead guitar.
3	**FineTune**	Detuning increases sonic depth.
4	**Air Aco**	Air sound makes it sound like recording with a mic.
5	**Standard**	Standard bass sound with many uses.
6	**CompBass**	Bass sound comes alive with compressor and exciter.
7	**WarmBass**	Bass sound with warm and round feeling.
8	**Flanging**	Flanging sound covers a lot of ground from 16-beat phrases to melody playing.
9	**Auto Wah**	Funky bass sound that makes good use of auto wah.
10-19	**Empty**	

Bass algorithm

No.	Patch name	Description
0	**SVT**	Royal rock sound great for finger-picking and flatpicking.
1	**BASSMAN**	Vintage rock sound for any occasion.
2	**HARTKE**	Hartke simulation with all the glitz and glitter.
3	**SUPER-B**	Great for guitar unison riffing and solo play.
4	**SANS-A**	Edgy sound with a strong core that is a good match for flatpicking.
5	**TUBE PRE**	All-around tube sound.
6	**Attack**	Compression sound effective for slap and flatpick playing.
7	**Wah-Solo**	Solo sound with distortion and a touch of wah. Pitch shifting is the secret ingredient.
8	**Talk&Cry**	Typical special effect that makes a crying sound like a talking modulator.
9	**Melody**	Chorus sound for melody, solo, chord and harmonic playing.
10	**SlapJazz**	Basic slap sound in the jazz bass style.
11	**Destroy**	Smashing sound mixing distortion, pitch shifting and ring modulation.
12	**Tremolo**	Great match for moody bass lines and chord playing.
13	**SoftSlow**	Melody or solo play tone that is great for fretless bass.
14	**Limiter**	Limiter evens out the sound when using a pick.
15	**X'over**	Flanger sound for picking, typical of the crossover genre.
16	**CleanWah**	Auto wah sound that has many uses.
17	**Exciter**	All-around sound with a fresh and transparent character.
18	**ClubBass**	Sound that simulates the ambience of a small club and is suitable for walking bass lines.
19	**DriveWah**	Auto wah sound with variable drive that follows picking dynamics.
20-29	**Empty**	

Mic algorithm

No.	Patch name	Description
0	**Rec Comp**	Conventional preamp and compression sound for recording.
1	**RoomAmbi**	Simulates the ambience of a radio station studio.
2	**VocalDly**	Delay effect that works best with wet vocals. .
3	**Rock**	Heavy compression sound for rock vocals

Effect patch list 3

4	**Long DLY**	Long delay sound for vocals (2-beat at 120 bpm)
5	**InTheBox**	This effect seems to put the entire sound into a small box
6	**Limiter**	Limiter effect that is very useful for recording
7	**AG MIC**	Preamp tone that is great for recording acoustic guitar
8	**AG Dub**	Doubling sound that gives a stroke more of a pick feeling
9	**12st Cho**	Chorus sound for 12-string guitar
10	**AG-Jumbo**	Increases the apparent body size of an acoustic guitar
11	**AG-Small**	Reduces the apparent body size of an acoustic guitar
12	**AG Lead**	Delay sound for acoustic guitar leads
13	**Live AMB**	Bright reverb sound for acoustic guitar increases live feeling
14	**Tunnel**	Simulation of tunnel reverb
15	**Filter**	Filter effect lets you change the sound character during a song, for example.
16	**BrethCmp**	Fairly strong compressor sound emphasizes breathiness
17	**Vib MOD**	Crafty vocal sound combines phaser and vibrato
18	**Duet Cho**	Detuned sound creates an instant duet
19	**Ensemble**	Fresh ensemble sound great for chorus
20	**VocalDub**	Conventional doubling sound
21	**Sweep**	Voice sound with slow phase sweep
22	**VoiceFlg**	Flanging chorus sound with strong modulation
23	**PH Voice**	Gimmicky phase sound seasoned with delay
24	**VibVoice**	Clear-cut vibrato sound
25	**FutureVo**	A message from the aliens
26	**M to F**	Transforms male vocals into a female sound
27	**F to M**	Transforms female vocals into a male sound
28	**WaReWaRe**	Special effect sounds like a talking spaceman
29	**Hangul**	Special effect makes Japanese sound like Korean
30-49	**Empty**	

Dual Mic algorithm

No.	Patch name	Description	Suggested left/right inputs
0	**Vo/Vo 1**	For duets	Vocals
1	**Vo/Vo 2**	Chorus for main vocals	Vocals
2	**Vo/Vo 3**	For harmony singing	Vocals
3	**AG/Vo 1**	Creates a story-like character	Acoustic guitar/Vocal
4	**AG/Vo 2**	Similar to AG/Vo 1 but vocal character different	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**	Condenser mic sound for a man on L channel and a woman 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 mono radio	Vocals
13	**Pavilion**	For narration that captures sound of demonstration at an exposition booth	Vocals
14	**TV News**	TV newscaster sound	Vocals
15	**F-Vo/Pf1**	For female pop vocal piano ballads	Vocal/Piano
16	**JazzDuo1**	Simulates jazz session LP with slightly lo-fi sound	Vocal/Piano
17	**Cntmprry**	All-around sound with distinct variation	Vocal/Piano
18	**JazzDuo2**	JazzDuo 1 for male vocals	Vocal/Piano
19	**Ensemble**	For balance of guitar with strong attack and mellow piano	Acoustic guitar/Piano
20	**Enhanced**	Emphasizes sound characteristics, optimal for ballads	Acoustic guitar/Vocal
21	**Warmy**	Moderates overbright tone	Acoustic guitar/Vocal
22	**Strum+Vo**	Smooth fat sound with midrange enhancement	Acoustic guitar/Vocal
23	**FatPlus**	Augments weak 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 acoustic guitar duos	Acoustic guitars
29	**Bright**	Bright, sharp, global feeling	Acoustic guitars
30-49	**Empty**		

Effect patch list 4

Stereo algorithm

No.	Patch name	Description
0	**Syn-Lead**	For single-note synthesizer 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 bass drum more power
8	**DrumFlng**	Conventional flanger for drums
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-frequency range
13	**Mono->St**	Gives spaciousness to a mono source
14	**AM Radio**	AM radio simulation
15	**WideDrum**	Wide stereo effect for (built-in) drum machine tracks
16	**DanceDrm**	Reinforces bass frequencies for dance rhythms
17	**Octaver**	Adds sound one-octave lower
18	**Percushn**	Gives air, presence, and stereo spread to percussion
19	**MoreTone**	Increases midrange frequencies, giving more body to distorted guitar
20	**SnrSmack**	Emphasizes snappiness of 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**	Gives synthesizer powerful special effect sound
26	**SynLead2**	Old-style jet sound for synthesizer lead
27	**Tekepiko**	For sequenced phrases or single-note muted guitar
28	**Soliner**	Simulates analog strings ensemble
29	**HevyDrum**	For hard rock drums
30	**SM57Sim**	Simulation of SM57 mic, which is great for recording electric guitars and other analog instruments.
31	**MD421Sim**	Simulation of MD421 professional standard mic that is indispensable in broadcasting, recording and live.
32	**U87Sim**	Simulation of U87, a condenser microphone that sets standards and is used in studios worldwide.
33	**C414Sim**	Simulation of C414, a famous microphone highly trusted in recording situations.
34	**Doubling**	Doubles the entire sound for thickness
35	**ShortDLY**	Delay sound suitable for vocals and field recordings that has a gimmicky effect
36	**Lo-Fi**	Creates lo-fi sound with a retro feeling as if coming from a radio
37	**Limiter**	A limiter very effective on band rehearsals and live recording
38	**BoostPls**	Adds overall sound pressure during recording
39	**All Comp**	Compressor evens out volume differences between instruments in a band performance, for example
40-49	**Empty**	

Effect patch list 5

Mastering algorithm

No.	Patch name	Description
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**	For a powerful low range
6	**Live**	Adds a live feel
7	**WarmMst**	Adds a warm feeling
8	**TightUp**	Adds a tight feeling
9	**1930Mst**	Mastering with 1930's sound
10	**LoFi Mst**	Lo-fi mastering
11	**BGM**	Mastering for background music
12	**RockShow**	Gives a rock style mix a live feel
13	**Exciter**	Lo-fi effect with slight distortion in mid and upper range
14	**Clarify**	Emphasizes high-end range
15	**VocalMax**	Brings buried vocals to the foreground
16	**RaveRez**	Special sweep effect using sharp filter
17	**FullComp**	Strong compression over full frequency range
18	**ClearPWR**	Power tuning emphasizes midrange and adds sound pressure and clarity
19	**ClearDMS**	Enhances clarity and spaciousness
20	**Maximizr**	Boosts overall sound pressure level
21-29	**Empty**	

Effect patch list 6

Send-return effects

REVERB

No.	Patch name	Description
0	TightHal	Hall reverb with a hard tonal quality
1	BrgtRoom	Room reverb with a hard tonal quality
2	SoftHall	Hall reverb with a mild tonal quality
3	LargeHal	Simulates the reverberation of a large hall
4	SmallHal	Simulates the reverberation of a small hall
5	LiveHous	Simulates the reverberation of a club
6	TrStudio	Simulates the reverberation of a rehearsal studio
7	DarkRoom	Room reverb with a gentle tonal quality
8	VcxRev	Tuned to enhance vocals
9	Tunnel	Simulates the reverberation of a tunnel
10	BigRoom	Simulates the reverberation of a gym-sized room
11	PowerSt.	Gate reverb
12	BritHall	Simulates the bright reverb of a concert hall
13	BudoKan	Simulates the reverberation at the Budokan in Tokyo
14	Ballade	For slow ballads
15	SecBrass	Reverb for brass section
16	ShortPla	Reverb with a short release
17	RealPlat	Plate reverb simulation
18	Dome	Reverb simulates playing in a domed-stadium
19	VinSprin	Simulates analog spring reverb
20	ClearSpr	Clear reverb with short reverb time
21	Dokan	Simulates the reverberation of a clay pipe
22-29	Empty	

CHORUS/DELAY

No.	Patch name	Description
0	ShortDLY	Standard short delay
1	GtChorus	Chorus to enhance weak guitar sound
2	Doubling	Versatile doubling
3	Echo	Showy analog-style delay
4	Delay3/4	Dotted-8th-note delay in sync with tempo
5	Delay3/2	Dotted-quarter-note delay in sync with tempo
6	FastCho	Fast-rate chorus
7	DeepCho	Versatile deep chorus
8	Vocal	Chorus that enhances vocals
9	Deep dB L	Deep doubling
10	SoloLead	Keeps fast phrases tight
11	WarmyDly	Simulates warm analog delay
12	EnhanCho	Enhancer that uses phase-shifted doubling
13	Detune	For instruments with strong harmonics such as a digital electronic piano or synthesizer
14	Natural	Chorus with low modulation suitable for backing parts
15	Whole	Whole-note delay in sync with tempo
16	Delay2/3	Quarter-note triplet delay in sync with tempo
17	Delay1/4	16th-note delay in sync with tempo
18-29	Empty	

Error message list

If you see a message like "---Error" push the EXIT key. When other errors and messages occur, they will automatically disappear in three seconds.

Message	Meaning	Response
Messages that indicate something is missing		
No Card	There is no card inserted.	Make sure that an SD card is inserted correctly.
No Project	There is no project.	Check that the project has not been deleted or moved to a different place.
No File	There is no file in the project.	Check that the file has not been deleted or stored in a different place.
Messages that are shown frequently		
Reset DATE/TIME	Setting lost because the batteries died.	Set the DATE/TIME again. (See "Setting the date & time" on P.14.)
Low Battery!	Time to change the batteries.	Change batteries or connect the adapter.
Stop Recorder	The function you tried cannot be accessed during playback/recording.	Stop the recorder first, and then try again..
Messages that indicate the object is protected		
Card Protected	The SD card is protected.	Eject the SD card, unlock its write-protection and then insert it again. See "SD card installation" on P.13.)
Project Protected	The project is protected.	Disable using the PROTECT menu. (See "Protecting and selecting projects" on P.91.)
File Protected	This file is read-only, so you cannot write to it.	Disable the read-only status of the file using a computer, for example.
Messages that indicate the capacity or structural limit has been exceeded		
Card Full	The card is full.	Change to a new card or delete unneeded data.
Project Full	No more projects can be saved on the card.	Delete unneeded projects.
File Full	The maximum number of files has been reached.	Delete unneeded files.
Messages that indicate access failure		
Card Access Error	Unable to read or write to the card.	Press **EXIT** and try the operation again.
Project Access Error	Unable to read or write to the project.	Press **EXIT** and try the operation again.
File Access Error	Unable to read or write to the file.	Press **EXIT** and try the operation again.
Card Format Error	This card is not in a format the ***R8*** can use.	Change the card format to one that the unit can use.
File Format Error	This file is not in a format the ***R8*** can use.	Change the file format to one that the unit can use.
Other error messages		
Card Error	An error of some kind is occurring.	Press **EXIT** and try the operation again.
Project Error		
File Error		

Troubleshooting

If you think there is a problem with the operation of the **R8**, check the following tips first.

Problems during playback

◆ No sound, or sound is very weak

- Check the connections with the monitoring system and its volume settings.
- Make sure that status indicators in the mixer section are lit green and that their faders are raised. If a track's indicator is not green, press its key repeatedly until it lights green.
- Make sure that the [MASTER] status key is not lit and that the [MASTER] fader is raised.

◆ Moving 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 (see P.29), or use the fader of the odd-numbered channel in the pair.

◆ Input signal cannot be heard or is very weak

- Make sure that the **GAIN** control for that input is turned up.
- Check that the status light is green (playback enabled) and that the fader of the track is raised.

◆ An operation does not work and the message “Stop Recorder” is shown on the display

- Some operations are not possible while the recorder is operating. Press the **STOP** key to stop the recorder and then conduct the operation.

Problems during recording

◆ Cannot record on a track

- Make sure that you have selected a track for recording.
- Check whether you have run out of free space on the SD card (see P.111).
- Recording is not possible if the project is protected. Either set “PROTECT” to “OFF” (see P.91), or use a different project.

◆ The recorded sound is distorted

- Make sure that the input **GAIN** knobs and recording levels are not set too high.
- Lower the faders so that the level meters do not reach 0 dB.
- If EQ gain in the track mixer is set extremely high, the sound may be audibly distorted even if the fader is lowered. Lower EQ gain to a suitable value.
- If an insert effect is applied to an input, check whether the effect output level (patch level) setting is suitable.

Problems with effects

◆ Insert effect is not working

- Check that the insert effect [INS] icon is shown on the display. If it is not shown, press the **EFFECT** key, then press the INSERT soft key and set ON/OFF to On.
- Make sure that the insert effect is inserted in the desired location (See P.23, 45, 46 and 80)

◆ Send-return effect is not working

- Confirm that the REV or CHO icon is shown on the display. If it is not shown, press the **EFFECT** key, then press the REVERB or CHORUS soft key and set ON/OFF to On.
- Make sure that the send levels for the tracks are raised (see P.44 and 82).

Other problems

◆ Cannot save a project

- The project cannot be saved if the project is protected. Set “PROTECT” to “Off” (see P.91).

◆ Cannot create a new project or copy a project

- If “Project Full” appears on the display, no more projects can be created on the card. Delete unneeded projects to free up memory.

◆ An error message is shown when attempting to execute a command

- Please check the error message list (see P.135).

Specifications

Section			R8
Recorder	Track count		8 (mono)
	Maximum number of simultaneous recording tracks		2
	Maximum number of simultaneous playback tracks		8 audio + metronome
	Recording format		44.1/48 kHz, 16/24-bit WAV format
	Maximum recording time		200 minutes/1 GB (mono tracks)
	Projects		1000
	Markers		100/project
	Locator		Hours/minutes/seconds/milliseconds and bars/beats/ticks
	File editing		Divide, trim
	Other functions		Punch-in/out (manual, auto), bounce, A-B repeat, undo/redo
Audio interface	Number of recording channels		2
	Number of playback channels		2
	Bit rate		24
	Sampling frequency		44.1, 48, 88.2, 96 kHz
Mixer	Faders		9 (mono × 8, master × 1)
	Track parameters		3-band equalizer, pan (balance), effect send ×2, invert
	Stereo link		Tracks 1/2 ~ 7/8 selectable in pairs
Effect	Algorithms		8 (CLEAN, DISTORTION, ACO/BASS SIM, BASS, MIC, DUAL MIC, STEREO, MASTERING)
	Patches		310 insert, 60 send-return
	Effect modules		7 insert , 2 send
	Tuner		Chromatic, guitar, bass, open A/D/E/G, D modal
Rhythm	Voices		8
	Sound format		16-bit linear PCM
	Drum kits		10
	Pads		8 (velocity-sensitive)
	Precision		48 ppqn
	Rhythm patterns		511/project
	Tempo		40.0 ~ 250.0 BPM
Sampler	Playback formats		44.1/48 kHz, 16/24-bit WAV format
	Editing functions		Trim, time-stretch
Hardware	Recording media		SD card (16MB ~ 2 GB), SDHC card (4 ~ 32 GB)
	Analog-digital conversion		96 kHz 24-bit delta-sigma ADC
	Digital-analog conversion		96 kHz 24-bit delta-sigma DAC
	Display		128×64 pixel LCD (with backlight)
	Inputs	INPUT 1 ~ 8	2 XLR/standard phone combo jacks Input impedance: (Balanced input) 1 KΩ balanced (2 hot) (Unbalanced input) 50 KΩ unbalanced (1 with Hi-Z, input impedance 470 kΩ (Hi-Z on), 2 with phantom power) Input level: -50 dBm < continuous < +4 dBm
		Built-in stereo mic pair	Omnidirectional condenser microphones Gain: -50 dBm < continuous < +4 dBm
	Phantom power		48 V, 24 V
	Outputs	OUTPUT	TRS phone type (balanced)
		PHONES	Standard stereo phone jack 20 mW x 2 (32 Ω load)
	S/N ratio		93 dB
	Control input		FS01
	USB		Mini-B type (USB 2.0 Hi-Speed):operation as audio interface/control surface and mass storage
	Power		DC 5V 1A AC adapter (ZOOM AD-17) 3 AA batteries (5.5-hour continuous operation time with backlight on and phantom power off)
	Dimensions		257 mm (W) × 190 mm (D) × 51 mm (H)
	Weight		780 g

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PDF: Audio Interface Manual (on SD card)

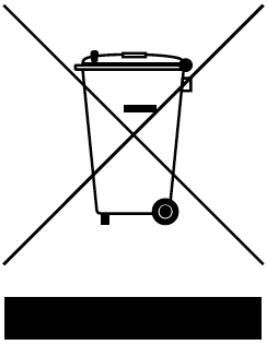
FCC regulation warning (for U.S.A.)

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 to an outlet on a circuit different from that the receiver is connected to.
- Consult the dealer or an experienced radio/TV technician for help.

For EU Countries

Declaration of Conformity:
This product complies with the requirements of
EMC Directive 2004/108/EC and
Low Voltage Directive 2006/95/EC
ErP Directive 2009/125/EC



Disposal of Old Electrical & Electronic Equipment

(Applicable in European countries with separate collection systems)

This symbol on the product or on its packaging indicates that this product shall not be treated as household waste. Instead it shall be handed over to the applicable collection point for the recycling of electrical and electronic equipment. By ensuring this product is disposed of correctly, you will help prevent potential negative consequences for the environment and human health, which could otherwise be caused by inappropriate waste handling of this product. The recycling of materials will help to conserve natural resources. For more detailed information about recycling of this product, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

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