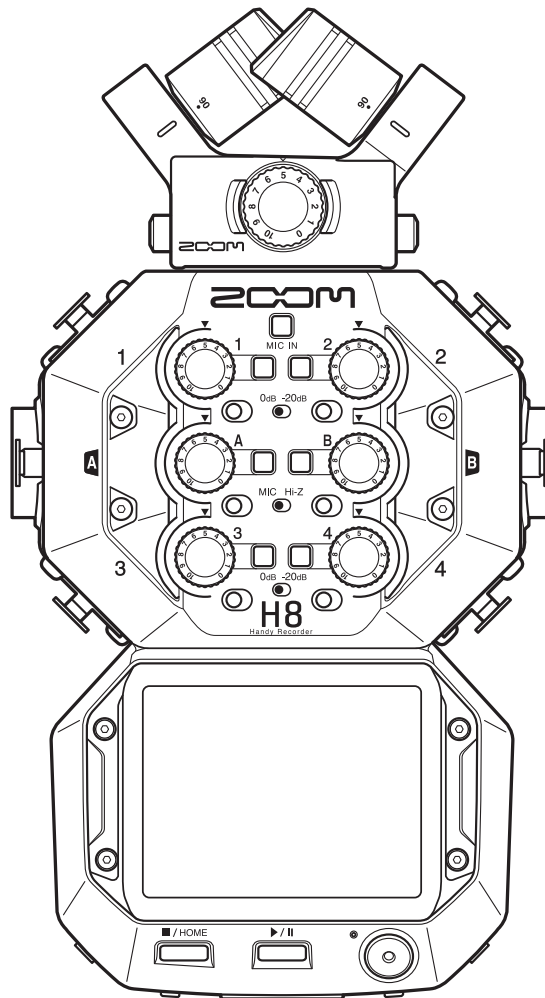


H8

Handy Recorder



Operation Manual

You must read the Usage and Safety Precautions before use.

© 2020 ZOOM CORPORATION

Copying or reprinting this manual in part or in whole without permission is prohibited.

Product names, registered trademarks and company names in this document are the property of their respective companies. All trademarks and registered trademarks in this document are for identification purposes only and are not intended to infringe on the copyrights of their respective owners.

Proper display is not possible on grayscale devices.

Notes about this Operation Manual

You might need this manual in the future. Always keep it in a place where you can access it easily.

The contents of this document and the specifications of the product could be changed without notice.

© Windows® is a trademark or registered trademark of Microsoft® Corporation.

© macOS and iPadOS are trademarks or registered trademarks of Apple Inc.

© The SD, SDHC and SDXC logos are trademarks.

© The Bluetooth® word mark and logo are registered trademarks of Bluetooth SIG, Inc. and these marks are used under license by Zoom Corporation. Other trademarks and trade names are the property of their respective companies.

© Other product names, registered trademarks and company names in this document are the property of their respective companies.

- All trademarks and registered trademarks in this document are for identification purposes only and are not intended to infringe on the copyrights of their respective owners.
- Recording from copyrighted sources, including CDs, records, tapes, live performances, video works and broadcasts, without permission of the copyright holder for any purpose other than personal use is prohibited by law. Zoom Corporation will not assume any responsibility related to infringements of copyrights.

Contents

| | | | |
|--|-----------|--|------------|
| Notes about this Operation Manual | 2 | Recording with the MUSIC app | 56 |
| H8 overview | 5 | Display overview | 56 |
| H8 apps | 5 | Creating new projects | 58 |
| Functions of parts | 8 | Opening existing projects..... | 60 |
| Mic capsule overview | 12 | Recording..... | 61 |
| Touchscreen operation overview | 13 | Playing recordings | 63 |
| Making preparations | 16 | Using effects..... | 64 |
| Supplying power | 16 | Using the metronome | 65 |
| Inserting SD cards | 17 | Assigning files to tracks..... | 70 |
| Turning the power on/off | 18 | Recording additional files..... | 73 |
| Preventing misoperation (HOLD function) | 18 | Mixing projects | 75 |
| Setting the display language (first time starting up) | 19 | Recording with the PODCAST app | 78 |
| Setting the date and time (first time starting up) | 19 | Display overview | 78 |
| Connecting | 20 | Recording..... | 80 |
| Connection examples | 20 | Playing recordings | 81 |
| Connecting/disconnecting the XY mic | 21 | Using sound pads | 83 |
| Connecting mics, instruments, mixers and other equipment | 23 | Making recording settings | 86 |
| Making input and output settings | 25 | Using effects | 89 |
| Making settings for input tracks | 25 | Selecting tracks and patch memories to use effects | 89 |
| Setting the headphone output level | 40 | Adjusting effect parameters | 93 |
| Adjusting connected equipment levels (playing test tones) | 41 | Making patch memory settings | 94 |
| Recording with the FIELD app | 43 | Managing projects | 98 |
| Display overview | 43 | Folder and file structure..... | 98 |
| Recording..... | 45 | Managing projects | 99 |
| Playing recordings | 47 | Using as an audio interface | 104 |
| Recording automatically | 48 | Connecting the H8 with a computer or iOS/iPadOS device | 104 |
| Capturing audio before recording starts (pre-recording) | 52 | Disconnecting from a computer or iOS/iPadOS device | 106 |
| Enabling the sound marker function | 53 | Making audio interface settings | 107 |
| Recording L/R tracks | 54 | Managing SD cards | 109 |
| | | Checking SD card information..... | 109 |
| | | Testing SD card performance | 110 |
| | | Formatting SD cards | 112 |
| | | Using as a card reader | 113 |
| | | Connecting the H8 with a computer | 113 |
| | | Disconnecting a computer from the H8 | 113 |

| | |
|---|------------|
| Using the tuner | 114 |
| Tuning guitars | 114 |
| Changing the tuner type..... | 115 |
| Setting the standard pitch of the tuner | 116 |
| Using flat tunings | 117 |
| Using Guitar Lab | 119 |
| Connecting Guitar Lab..... | 119 |
| Disconnecting Guitar Lab..... | 119 |
| Setting the date and time | 120 |
| Setting the date and time..... | 120 |
| Setting the date format | 121 |
| Setting the battery type | 123 |
| Setting how marks are added when recording/playing | 124 |
| Making display settings | 125 |
| Setting the display brightness | 125 |
| Setting the display backlight | 126 |
| Operating from an iOS/iPadOS device | 128 |
| Connecting an iOS/iPadOS device | 128 |
| Disconnecting from an iOS/iPadOS device..... | 129 |
| Setting the language shown..... | 130 |
| Restoring default setting values | 131 |
| Managing the firmware | 132 |
| Checking the firmware versions..... | 132 |
| Updating the firmware | 132 |
| Appendix | 133 |
| Troubleshooting..... | 133 |
| Specifications | 135 |

H8 overview

H8 apps

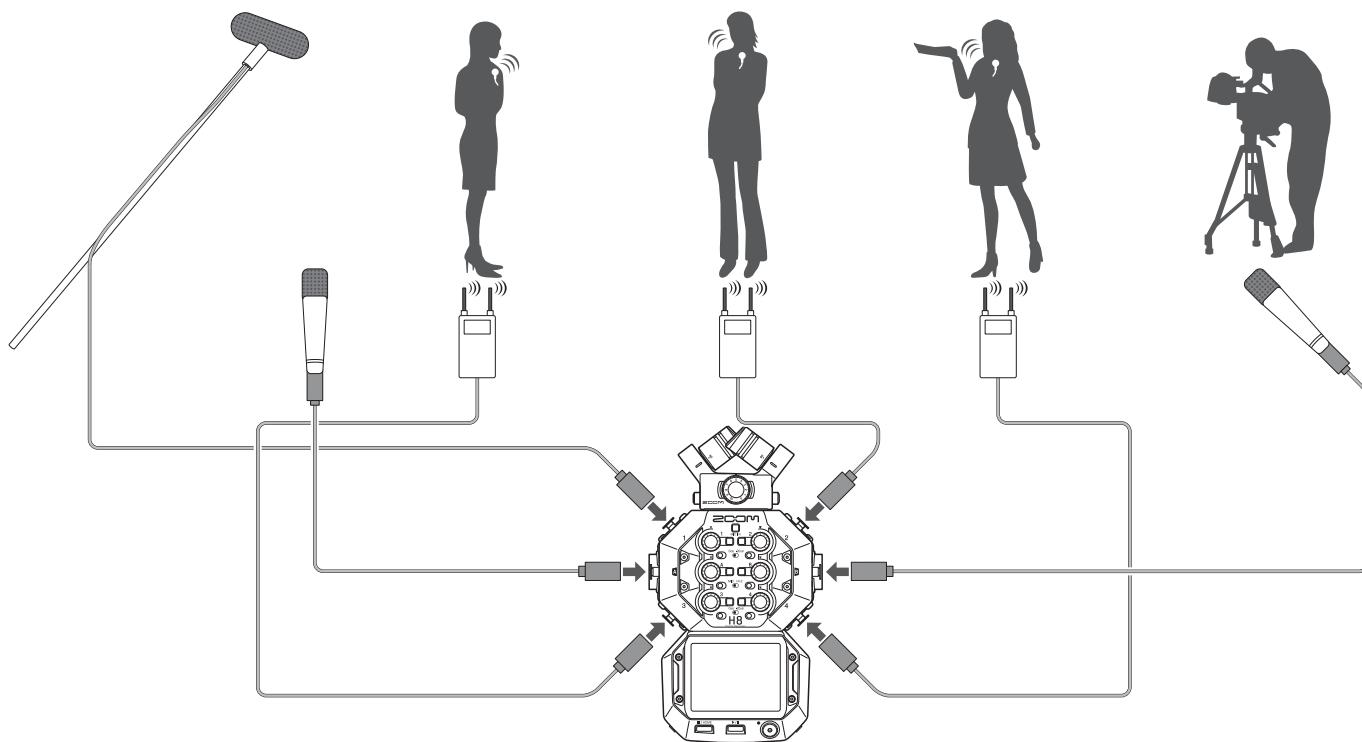
The **H8** includes three recording apps designed for different types of recording.

FIELD app

Use this when field recording with the XY mic.

This app is also good for capturing sound for movies and videos as well as recording live concerts, for example, using external mics.

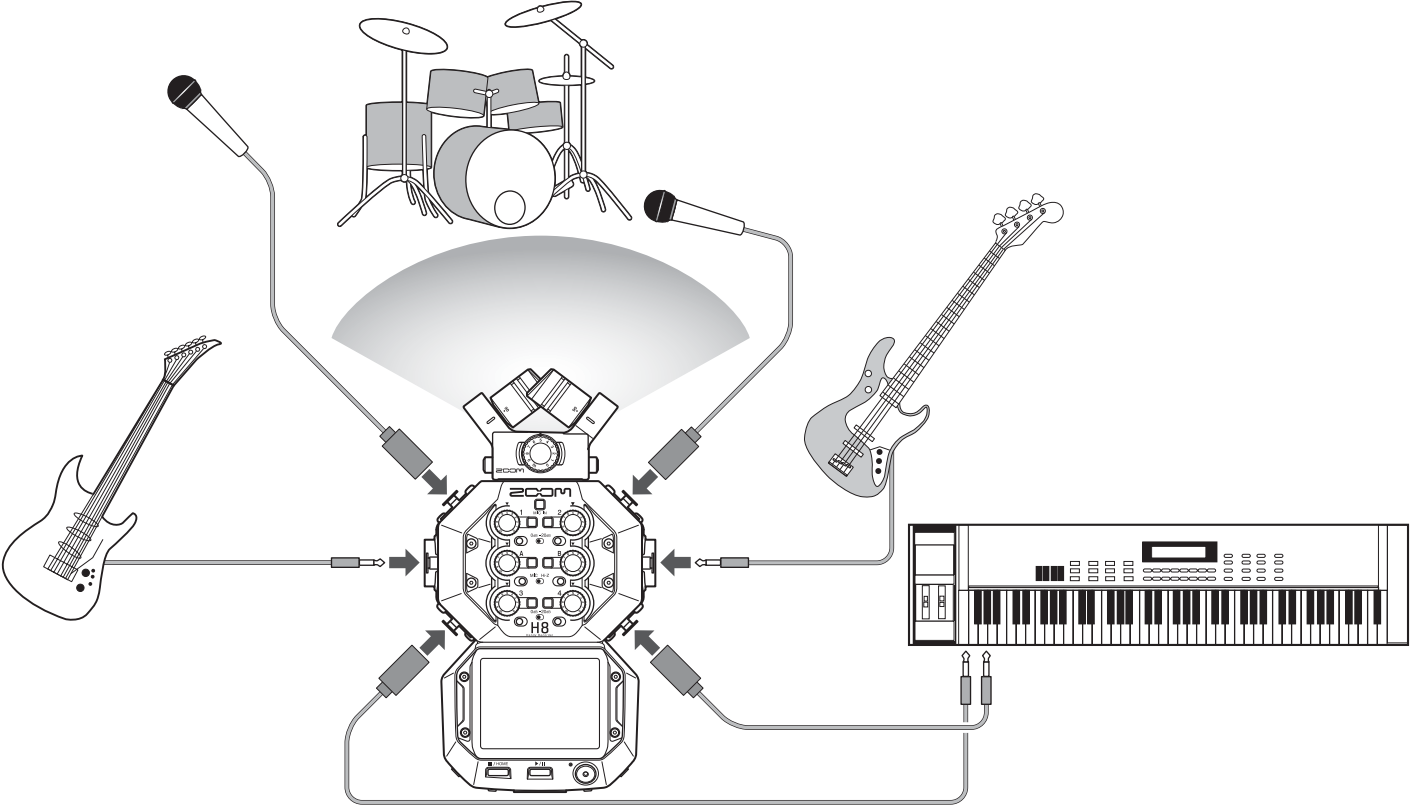
Use example



MUSIC app

Use this when making music. In addition to punch-in/out functions for vocals and instruments, this app can also mix down multiple tracks with level and panning settings.

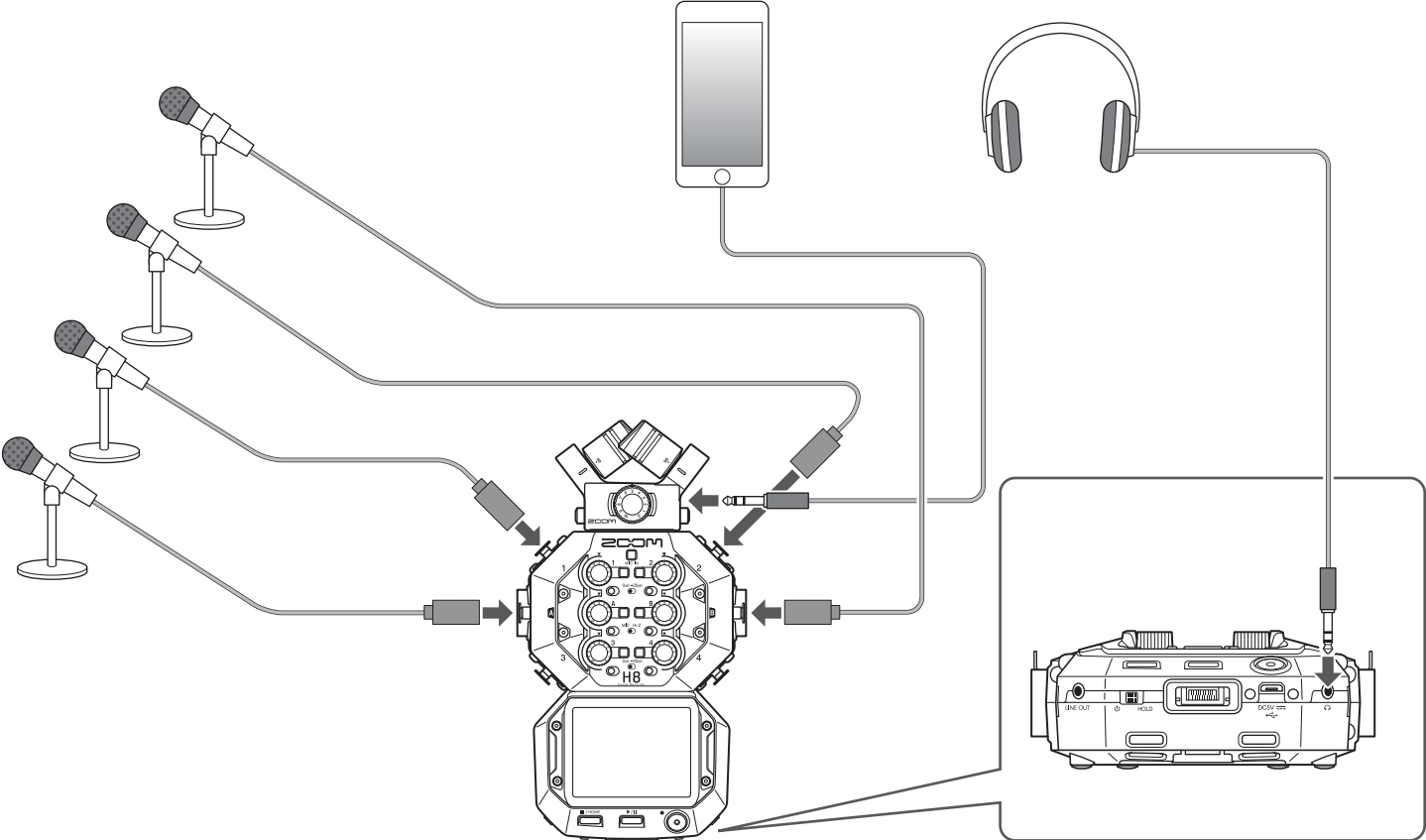
Use example



PODCAST app

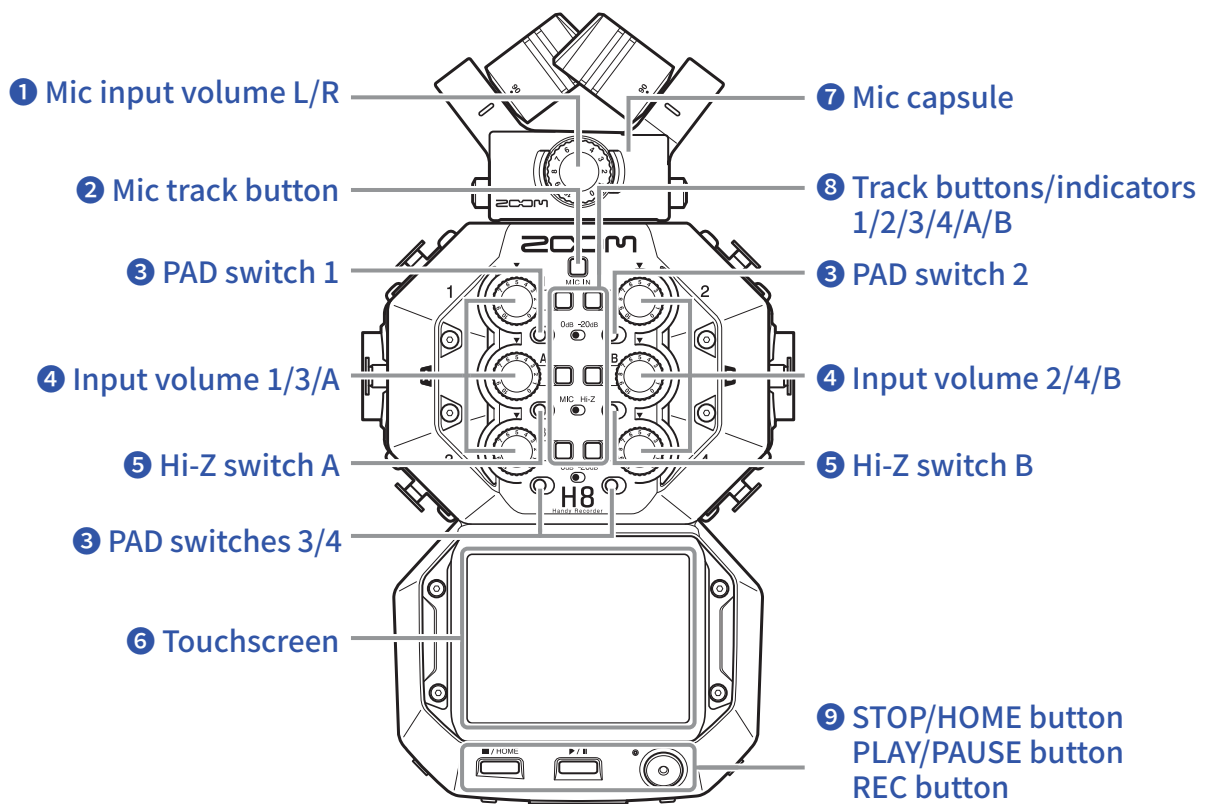
This app is good for preparing audio materials for podcasts as well as live streaming. Sound pads can be used to play jingles and special effects, for example, with a single touch.

Use example



Functions of parts

Front



1 Mic input volume L/R

Use to adjust the mic input volume.

2 Mic track button

This turns the mic track on and off.

3 PAD switches 1-4

These attenuate (reduce) the input signals of equipment connected to inputs 1-4 by 20 dB. Set PAD switches to -20dB when connecting line level equipment.

4 Input volume knobs 1/2/3/4/A/B

Use to adjust input volumes.

5 Hi-Z switches A/B

Use to switch the impedances of inputs A/B.

Set Hi-Z switches to Hi-Z when connecting a guitar or bass guitar.

6 Touchscreen

This shows various types of information and allows touch control of unit settings and other features.

7 Mic capsule

This can be swapped for different applications.

8 Track buttons/indicators 1/2/3/4/A/B

These turn input tracks on and off.

They also light red and green to show track status. They blink rapidly when input sound levels are high.

9 STOP/HOME button

Press to stop file playback and to open the Home Screen or the top screen of an app.

PLAY/PAUSE button

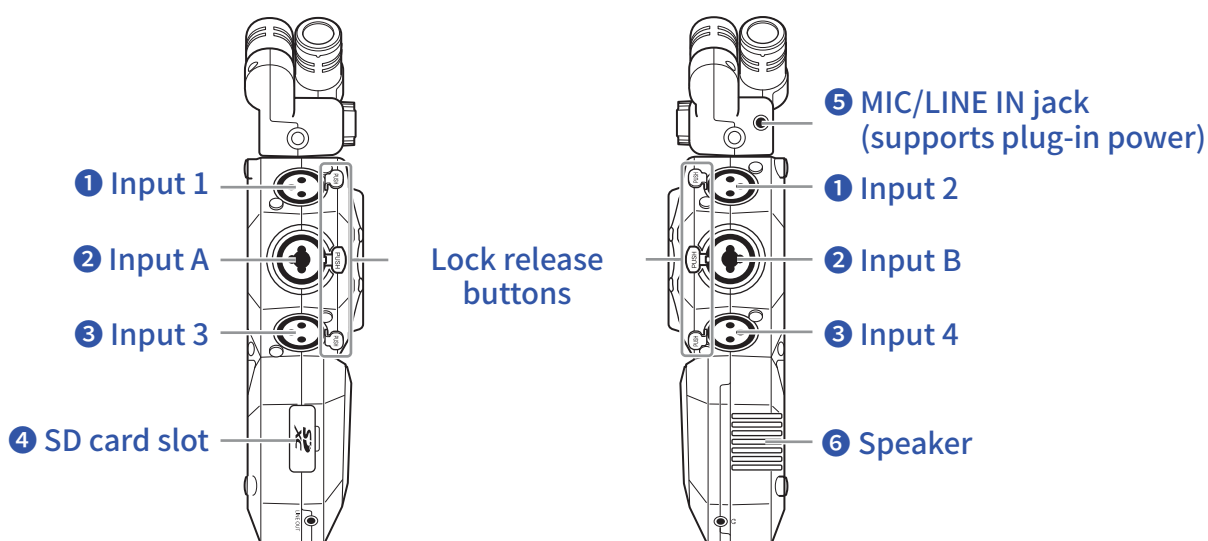
Press to start/pause playback of recorded files.

REC button

Press to start recording.

Left side

Right side



1 Inputs 1/2

Connect mics and keyboards to these. These support XLR Plug connectors.

2 Inputs A/B

Connect mics, keyboards and guitars to these. These support XLR and 1/4-inch phone (unbalanced) plugs.

3 Inputs 3/4

Connect mics and keyboards to these. These support XLR Plug connectors.

4 SD card slot

The **H8** supports cards that conform to SD, SDHC or SDXC specifications.

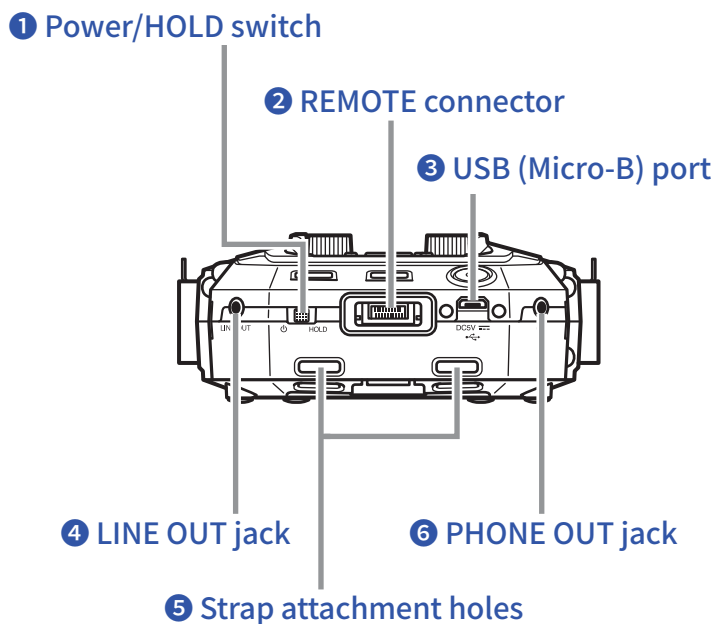
5 MIC/LINE IN input jack (supports plug-in power)

A connected mic can be used to record. Mics that require plug-in power can be used with this jack.

6 Speaker

Sound is output here during project playback.

Bottom



1 Power/HOLD switch

Use this to turn the power ON/OFF and to disable button operation.

2 REMOTE connector

Connect a BTA-1 or other dedicated wireless adapter here. This enables operation of the **H8** from an iOS/iPadOS device using a dedicated controller app.

3 USB (Micro-B) port

Connect this to a computer or iOS/iPadOS device to use the **H8** as an audio interface or card reader. By using Guitar Lab on a computer, you can also manage patches and edit and add effects, for example. A dedicated AC adapter (ZOOM AD-17) can also be connected here to use AC power.

4 LINE OUT jack

This can output sound to a connected device.

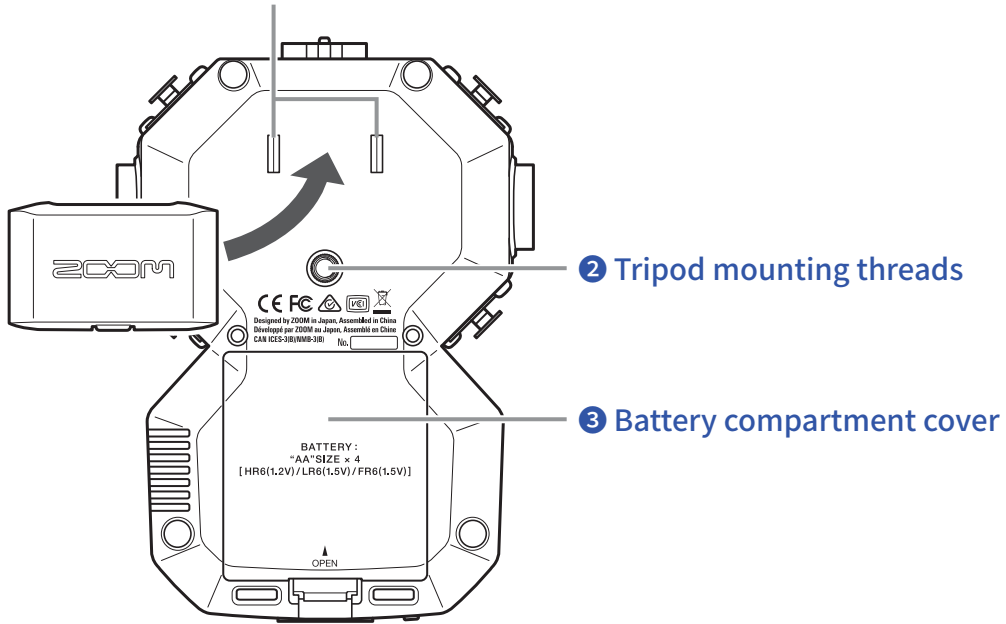
5 Strap attachment holes

Use these to attach a strap.

6 PHONE OUT jack

This can output sound to headphones.

① Mic connector cap attachment points



① Mic connector cap attachment points

Use these when attaching a mic connector cap.

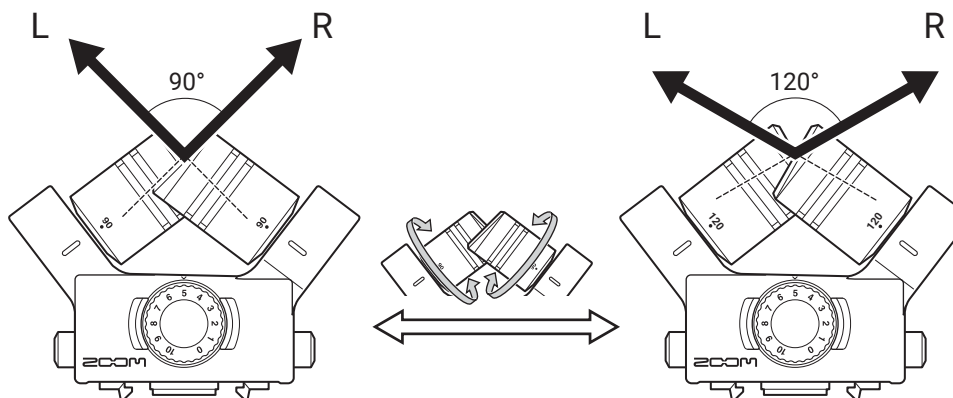
② Tripod mounting threads

Use these screw threads to attach a tripod (not included).

③ Battery compartment cover

Remove when installing or removing batteries.

Mic capsule overview



The **H8** includes a mic capsule (XY mic).

The XY mic capsule has two crossing directional mics. By rotating the individual mics, the width of audio capture can be switched from 90° to 120°.

Features:

Since these mics have large diaphragms, they can record a range of frequencies from low to high with good stereo placement while capturing sounds in the center clearly.

Providing a three-dimensional sound with natural depth and width, this technique is ideal for recording when you want to capture a specific sound source that is nearby or at a medium distance.

Use examples: solo performances, chamber music, live rehearsals, field recording

NOTE

The XY mic has a MIC/LINE IN input jack that can be used to connect an external mic or line-level device. This jack can also provide plug-in power to mics that use it. (→ [page 27](#))

Touchscreen operation overview


Tap, swipe and slide on the **H8** touchscreen to make settings and select functions to adjust.

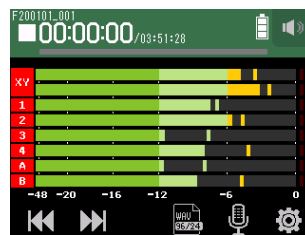
Home Screen


This appears on the touchscreen when the **H8** power is turned on.

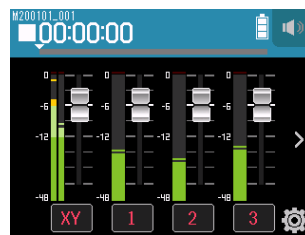
From the Home Screen, three recording applications, various settings screens and other functions can be launched.




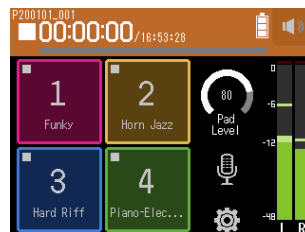
- Tap the  icon to launch the FIELD app.



- Tap the  icon to launch the MUSIC app.




- Tap the  icon to launch the PODCAST app.



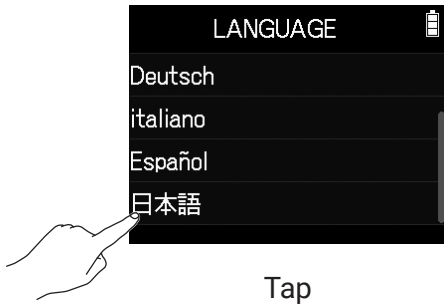
- Tap other icons to launch various settings screens, for example.

HINT

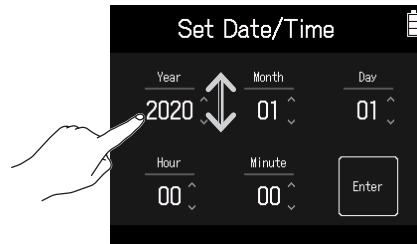
Press  to return to the Home Screen.

Operations on various screens

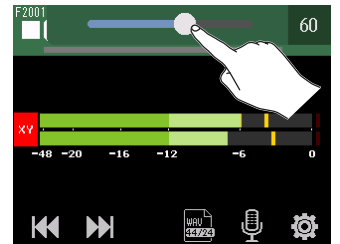
Tap, swipe and slide to operate the touchscreen.



Tap
(touch a selection item)



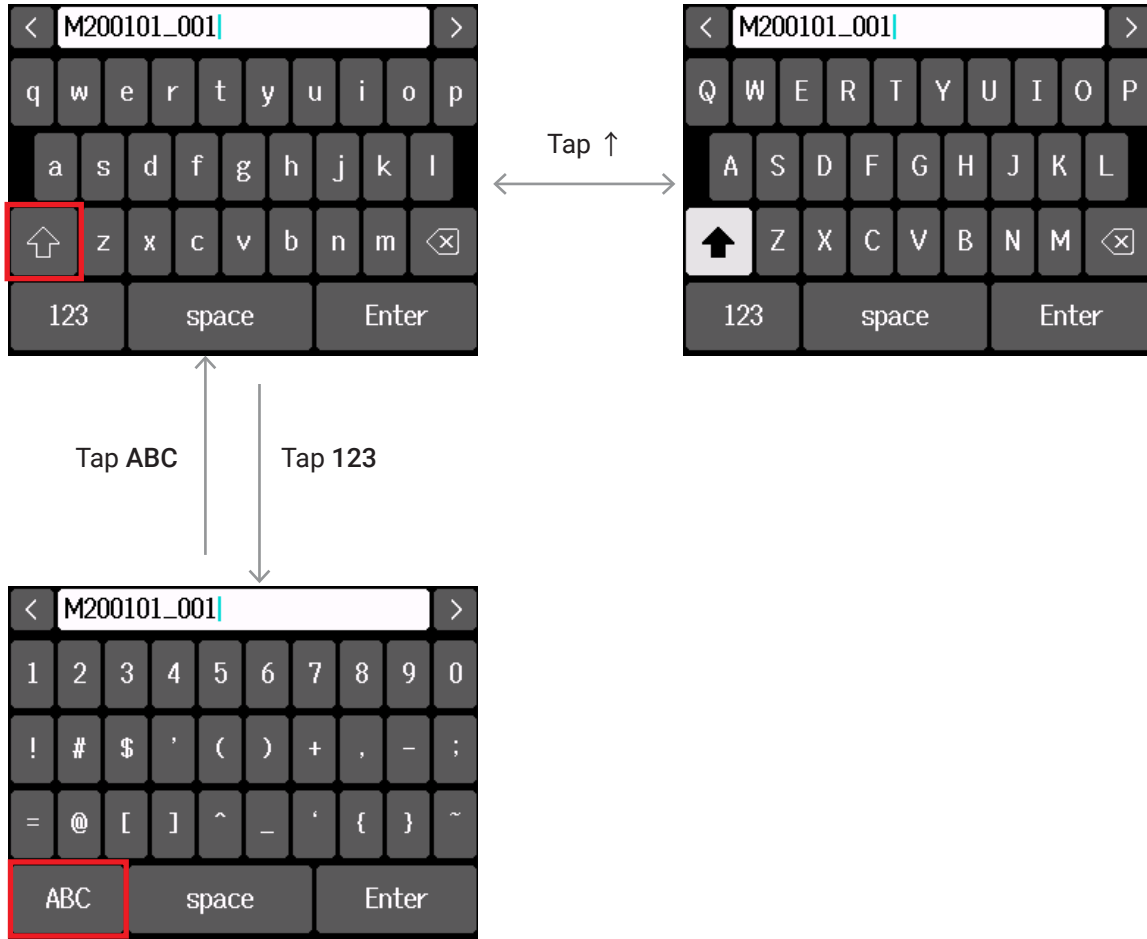
Swipe
(touch and flick)



Slide
(move while touching)

Character Input Screen overview





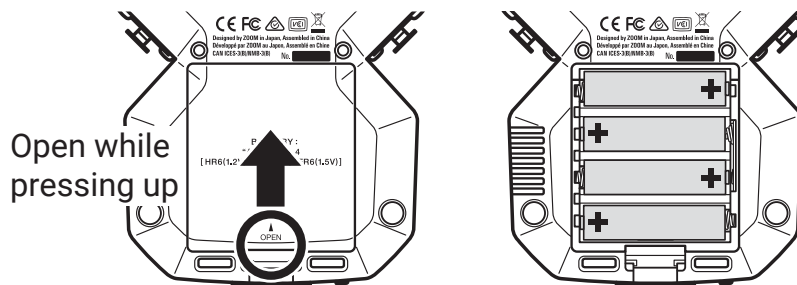
NOTE

The following characters can be used in project names.
(space)!#\$%&'()*+,-0123456789;=@ABCDEFGHIJKLMN OPQRSTUVWXYZ[]^_`a b c d e
f g h i j k l m n o p q r s t u v w x y z { } ~

Making preparations

Supplying power

Using batteries



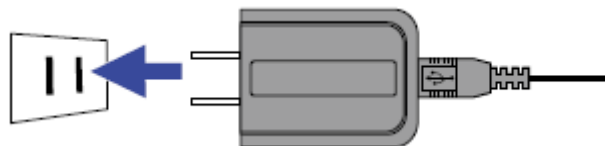
1. Turn the power off and then remove the battery cover.
2. Install the batteries.
3. Replace the battery cover.

NOTE

- Use alkaline batteries, rechargeable NiMH batteries or lithium batteries.
- If the battery indicator becomes empty, turn the power off immediately and install new batteries.
- To enable accurate display of remaining battery charge, set the battery type using Home Screen > SYSTEM > Battery. (→ [“Setting the battery type” on page 123](#))

Using an AC adapter

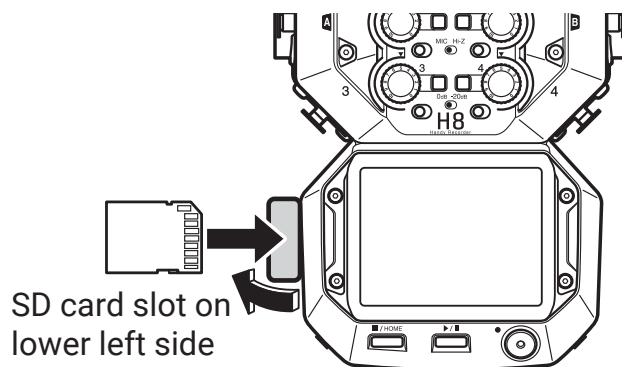
1. Connect the cable of the dedicated ZOOM AD-17 AC adapter to the USB port.
2. Plug the dedicated AC adapter into an outlet.



HINT

- A 5V mobile battery (commercially-available) can also be connected.
- When connected to a computer, power can be supplied by USB.

Inserting SD cards



1. Turn the power off and then open the SD card slot cover.

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

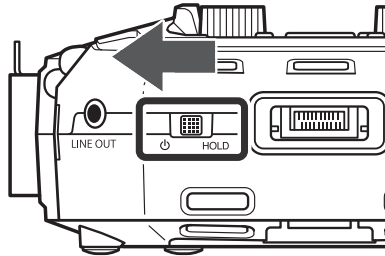
To remove an SD card, push it further into the slot and then pull it out.

NOTE

- Always turn the power off before inserting or removing an SD card. Inserting or removing a card while the power is on could result in data loss.
- When inserting an SD card, be sure to insert the correct end with the top side up as shown.
- If an SD card is not loaded, recording and playback are not possible.
- After purchasing a new SD card, always format it using the **H8** to maximize performance. (→ [“Formatting SD cards” on page 112](#))

Turning the power on/off

Turning the power on



1. Slide  toward .

Turning the power off

1. Keep sliding  toward  until the ZOOM logo appears.

NOTE

- If “No Card!” appears on the display, confirm that an SD card is inserted properly.
- If “Card Protected!” appears on the display, the SD card write-protection is enabled. Slide the lock switch on the SD card to disable write-protection.
- If “Invalid SD Card!” appears on the display, the card is not formatted correctly. Format the card or use a different card. (→ [“Formatting SD cards” on page 112](#))

Preventing misoperation (HOLD function)

In order to prevent misoperation, the HOLD function can be used to disable operation of the **H8** buttons and touchscreen.

1. Slide  to HOLD.

Deactivating the hold function

Slide  back to the middle.

Setting the display language (first time starting up)

The first time you turn the power on after purchase, set the touchscreen display language when the LANGUAGE Screen opens.

1. Tap the language you want to set.



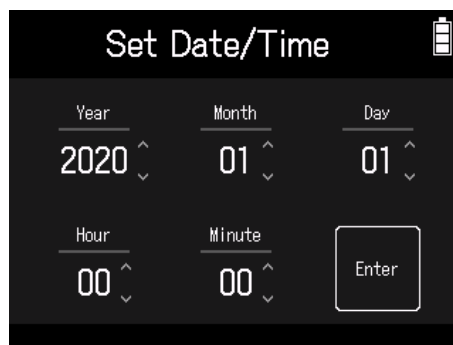
HINT

The display language can be changed later using Home Screen > Language. (→ [“Setting the language shown” on page 130](#))

Setting the date and time (first time starting up)

When the Set Date/Time Screen opens after the LANGUAGE Screen, set the date and time.

1. Swipe the date and time items to set them.



2. Tap Enter.

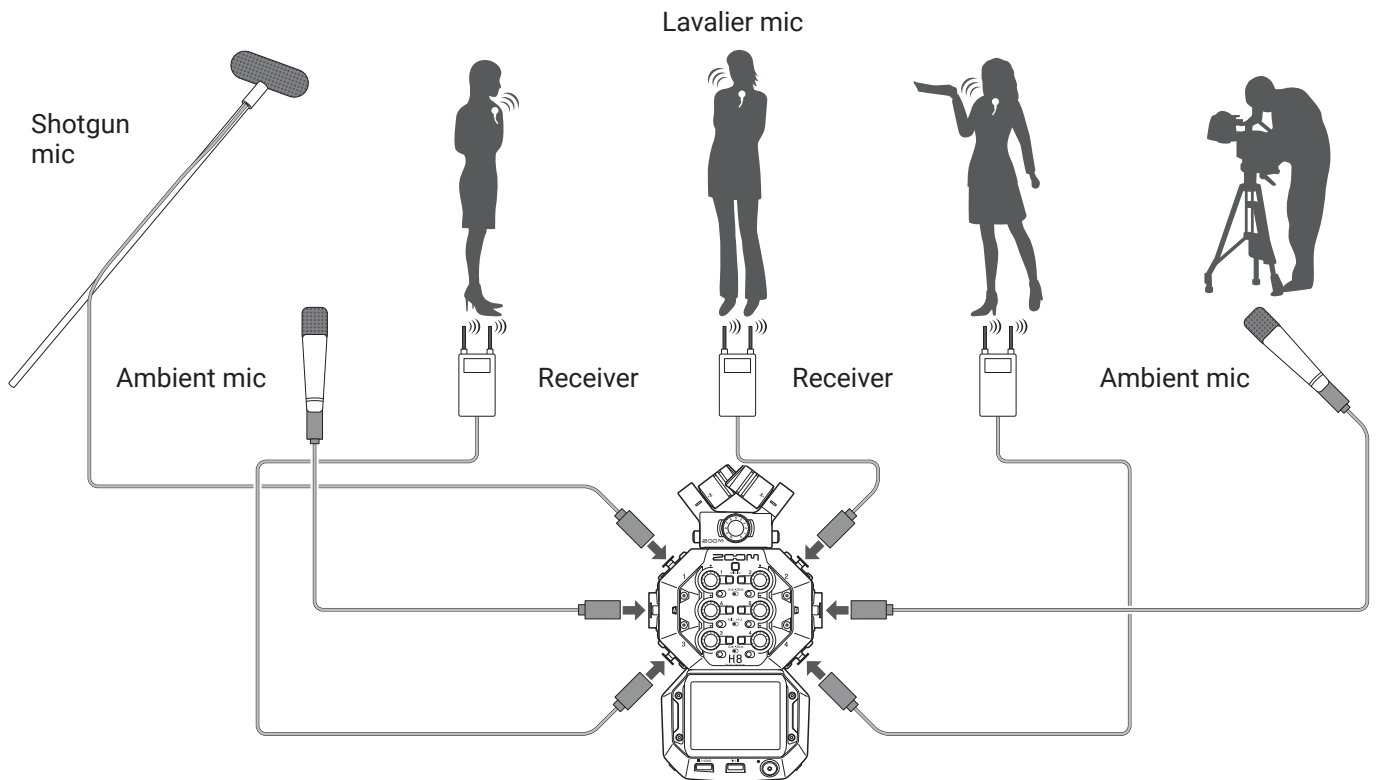
HINT

The date and time setting can be changed later using Home Screen > SYSTEM > Date/Time > Set Date/Time. (→ [“Setting the date and time” on page 120](#))

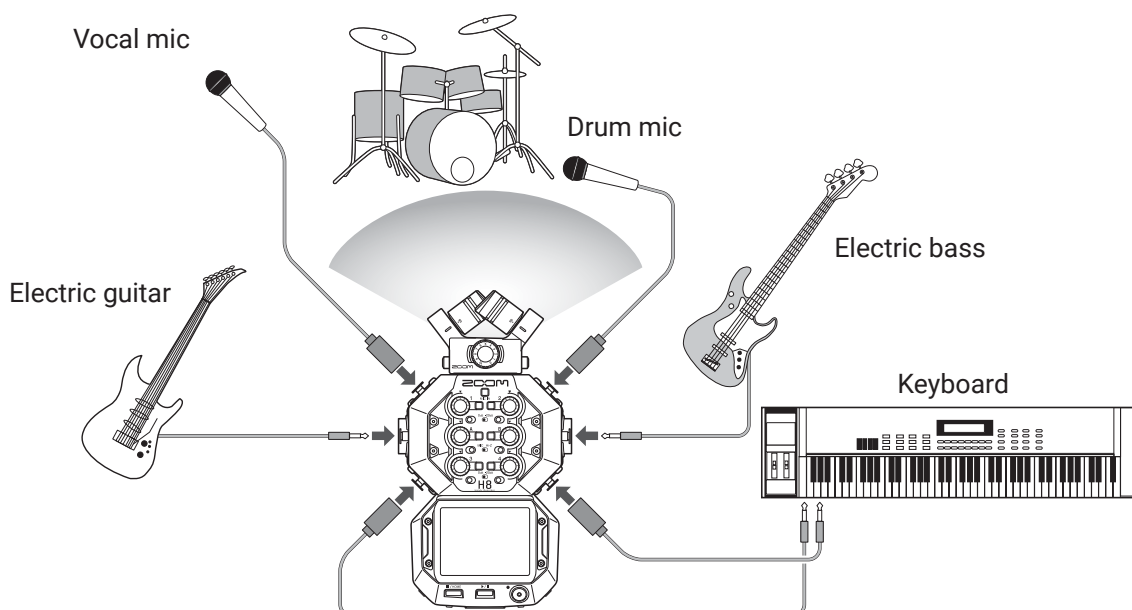
Connecting

Connection examples

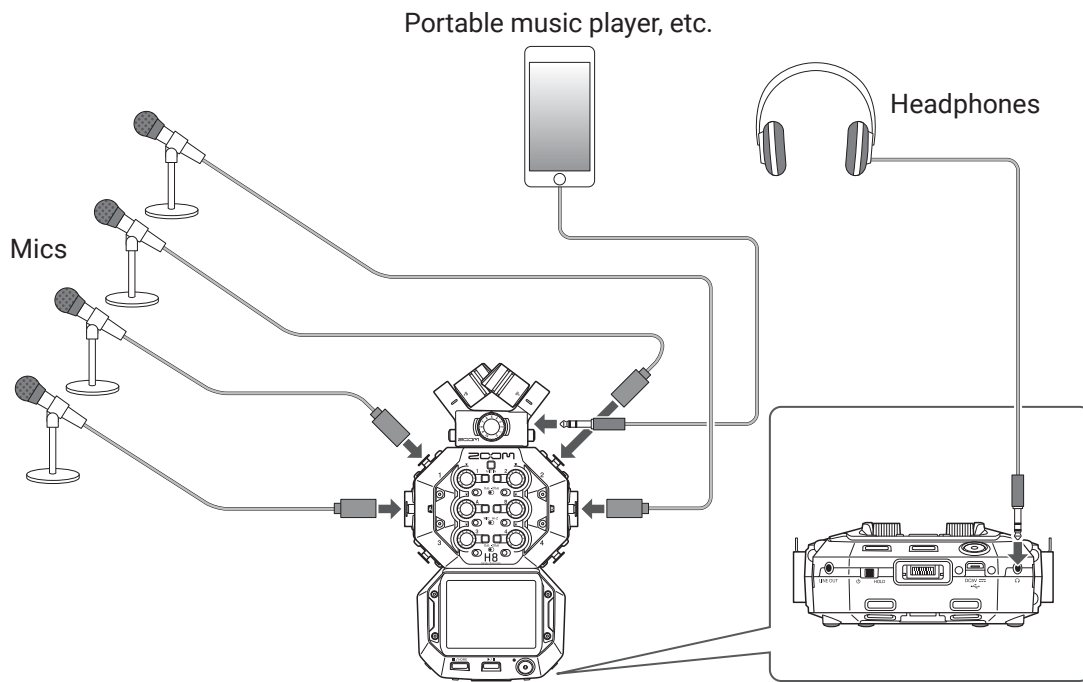
Video recording (using the FIELD app to record audio)



Band recording in a studio (using the MUSIC app to record audio)



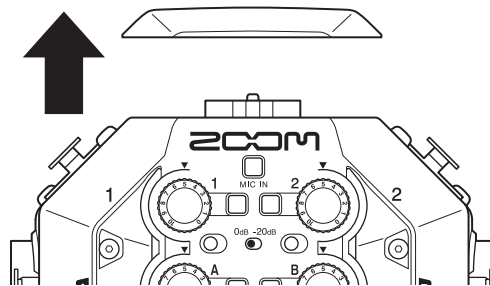
Podcasting (using the PODCAST app to record audio)



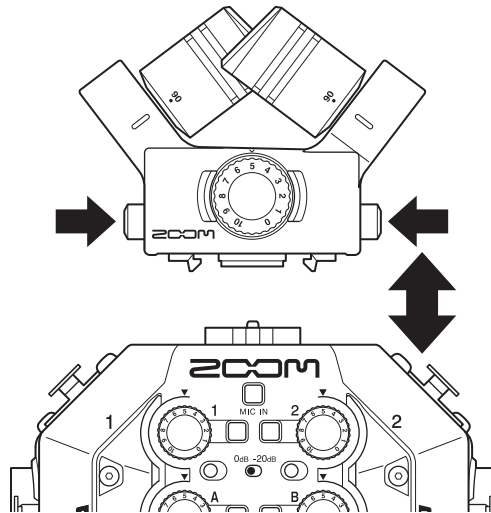
Connecting/disconnecting the XY mic

Connecting the XY mic

1. Remove the protective caps from the **H8** and the mic capsule.

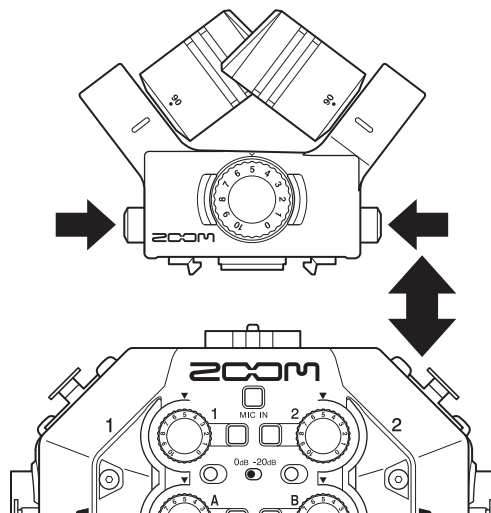


2. While pressing the buttons on the sides of the mic, connect it to the main unit, inserting it completely.



Disconnecting the XY mic

1. While pressing the buttons on the sides of the mic, pull it out of the main unit.



NOTE

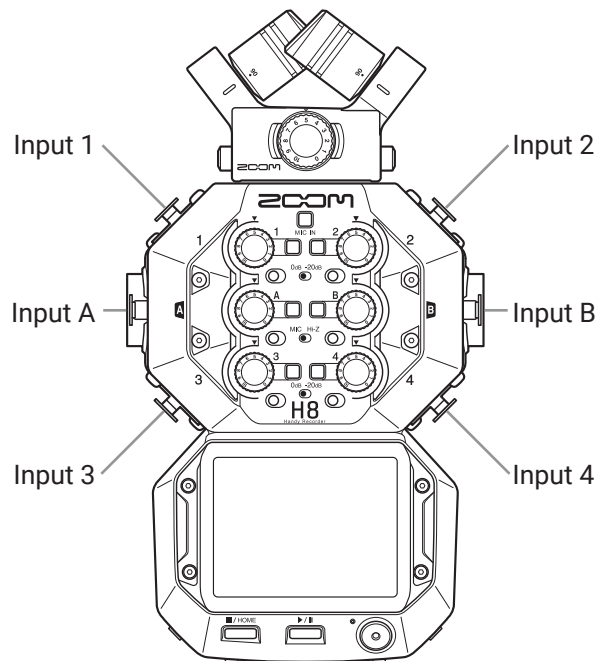
- Do not use too much force when disconnecting. Doing so could damage the mic or the main unit.
- Recording will stop if a mic capsule is removed during recording.
- Attach the protective caps when the mic capsule will not be connected for a long time.

Connecting mics, instruments, mixers and other equipment

The **H8** can record up to 12 tracks at once. These include up to 4 tracks of input from a mic capsule, Inputs 1–4, A and B, and a stereo mix of these with L/R tracks (2 tracks).

Mics can be connected to Inputs 1–4 and instruments can be connected to Inputs A and B, for example, and recorded to corresponding input tracks 1–4, A and B.

Connecting mics

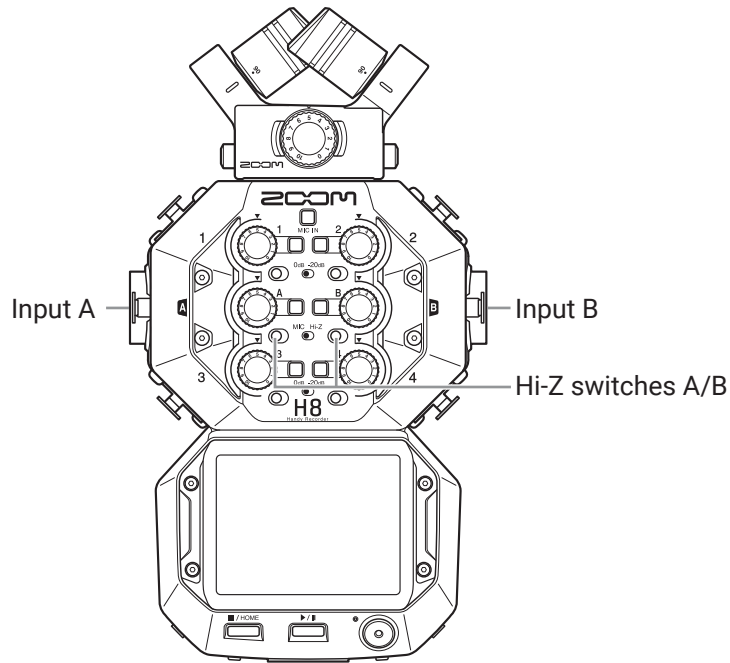


Connect dynamic and condenser mics with XLR plugs to Inputs 1–4, A and B. Phantom power (+24 V/+48 V) can be supplied to condenser mics. (→ [page 29](#))

Connecting instruments

When directly connecting guitars and bass guitars, connect their mono plugs to Input A or B. When connecting keyboards and other instruments with stereo outputs connect them to both input A and B.

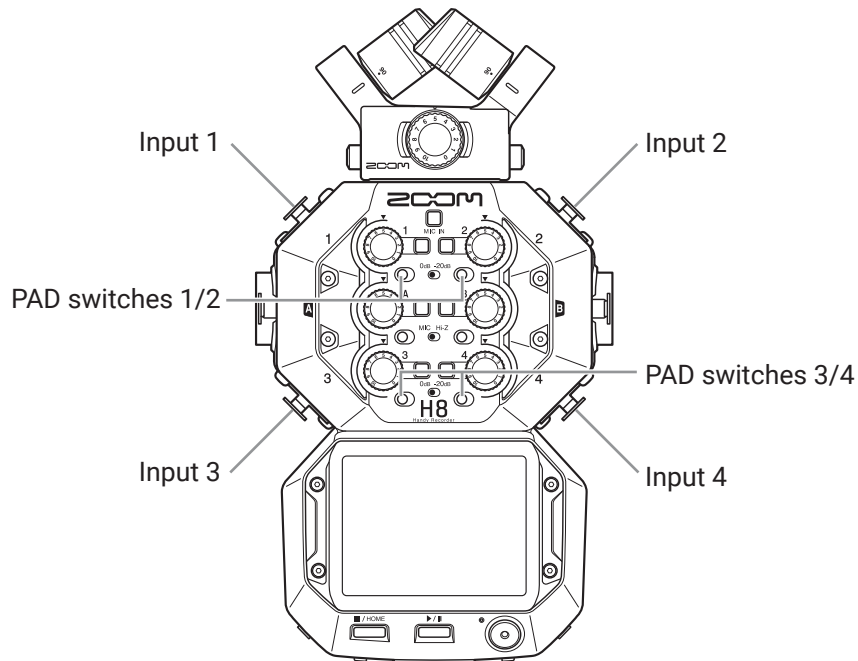
When connecting a guitar or other device with high output impedance, set the corresponding Hi-Z switch (⊖) to **Hi-Z**.



Connecting mixers and similar devices

Connect XLR cables from keyboards and mixers directly to Inputs 1–4.

For mixers and other devices with a rated output level of +4 dB, set the corresponding PAD switches (⊖) to **-20dB**.



HINT

When connecting an ordinary mic, set the PAD switch to **0dB**.

Making input and output settings

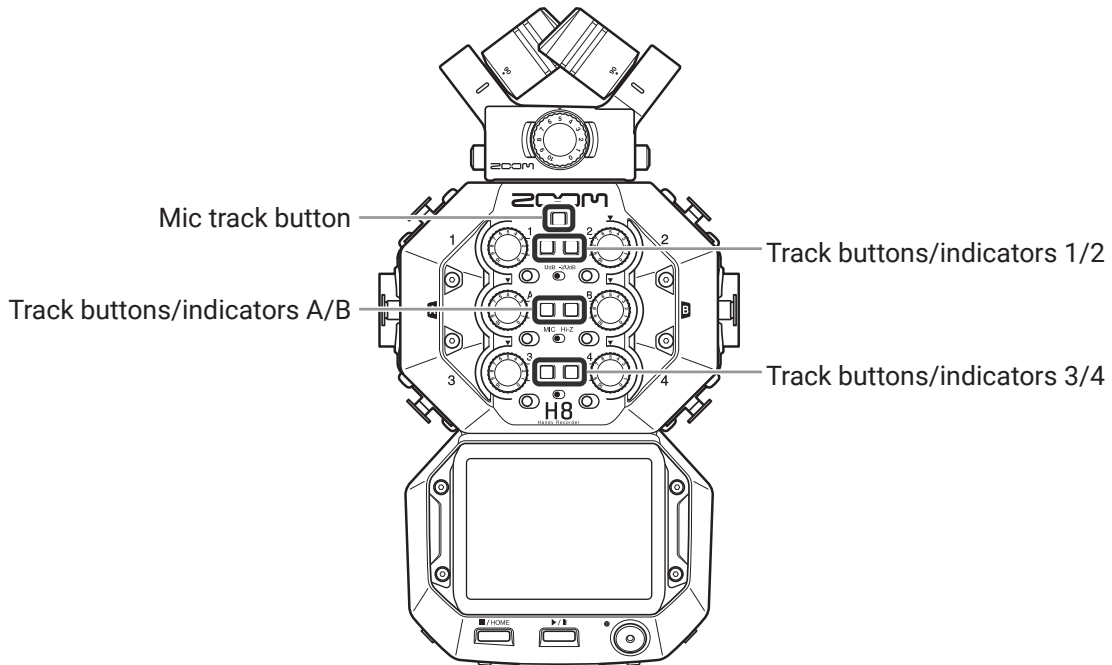
Making settings for input tracks

Enabling tracks for recording

Select which tracks to record from MIC IN, 1–4 and A/B.

The MIC IN, 1–4 and A/B tracks correspond to the MIC IN, 1–4 and A/B inputs.

1. Launch a recording app
2. Press the buttons for the tracks that you want to record.
The indicators for the selected track buttons will light red.



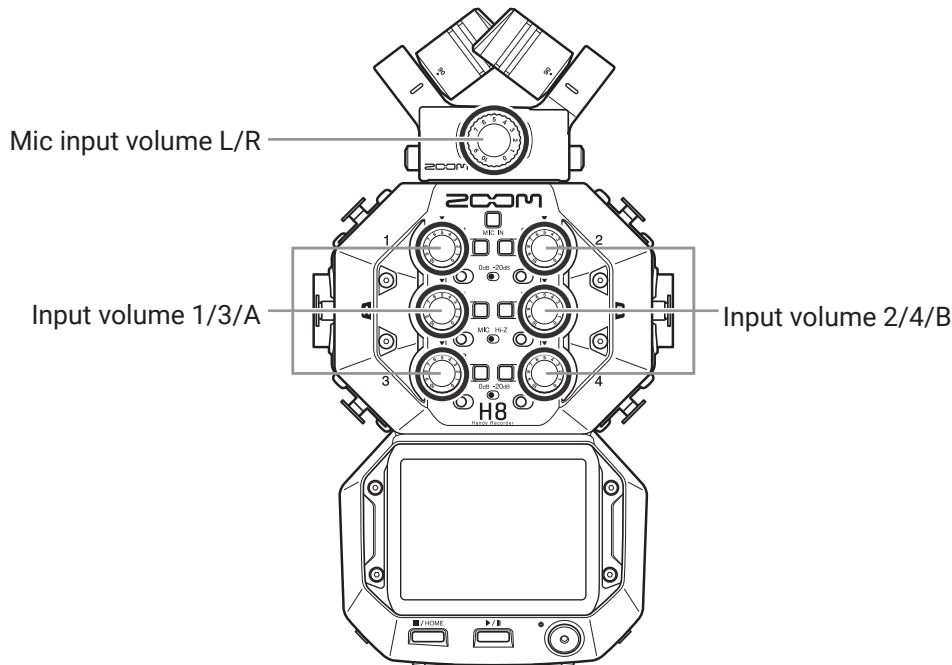
HINT

While pressing a track button, pressing the adjacent button (1 and 2, 3 and 4, or A and B) will stereo link those tracks, making a stereo track and creating stereo files on the SD card. Do the same thing to end a stereo link.

Setting recording (input) levels

Input levels can be adjusted for signals to be recorded.

1. Turn the input volume knob (🔊) for the selected track to adjust its input level.
Adjust so that the peak level stays around -12 dB.



HINT

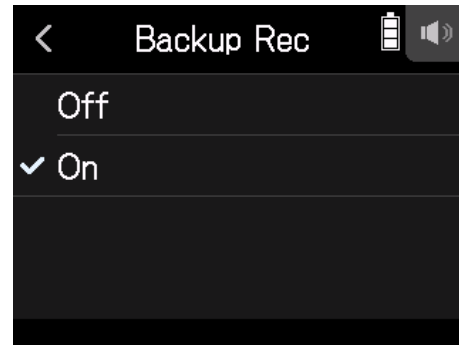
- If the sound distorts even after lowering the input level, try changing mic positions and adjusting the output levels of connected devices.
 - Plug-in power can be provided to the MIC/LINE IN input jack on the mic capsule.
(→ [“Using plug-in power” on page 27](#))
 - The Lo Cut function can be used when adjusting levels. (→ [page 31](#))
 - The Comp/Limiter/Gate function can be used when adjusting levels. (→ [page 32](#))
-

Backup recording (MUSIC and PODCAST apps only)

When using a mic capsule with up to two channels on the MIC IN, a backup recording file can be recorded 12 dB lower than the set input level. This can be used to replace the regular recording file if its recording level was too high, causing distortion, for example.

1. Open the Track Setting Screen in the app.
Tap in the following order:
 - FIELD app screen > 🎙️ > select track
 - PODCAST app screen > 🎙️ > select track

2. Tap Backup Rec, and set to On.



NOTE




- During backup recording, the Lo Cut and Comp/Limiter settings are not applied.
- To play a backup recording file, assign a file with “_BU” added to its name to a track. Then select and play it. (→ [“Changing files assigned to tracks” on page 70](#))

Using plug-in power

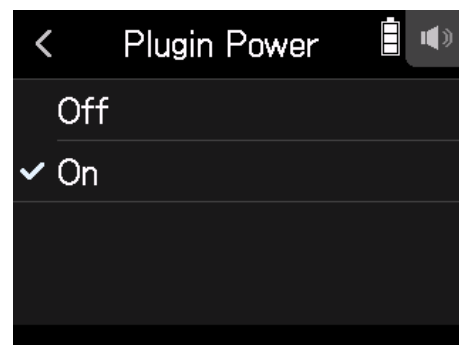
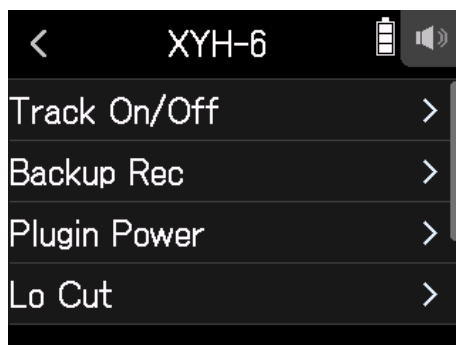
Make the following setting when a mic that is compatible with plug-in power is connected to the XY mic capsule MIC/LINE IN input jack.

1. Open the Track Setting Screen in the app.

Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

2. Tap Plugin Power and set to On.



NOTE




This setting can be set only when a mic capsule that supports plug-in power is connected.

Adjusting the side mic level

You can adjust the side mic level (stereo width) before recording for tracks that use a mid-side mic.

1. Open the Track Setting Screen in the app.

Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

2. Tap MS Side Mic Level.



3. Slide the side mic level up or down to adjust it.



HINT

- This can be set to Off, RAW or in a range from -24 to +6 dB.
 - The more the side mic level is increased, the greater the stereo width becomes.
 - The side mic level setting is also applied to backup recording when it is enabled.
-

NOTE

- When set to RAW, recording to the MIC IN tracks will occur without stereo encoding.
- Stereo encoding is conducted for L/R track recording and mixdown.
- The stereo width of audio in RAW format can be adjusted after recording by using ZOOM MS Decoder or other plug-in software.

Setting phantom power

H8 inputs 1–4, A and B support phantom power. They can supply power at +24 V or +48 V.

HINT




Phantom power is a function that supplies power to devices that require an external power supply, including some condenser mics. The standard power is +48V, but some devices can operate with lower voltages.

NOTE

Do not use this function with devices that are not compatible with phantom power. Doing so could damage the device.

1. Open the Track Setting Screen in the app.

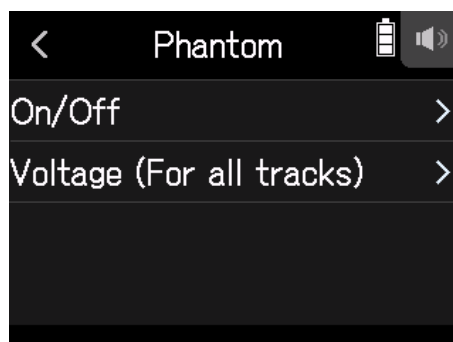
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

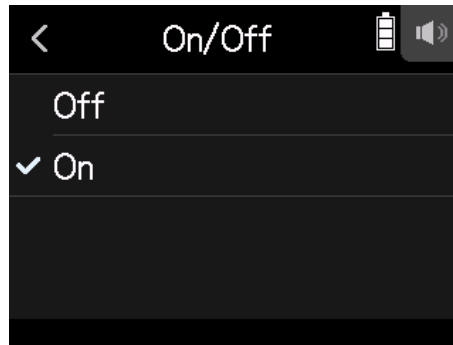
2. Tap Phantom.



3. Tap On/Off.






4. Tap On.



Setting phantom power voltage

1. Open the Track Setting Screen in the app.

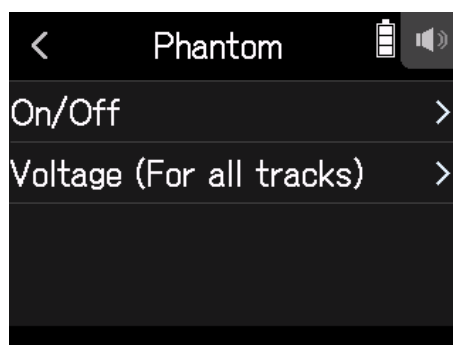
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

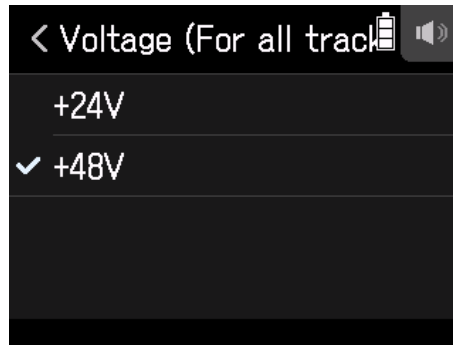
2. Tap Phantom.



3. Tap Voltage (For all tracks).



4. Tap +24V or +48V.



HINT




- When using mics and other equipment that can operate with voltages less than +48 V, selecting the lower voltage can reduce the **H8** power consumption.
 - The phantom power setting is shared by all inputs.
-

Reducing noise (low-frequency cut)

The high pass filter can cut low frequencies to reduce the sound of wind, vocal pops and other noise.

1. Open the Track Setting Screen in the app.

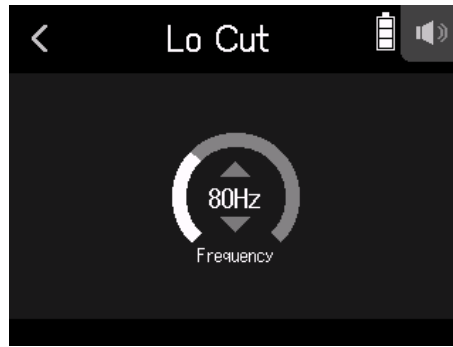
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

2. Tap Lo Cut.



- Slide the knob up and down to set the desired cutoff frequency.



NOTE

This will not affect backup recording data.

HINT

This can be set to Off or 10–240 Hz.

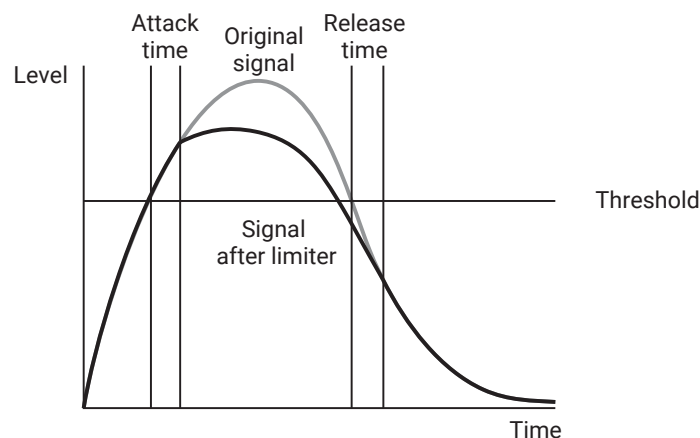
Comp/Limiter/Gate

The compressor can be used to reduce input signals with levels that are too high and raise signals that are too low. The limiter can prevent distortion by reducing input signal with levels that are too high.

■ Compressor

Compressors reduce high-level sounds and raise low levels.

■ Limiter






When the compressor or limiter is on, if the input signal level exceeds the set threshold value, the signal level will be suppressed to prevent the sound from distorting.

The attack time is how long after the signal exceeds the threshold until the limiter starts operating. The release time is how long after the signal goes below the threshold until the limiter stops operating. Change these two parameters to adjust the sound quality.

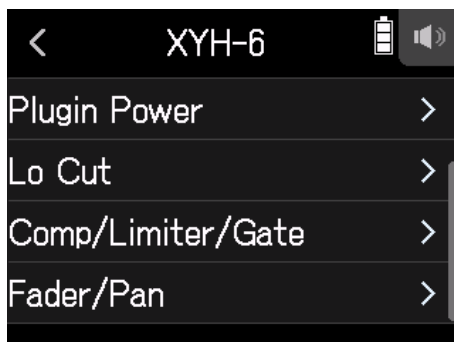
■ Selecting the compressor, limiter or noise gate

1. Open the Track Setting Screen in the app.

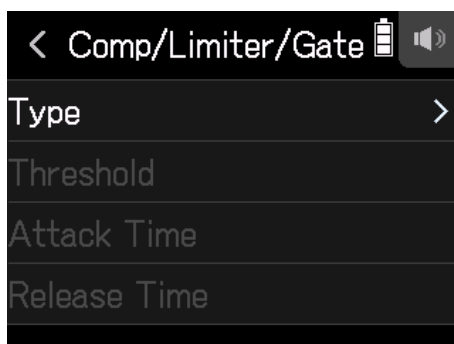
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

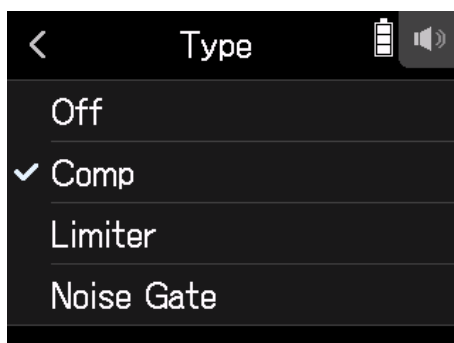
2. Tap Comp/Limiter/Gate.



3. Tap Type.



4. Tap Comp, Limiter or Noise Gate.






- **Comp:** This selects the compressor and sets the ratio to 4:1.
- **Limiter:** This selects the Limiter and sets the ratio to 20:1.
- **Noise Gate:** This selects the noise gate.
- **Off:** This disables the compressor, limiter and noise gate.

■ Setting the threshold

This sets the base level from which the limiter operates.

1. Open the Track Setting Screen in the app.

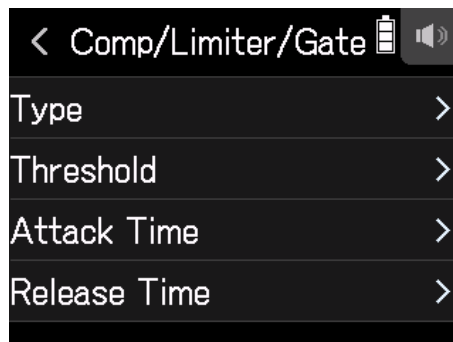
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

2. Tap Comp/Limiter/Gate.



3. Tap Threshold.



NOTE

Threshold cannot be set if Type is set to Off.

4. Slide the slider to adjust.



HINT




- This can be set from -16 to -2 dBFS for the compressor and limiter.
 - This can be set from -80 to -2 dBFS for the noise gate.
-

■ Setting the attack time

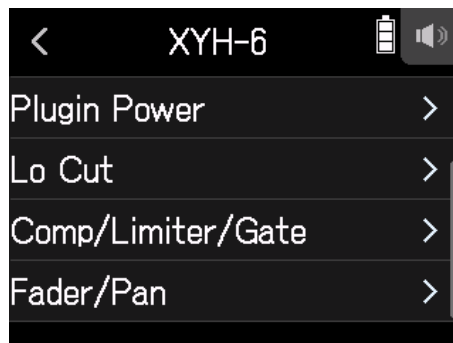
This sets the amount of time until compression starts after the input signal exceeds the threshold.

1. Open the Track Setting Screen in the app.

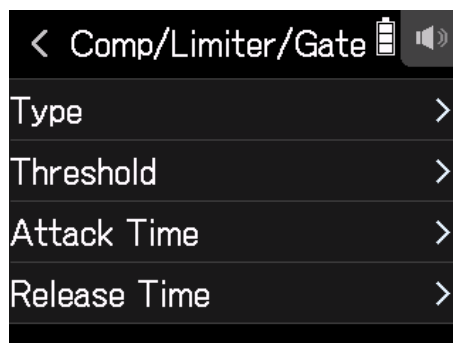
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

2. Tap Comp/Limiter/Gate.



3. Tap Attack Time.

**NOTE**

Attack Time cannot be set if Type is set to Off.

- Slide the slider to adjust the time.



HINT




This can be set from 1 to 4 ms.

■ Setting the release time

This sets the amount of time until compression stops after the input signal goes below the threshold.

- Open the Track Setting Screen in the app.

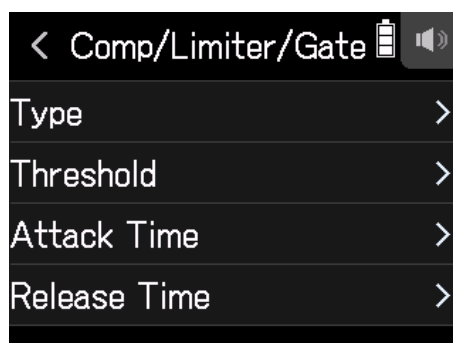
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

- Tap Comp/Limiter/Gate.



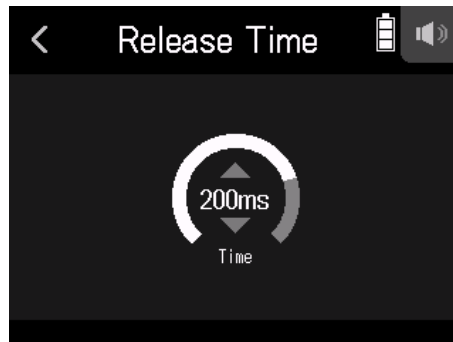
- Tap Release Time.



NOTE

Release Time cannot be set if Type is set to Off.

4. Slide the slider to adjust the time.

**HINT**




• Limiter operation is linked for tracks that have stereo link enabled. If the signal for either linked channel reaches the threshold, the limiter will operate on both tracks.

Adjusting input signal monitoring balance using fader and pan settings

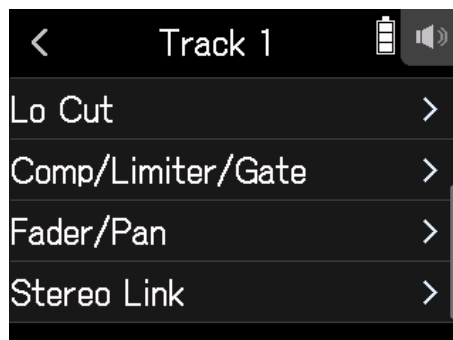
The level and panning of each input signal when monitoring can be adjusted.

1. Open the Track Setting Screen in the app.

Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

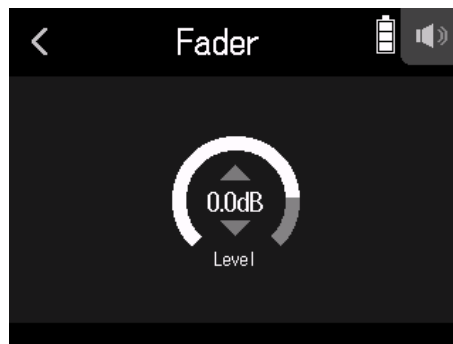
2. Tap Fader/Pan.



3. Select Fader or Pan.



4. Slide parameters up and down to change their settings.






- Fader can be set to Mute or in a range of -48.0 dB – $+10.0$ dB (by 0.5 dB) to adjust the input signal level.
- Pan can be set to L100 – L1, Center, or R1 – R100 to adjust the left-right sound balance.

Enabling stereo linking

By enabling stereo tracks (stereo links), inputs can be handled as stereo sounds.

1. Open the Track Setting Screen in the app.

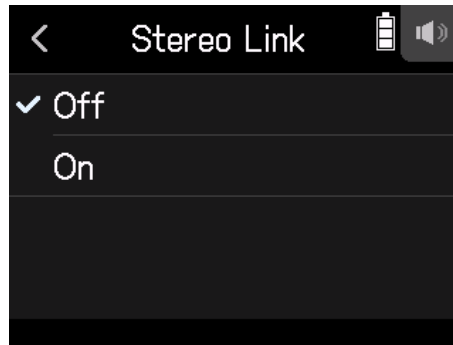
Tap in the following order:

- FIELD app screen >  > select track
- MUSIC app screen > select track > 
- PODCAST app screen >  > select track

2. Tap Stereo Link.



3. Tap On.



HINT



While pressing a track button, pressing the adjacent button (1 and 2, 3 and 4, or A and B) will stereo link those tracks, making a stereo track and creating stereo files on the SD card. Do the same thing to end a stereo link.

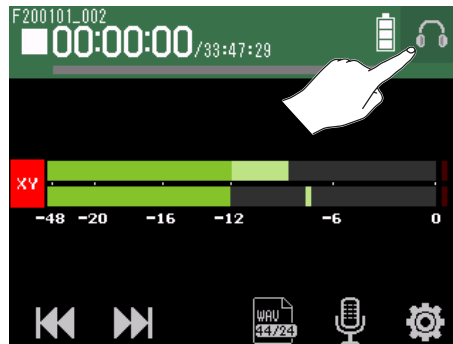
Setting the headphone output level

Use headphones, for example, to monitor input/playback sounds and adjust levels (volume).

HINT

- Monitoring with the speaker is possible during playback.
- If a cable is connected to the LINE OUT or PHONE OUT jack, sound will not be output from the **H8** speaker.

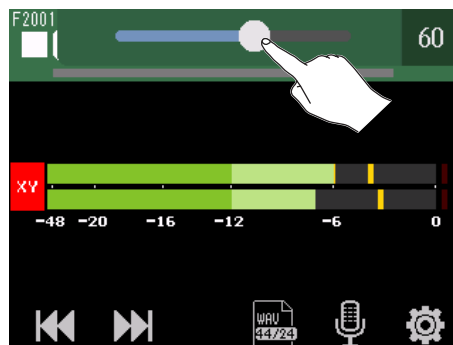
1. Connect headphones, for example, to the **H8** PHONE OUT jack.
2. Tap /  at the top right of the screen.





NOTE

A speaker icon will appear when headphones are not connected.

3. Slide  to adjust the volume.



4. Tap /  at the top right of the screen.

Adjusting connected equipment levels (playing test tones)

The line output level can be adjusted.

Test tones can be played in order to adjust the level for a digital SLR camera or other device.

1. Minimize the input volume of the other device.
2. Use an audio cable to connect the external mic jack of the other device with the **H8 LINE OUT** jack.
3. Tap **Line Output Level** on the Home Screen.



4. Tap  Test Tone.



This starts output of the test tone.

5. Slide the line output **LEVEL** slider to adjust the output level.



While checking the audio level meter of the other device, adjust the audio signal level so that it never exceeds -12 dB.

HINT

This can be set from -40 to 0 dB.

6. Make small adjustments to the input volume of the other device.

While checking the audio level meter of the connected device, make adjustments to the input gain of that device until the audio signal level is about -12 dB.

7. Tap  Test Tone.

This stops test tone output.

NOTE

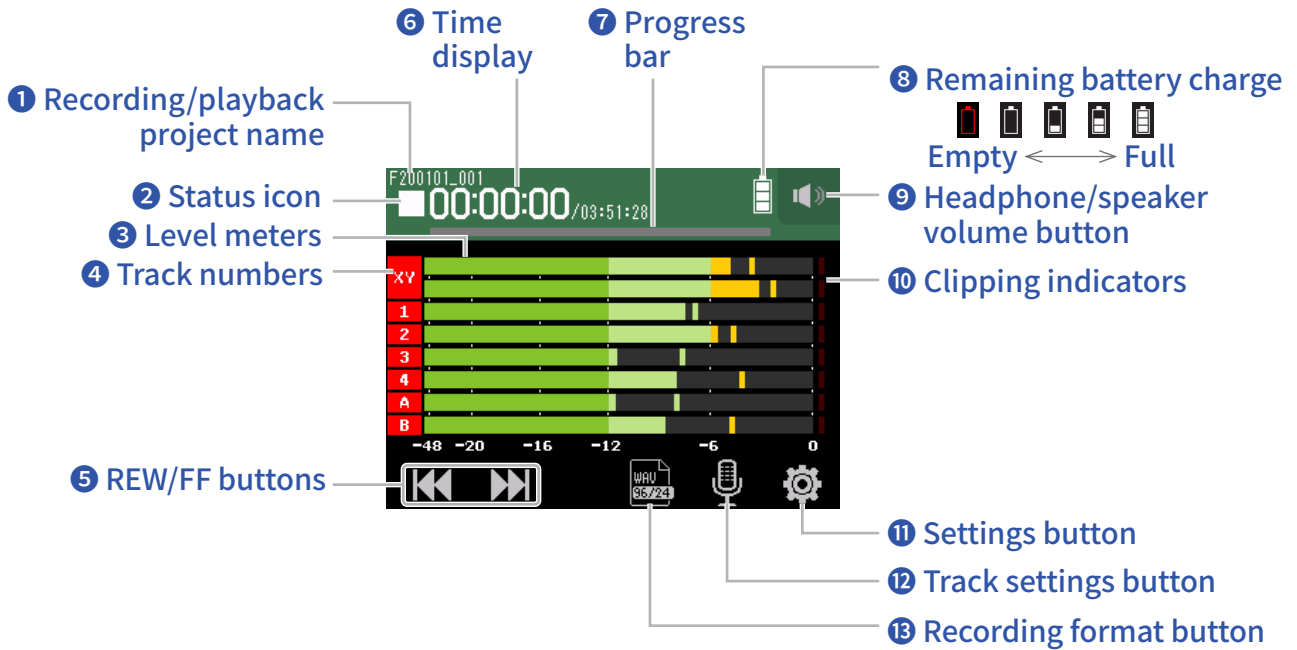
- See the manual of the connected device for information about its operation.
- The test tone is output from both the **LINE OUT** and **PHONE OUT** jacks.
- Be careful with the volume if you are monitoring the sound with headphones, for example.

HINT

The test tone is a 1kHz sine wave at -12 dBFS.

Recording with the FIELD app

Display overview



1 Recording/playback project name

2 Status icon

This shows the recording/playback status.

■ : Stopped ● : Recording || : Recording/playback paused ► : Playing

3 Level meters

4 Track numbers

Red: Input enabled

Green: Playback track enabled

Gray: Input disabled

Adjacent track numbers are connected to show input link settings.

5 REW/FF buttons

Use to select projects and to search backward and forward.

6 Time display

00:00:00/00:00:00

Left: Current elapsed recording/playback time

Right: Remaining available recording/playback time

7 Progress bar

This shows the current playback location.

Mark positions are shown above the progress bar.

Slide ▼ to change the playback position.

8 Remaining battery charge

This shows the remaining battery charge. When the remaining battery charge becomes low, replace the batteries (→ [“Using batteries” on page 16](#)) or connect an AC adapter (→ [“Using an AC adapter” on page 16](#)).

9 Headphone/speaker volume button

Touch this to show the headphone/speaker volume slider. (→ [page 40](#))

10 Clipping indicators

If a clipping indicator lights, adjust the input level (→ [“Setting recording \(input\) levels” on page 26](#)) or set the limiter (→ [“Comp/Limiter/Gate” on page 32](#)).

11 Settings button

Press to access a list of projects on the SD card (→ [page 99](#)) and to make automatic recording settings (→ [page 48](#)).

12 Track settings button

Press to make track settings, including Lo Cut and Phantom functions. (→ [page 26](#))

13 Recording format button

Use to set the recording format. (→ [page 45](#))

Recording




Recording process

Recording follows the process shown below.

Prepare to record

- Use batteries or an AC adapter
- Insert an SD card
- Connect the XY mic
- Connect mics, instruments, mixers and other equipment
- Turn the power on
- Set the recording format
- Make input and output settings

Record

- Press  to start recording and press  to stop
- Marks can also be added
- Press  to pause

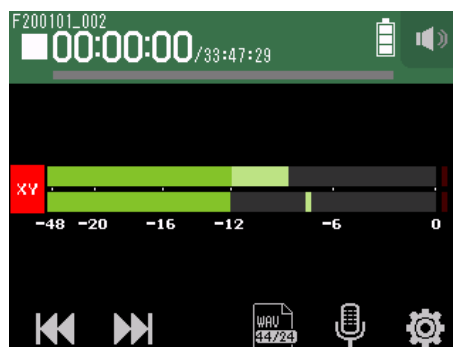
Play and check

- Press  to start playback and  to stop
- Cue to mark positions and to make project mixer settings, for example

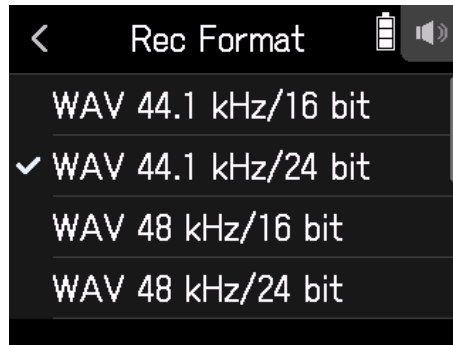
Setting the recording format

Considering audio quality and file size, select the format.

1. Tap .



2. Set the recording format




The following formats can be set.

They are shown in order of audio quality (from low to high) and file size (from small to large).


| Setting | Explanation |
|---------------------|--|
| MP3 128 kbps | The sampling frequency is 44.1 kHz. The higher the bit rate is, the better the audio quality will be. |
| MP3 192 kbps | |
| MP3 320 kbps | |
| WAV 44.1 kHz/16 bit | The higher the sampling frequency (kHz) and bit rate (bit) are, the better the audio quality will be. |
| WAV 44.1 kHz/24 bit | |
| WAV 48 kHz/16 bit | |
| WAV 48 kHz/24 bit | |
| WAV 96 kHz/16 bit | |
| WAV 96 kHz/24 bit | |

Recording

1. Press  on the FIELD app screen.
This starts recording.

2. Press  to pause.

NOTE

- When recording is paused, a mark is added at that point. Press  again to resume recording.
- A maximum of 99 marks can be added in a project.

HINT

Marks can be added without pausing. (→ [“Setting how marks are added when recording/playing” on page 124](#))

3. Press  to stop.

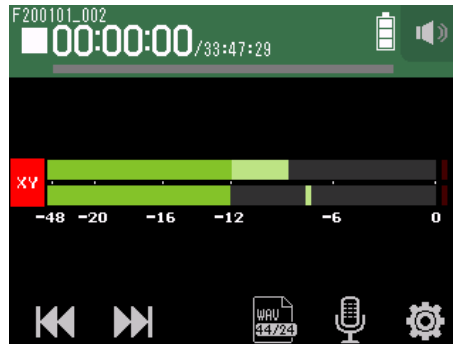
NOTE

If the file size exceeds 2 GB during recording, a new file will be created automatically in the same project and recording will continue without pause. When this happens, numbers will be added to the ends of the file names: “_0001” for the first file, “_0002” for the second file and so on. No gap in sound will occur between the two files when this happens.

HINT








Files are automatically saved at regular intervals during recording. If the power is interrupted or another problem occurs during recording, an affected file can be restored to normal by playing the automatically saved file with the **H8**.

Playing recordings





1. Press .

Playback operations

| Operation | Touchscreen/button operation |
|--------------------------------------|--|
| Select playback project/move to mark | Tap   |
| Search forward/backward | Press and hold   Slide  left/right |
| Pause/resume playback | Press  |
| Stop | Press  |

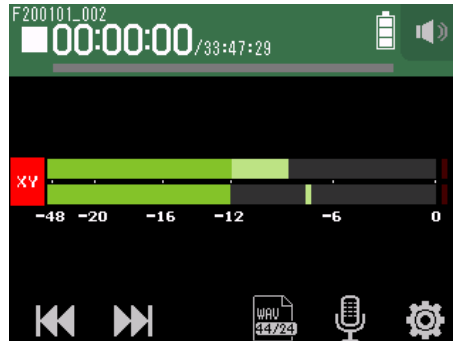
HINT

- Slide left/right  to change the playback position.
 - During playback, press track buttons to switch between playing back (lit green) and muted (unlit).
 - If the selected project is not valid, an "Invalid Project!" message will appear.
 - If no playable project exists, a "No Project!" message will appear.
 - During playback, press  to add marks that can be used for cueing. (→ ["Setting how marks are added when recording/playing" on page 124](#))
-

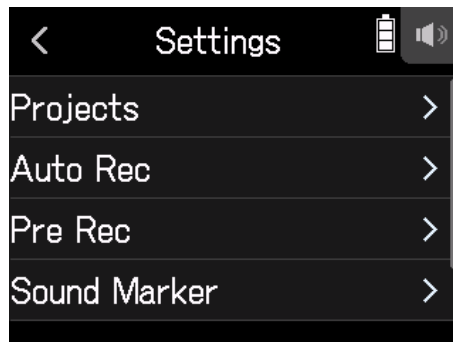
Recording automatically

Recording can be started and stopped automatically in response to the input level.

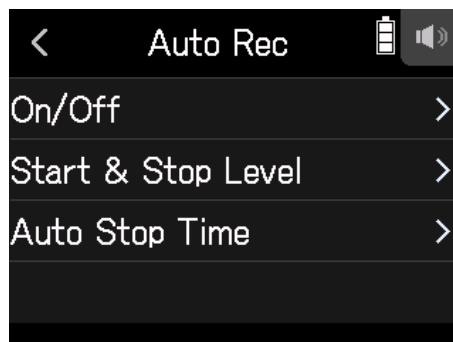
1. Tap .



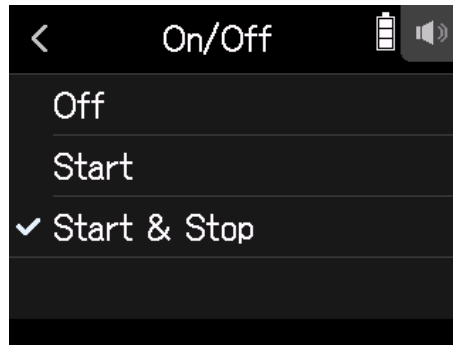
2. Tap Auto Rec.



3. Tap On/Off.





4. Tap Start or Start & Stop.

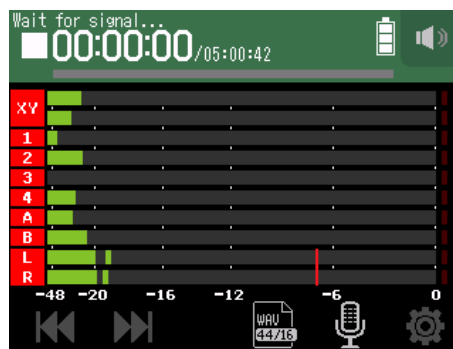


5. Return to the top screen of the FIELD app, and press .

This will start automatic recording standby.

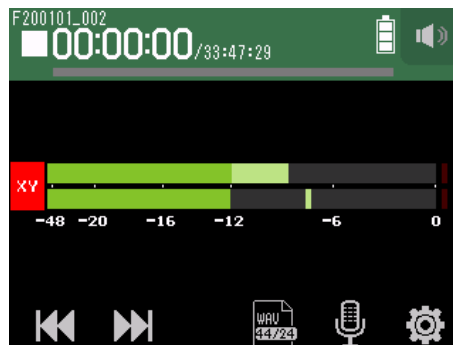
HINT

- Pressing  again will start recording immediately.
- Press  to end recording standby or stop recording.

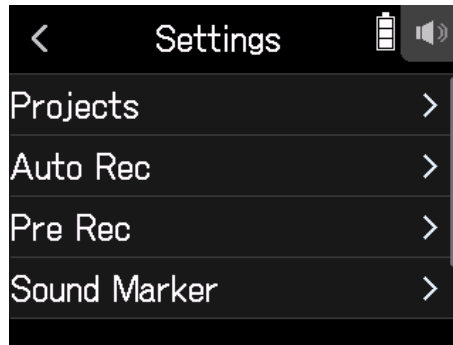


Setting automatic recording start/stop levels

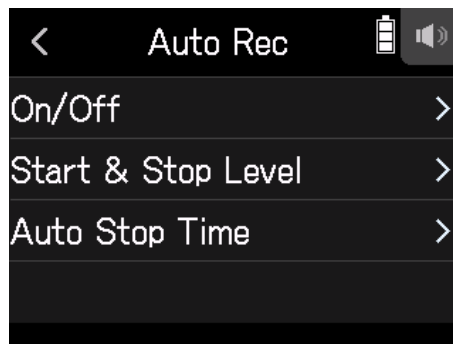
1. Tap .



2. Tap Auto Rec.

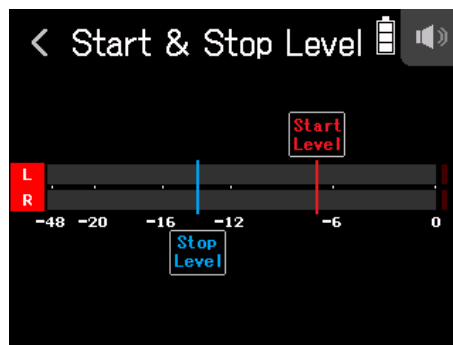


3. Tap Start & Stop Level.



4. Slide Start Level and Stop Level left and right to set their levels.

- The red line shows the recording start level, and the blue line shows the recording stop level.



Recording will start automatically when the input level exceeds the set start level.

Recording will stop automatically when the input level becomes lower than the set stop level.

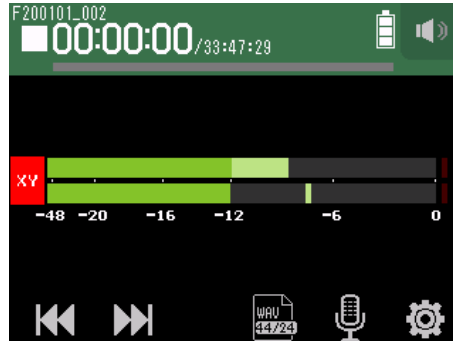
HINT

This can be set from -48 to 0 dBFS.

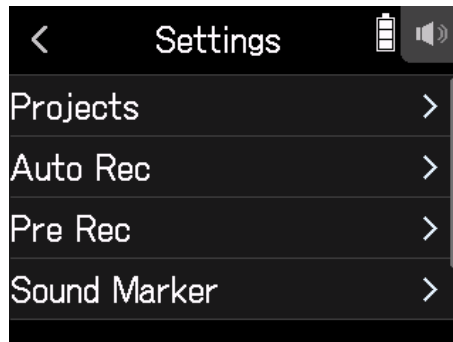
Setting the automatic recording stop time

This sets the time until recording stops automatically after the input level becomes lower than the set stop level.

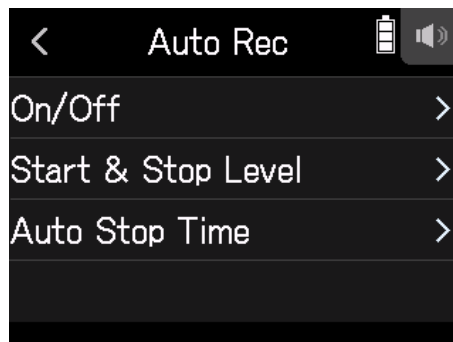
1. Tap .



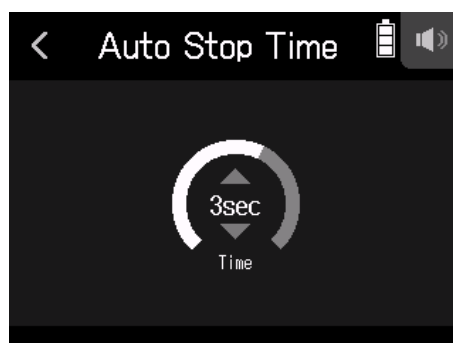
2. Tap Auto Rec.



3. Tap Auto Stop Time.





4. Slide the knob to set the level.



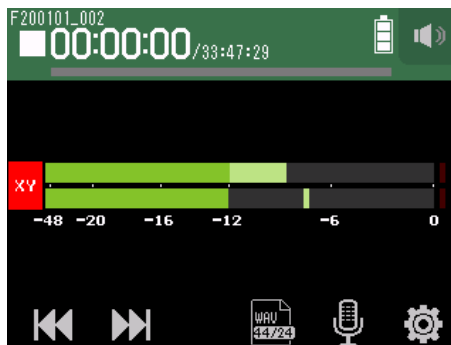
HINT

- This can be set from 0 to 5 seconds.
 - After stopping recording automatically, automatic recording standby starts.
-

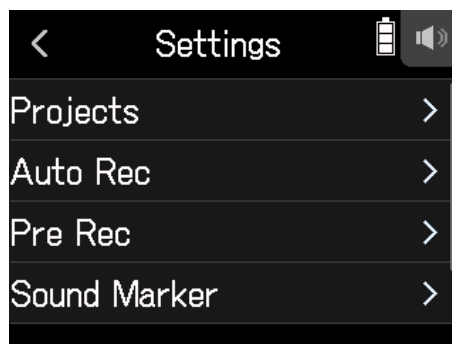
Capturing audio before recording starts (pre-recording)

The input signal is always buffered for a set amount of time, so it can be captured for up to 6 seconds before  is pushed (pre-recording). This is useful when  is pressed late, for example.

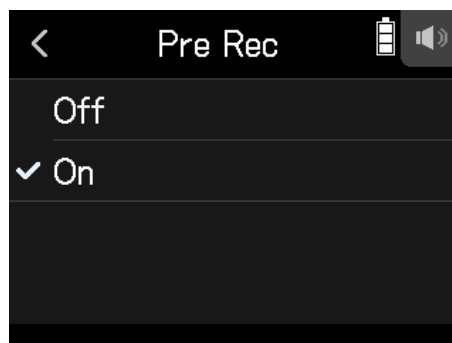
1. Tap .



2. Tap Pre Rec.



3. Tap On.

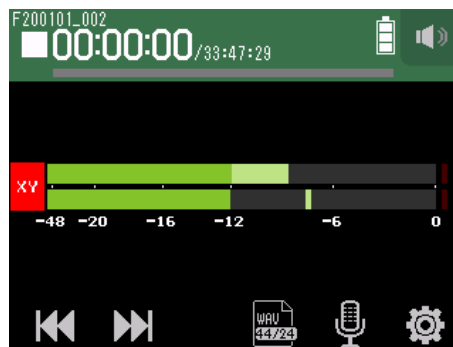


| Recording format | Maximum pre-recording time |
|---------------------|----------------------------|
| MP3 128 kbps | 6 seconds |
| MP3 192 kbps | |
| MP3 320 kbps | |
| WAV 44.1 kHz/16 bit | |
| WAV 44.1 kHz/24 bit | |
| WAV 48 kHz/16 bit | |
| WAV 48 kHz/24 bit | 3 seconds |
| WAV 96 kHz/16 bit | |
| WAV 96 kHz/24 bit | |

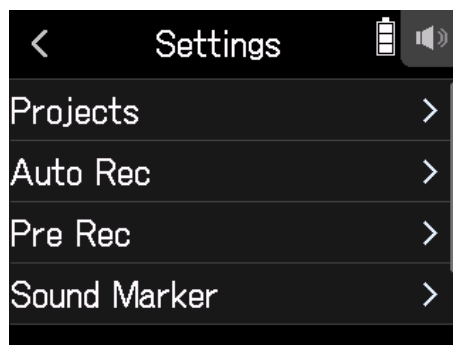
Enabling the sound marker function

Half-second tone signals (sound markers) can be output from the output jacks (**PHONE OUT** and **LINE OUT**) when recording is started and stopped. Since sound markers are also written to recording files, when recording audio for video with the **H8**, sending its output signal to the camera input can make synchronizing audio and video easier.

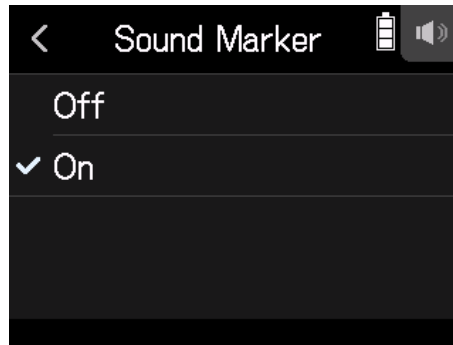
1. Tap .



2. Tap Sound Marker.



3. Tap On.



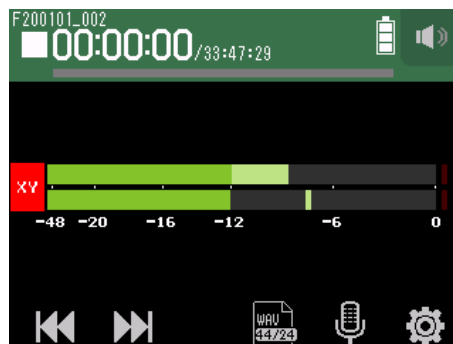
NOTE

Be careful with the volume if you are monitoring the input sound with headphones, for example.

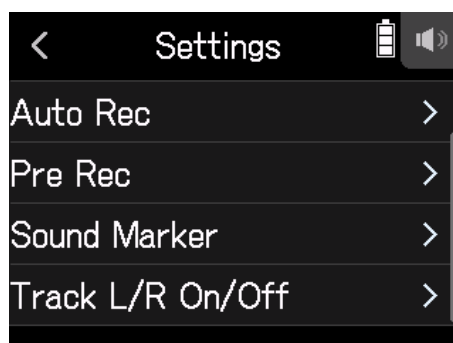
Recording L/R tracks

During recording, a stereo file can be created based on the mix from the internal mixer.

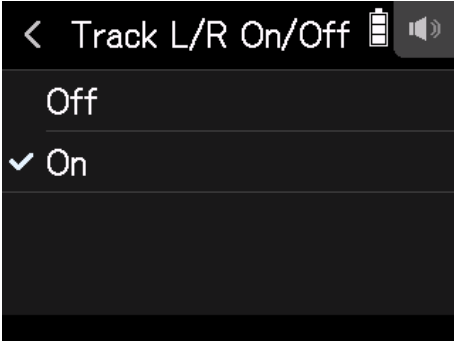
1. Tap .



2. Tap Track L/R On/Off.

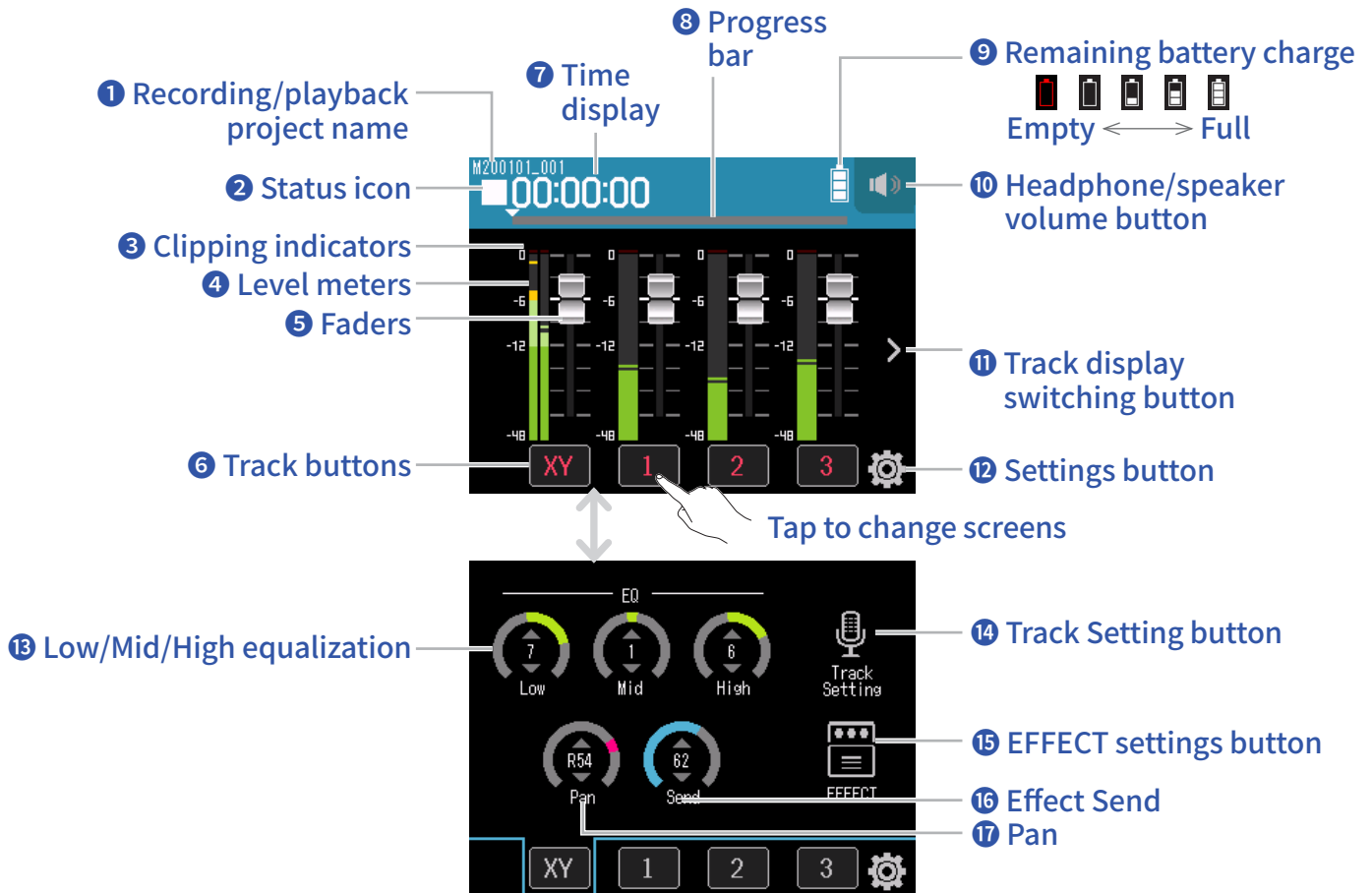


3. Set it to On.



Recording with the MUSIC app

Display overview



1 Recording/playback project name

2 Status icon

This shows the recording/playback status.

■ : Stopped ● : Recording || : Recording/playback paused ► : Playing

3 Clipping indicators

If a clipping indicator lights, adjust the input level (→ [“Setting recording \(input\) levels”](#) on page 26) or set the limiter (→ [“Comp/Limiter/Gate”](#) on page 32).

4 Level meters

5 Faders

6 Track buttons

Tap these to open track channel strip screens.

7 Time display

Current elapsed recording/playback time

8 Progress bar

This shows the current playback location.

Slide ▼ to change the playback position.

9 Remaining battery charge

This shows the remaining battery charge. When the remaining battery charge becomes low, replace the batteries (→ [“Using batteries” on page 16](#)) or connect an AC adapter (→ [“Using an AC adapter” on page 16](#)).

10 Headphone/speaker volume button

Touch this to show the headphone/speaker volume slider. (→ [page 40](#))

11 Track display switching button

This changes the tracks shown

12 Settings button

Press to access a list of projects on the SD card (→ [page 99](#)) and to create new projects (→ [page 58](#)).

13 Low/Mid/High equalization

These can be used to boost and cut the equalization of low, mid and high frequencies.

14 Track Setting button

Press to make track settings, including Lo Cut and Phantom functions. (→ [page 27](#))

15 EFFECT settings button

Insert effects can be used. (→ [“Using effects” on page 64](#))

16 Effect Send

Use this to adjust the level sent to the send effect.

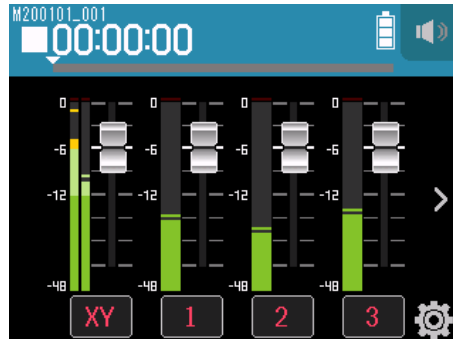
17 Pan

Use this to adjust the left-right balance.

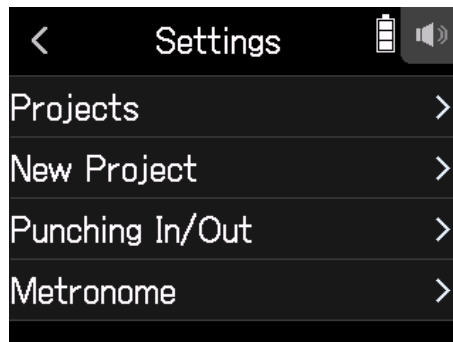
Creating new projects

The **H8** manages recording and playback data in units called projects.

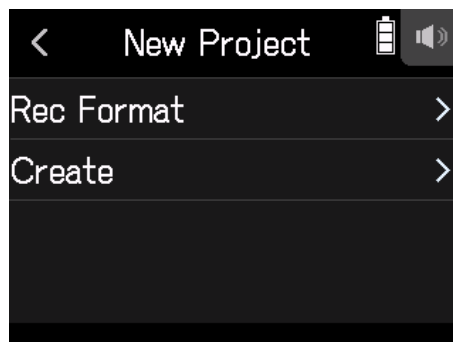
1. Tap .



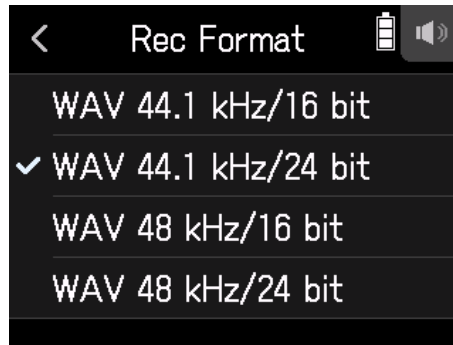
2. Tap New Project.



3. Tap Rec Format.



4. Tap a format.



The following formats can be set.

| Setting | Explanation |
|---------------------|---|
| WAV 44.1 kHz/16 bit | The higher the sampling frequency (kHz) and bit rate (bit) are, the better the audio quality will be. |
| WAV 44.1 kHz/24 bit | |
| WAV 48 kHz/16 bit | |
| WAV 48 kHz/24 bit | |

NOTE

Effects can only be used when the recording format is 44.1 kHz/16 bit or 44.1 kHz/24 bit.

5. Tap **Create**, and input the project name.

See "Character Input Screen overview" (→ [page 14](#)) for how to input characters.

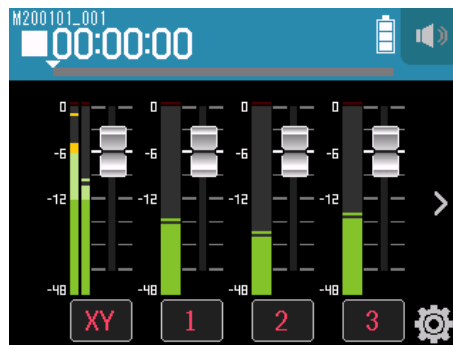


NOTE

The project created will be set as the recording/playback project.

Opening existing projects

1. Tap .

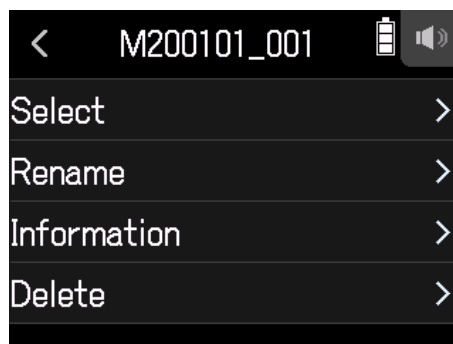


2. Tap Projects.



3. Tap ... for the project you want to open.

4. Tap Select.



5. Tap Execute.

Recording





Recording process

Recording follows the process shown below.



Prepare to record

- Use batteries or an AC adapter
- Insert an SD card
- Connect the XY mic
- Connect mics, instruments, mixers and other equipment
- Turn the power on
- Create a new project
- Make input and output settings




Record

- Press  followed by  to start recording and  to stop recording
- Press  to pause


Play and check

- Press  to start playback and  to stop
- Project mixer settings can also be made, for example

Record additional files

- Make punch in/out settings
- Press  followed by  to start recording and  to stop recording

Recording

1. Press  on the MUSIC app screen.

This will start recording standby.

2. Press .

This starts recording.

3. Press  to pause.

4. Press  to stop.

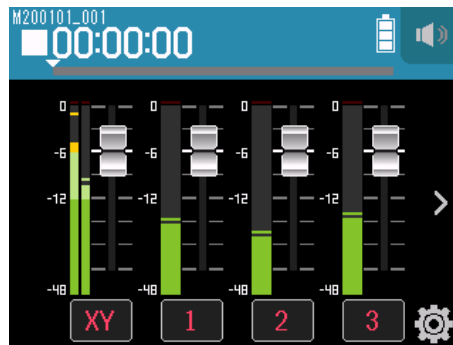
NOTE

If the file size exceeds 2 GB during recording, a new file will be created automatically in the same project and recording will continue without pause. When this happens, numbers will be added to the ends of the file names: “_0001” for the first file, “_0002” for the second file and so on. No gap in sound will occur between the two files when this happens.

HINT




Files are automatically saved at regular intervals during recording. If the power is interrupted or another problem occurs during recording, an affected file can be restored to normal by playing the automatically saved file with the **H8**.

Playing recordings



1. Press .

Playback operations

| Operation | Touchscreen/button operation |
|-------------------------|---|
| Search forward/backward | Slide  left/right. |
| Pause/resume playback | Press  . |
| Stop | Press  . |

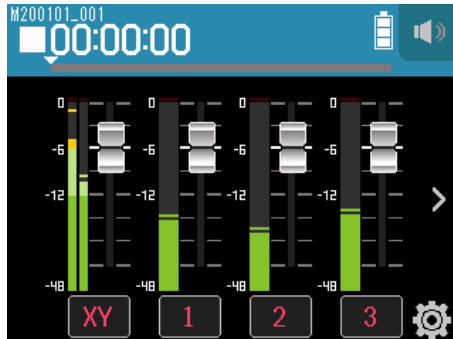
HINT

- Slide the progress bar left/right to change the playback position.
- During playback, press track buttons to switch between playing back (lit green) and muted (unlit).
- If the selected project is not valid, an "Invalid Project!" message will appear.

Using effects

There are 76 types of effects that can be used.

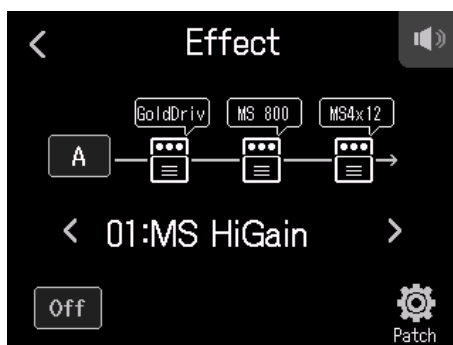
1. Tap the desired track button.



2. Tap  EFFECT.



This opens the Effect Screen.



Refer to “Using effects” (→ [page 89](#)) for setting procedures and other details.

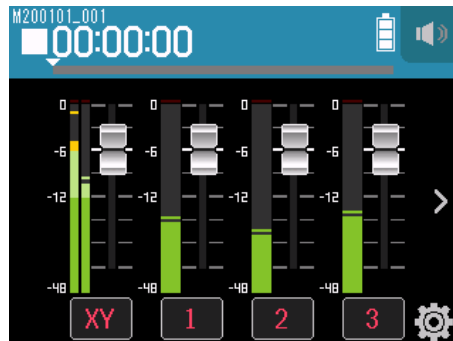
NOTE

Effects can only be used when the recording format is 44.1 kHz/16 bit or 44.1 kHz/24 bit.

Using the metronome

The **H8** has a metronome with a precount function. Metronome settings are saved separately with each project.

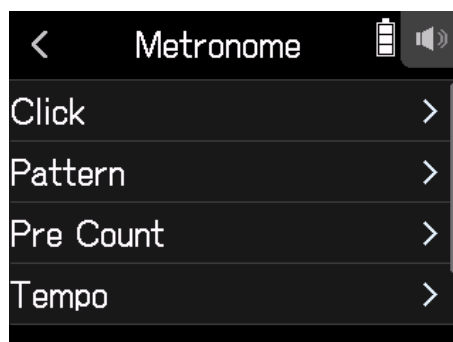
1. Tap .



2. Tap Metronome.

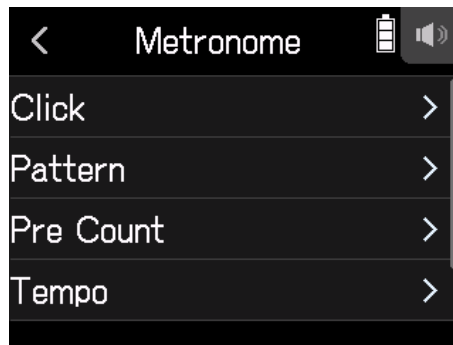


This opens the Metronome Settings Screen.

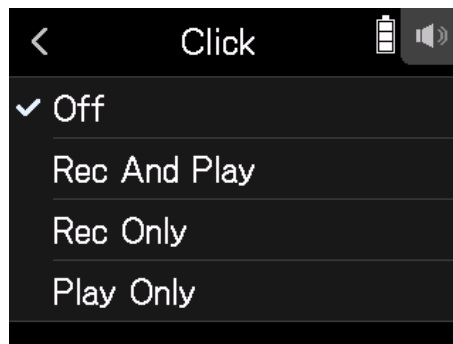


Setting when the metronome sounds

1. Tap Click on the Metronome Settings Screen.



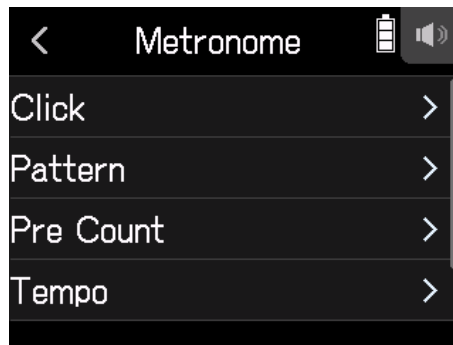
2. Tap a condition to select it. (See the table below.)



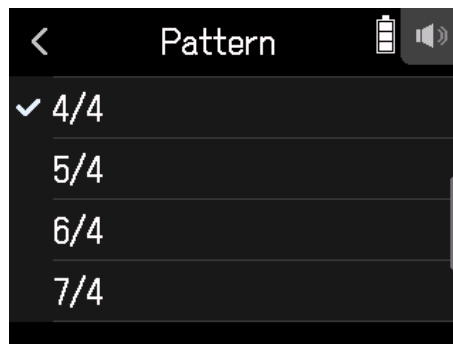
| Condition (setting) | Explanation |
|---------------------|---|
| Off | The metronome does not make sound. |
| Rec And Play | The metronome sounds during recording and playback. |
| Rec only | The metronome sounds only during recording. |
| Play only | The metronome sounds only during playback. |

Selecting the metronome pattern

1. Tap **Pattern** on the **Metronome Settings Screen**.



2. Tap a pattern to select it.



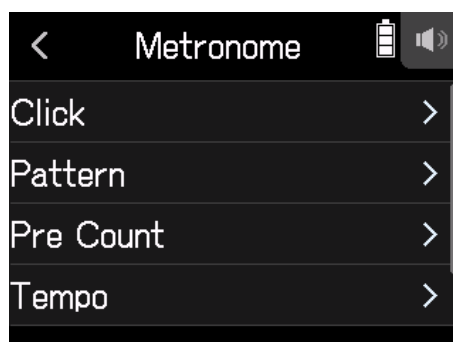
HINT

This can be set to 0/4, 1/4, 2/4, 3/4, 4/4, 5/4, 6/4, 7/4, 8/4 or 6/8.

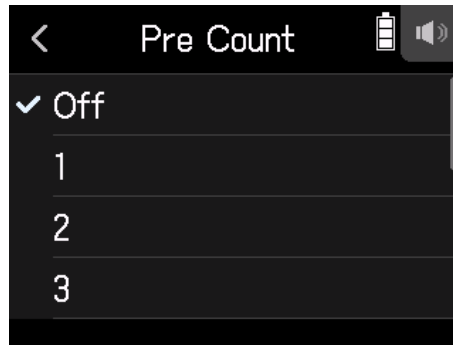
Setting the precount

A metronome count can be sounded before starting recording/playback.

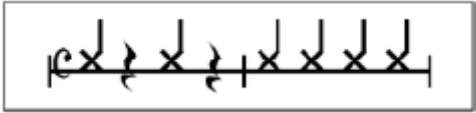
1. Tap **Pre Count** on the **Metronome Settings Screen**.



2. Tap a setting to select it. (See the table below.)

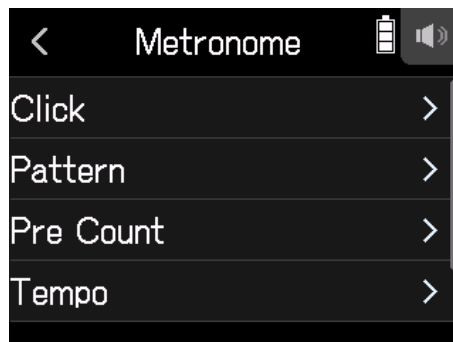


Select a setting from below.

| Setting | Explanation |
|---------|--|
| Off | No precount will sound. |
| 1-8 | Before recording/playback, the precount will sound for the set number of times (1-8). |
| Special | Before recording/playback, the precount will sound as shown below.  |

Setting the metronome tempo

1. Tap Tempo on the Metronome Settings Screen.



2. Slide the tempo slider up and down to set the desired tempo.

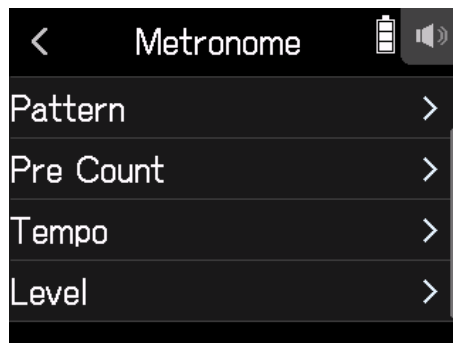


HINT

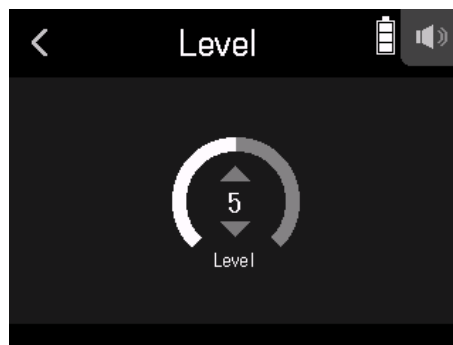
- This can be set from 40 to 250.
 - The tempo set here will be shared by the effects.
-

Setting the metronome volume

1. Tap **Level** on the **Metronome Settings** Screen.



2. Slide the level slider up and down to set the desired volume.



HINT

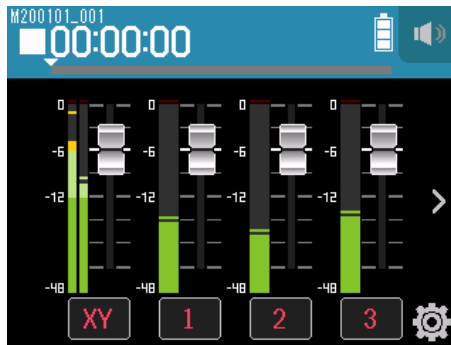
This can be set from 0 to 10.

Assigning files to tracks

Recording data from tracks in other projects and backup recording track data can be freely assigned to tracks and checked during playback.

Changing files assigned to tracks

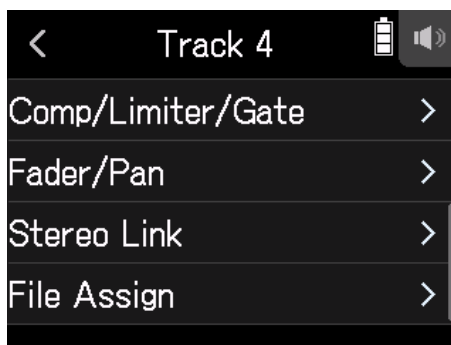
1. Tap the desired track button.



2. Tap  Track Setting.



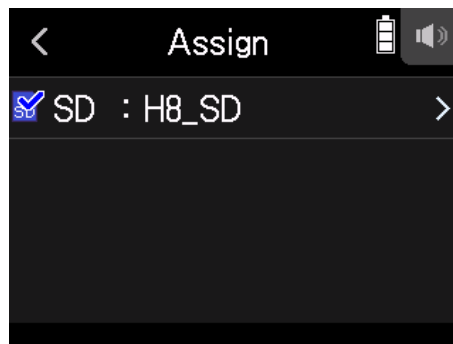
3. Tap File Assign.



4. Tap Assign.



5. Tap the file to assign.



6. Tap Assign.

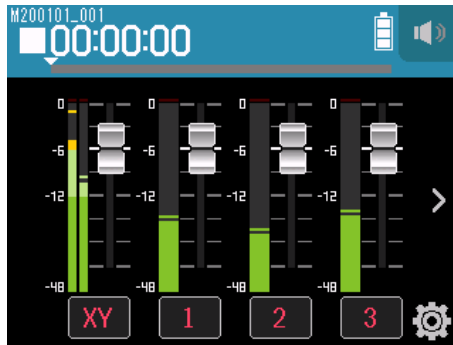


NOTE

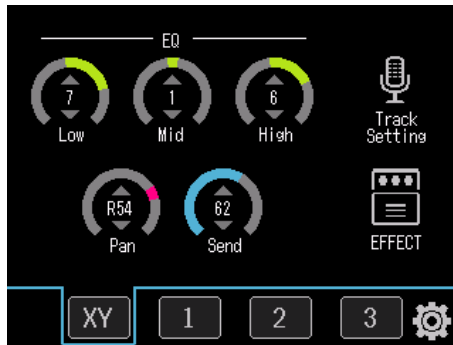
When a file is assigned from another project, it will be copied into the currently selected project.

Removing file assignments from tracks

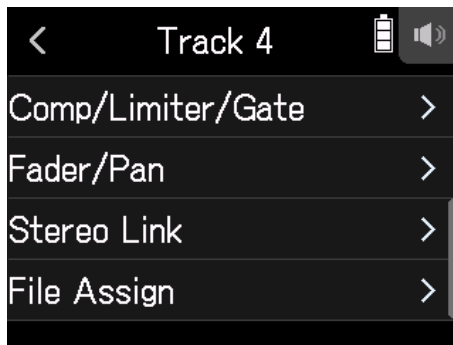
1. Tap the button for the track to change.



2. Tap  Track Setting.



3. Tap File Assign.



4. Tap Clear.



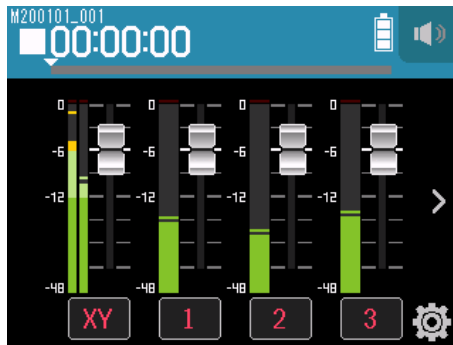
5. Tap Execute.

Recording additional files

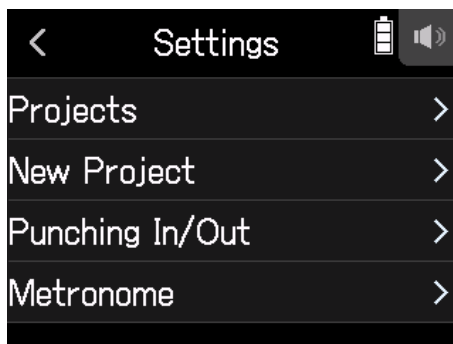
When **Punching In/Out** is **Off**, new files are always recorded.

When **Punching In/Out** is **On** parts of already recorded tracks can be partially re-recorded.

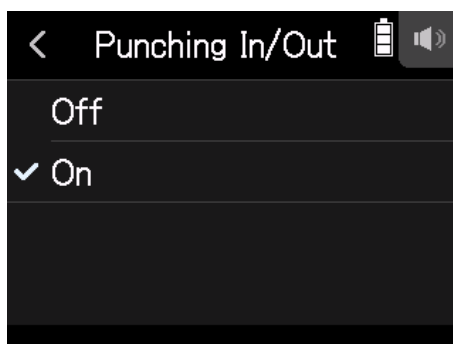
1. Tap .



2. Tap **Punching In/Out**.






3. Set it to **Off** or **On**.



| Setting | Explanation |
|---------|--|
| Off | Always record new files. |
| On | Parts of already recorded tracks are rerecorded. |




Recording new files

1. Tap **Punching In/Out** and set to **Off**.
2. Repeatedly press the track buttons for tracks to rerecord until they light red.
3. Press .
This will start recording standby.
4. Press .
This starts recording.
5. Press  to stop.

Rerecording parts of tracks

Punching in/out is a function that can be used to rerecord parts of already recorded tracks. "Punching in" is switching track status from playback to recording. "Punching out" is switching track status from recording to playback.

With the **H8**, punching in/out can be conducted manually.

1. Tap **Punching In/Out** and set to **On**.
2. Repeatedly press the track buttons for tracks to rerecord until they light red.
3. Press  to start playback.
4. Press  at the position where you want to start rerecording (punch in).
5. Press  at the end of recording (punch out).

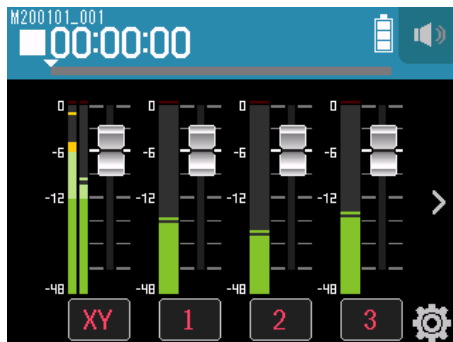
NOTE

- Punching in/out can be done once each time playback is started.
- Since punching in/out overwrites part of the file, the previous data will be lost.

Mixing projects

Adjusting track levels

1. Slide track faders up and down to adjust track levels.

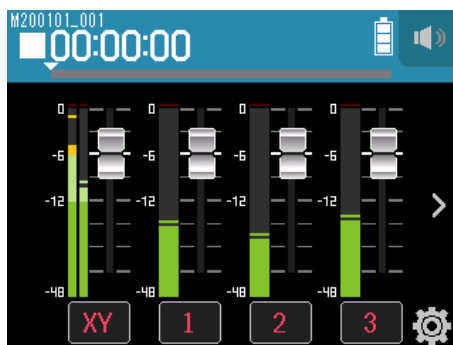


HINT

This can be set from $-\infty$ to +10 dB.

Adjusting other settings

1. Tap the desired track button.



2. Slide knobs up and down to adjust them, and tap the buttons.



| Parameter | Explanation |
|---------------|--|
| EQ Low* | <ul style="list-style-type: none"> • This adjusts the boost/cut of low-frequency equalization. • Type: shelving • Gain range: -12 dB – +12 dB • Frequency: 100 Hz |
| EQ Mid* | <ul style="list-style-type: none"> • This adjusts the boost/cut of mid-frequency equalization. • Type: peaking • Gain range: -12 dB – +12 dB • Frequency: 2.5 kHz |
| EQ High* | <ul style="list-style-type: none"> • This adjusts the boost/cut of high-frequency equalization. • Type: shelving • Gain range: -12 dB – +12 dB • Frequency: 10 kHz |
| Pan* | Use this to adjust the left-right balance. |
| Send* | Use this to adjust the level sent to the send effect. |
| Track Setting | Use to make input settings. (→ “Making input and output settings” on page 25) |
| EFFECT | Insert effects can be used. (→ “Using effects” on page 89) |

NOTE

*These parameters do not affect individual track recordings. They do affect files created during mixdown. Other parameters do affect individual track recordings.

Mixing down tracks

Recorded projects can be mixed down to stereo files (WAV).

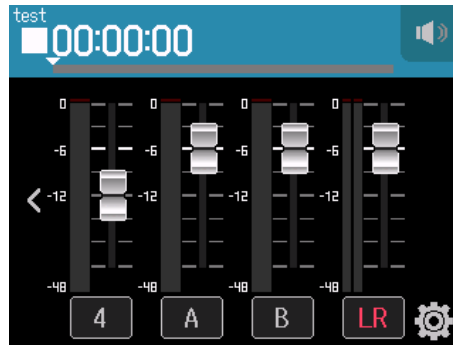
NOTE

Mixing down is not possible when **Punching In/Out** is On.

1. Tap the > track display switching button to show the LR track.



2. Tap the LR track button.



LR will become red.

3. Press .

This will start recording standby.

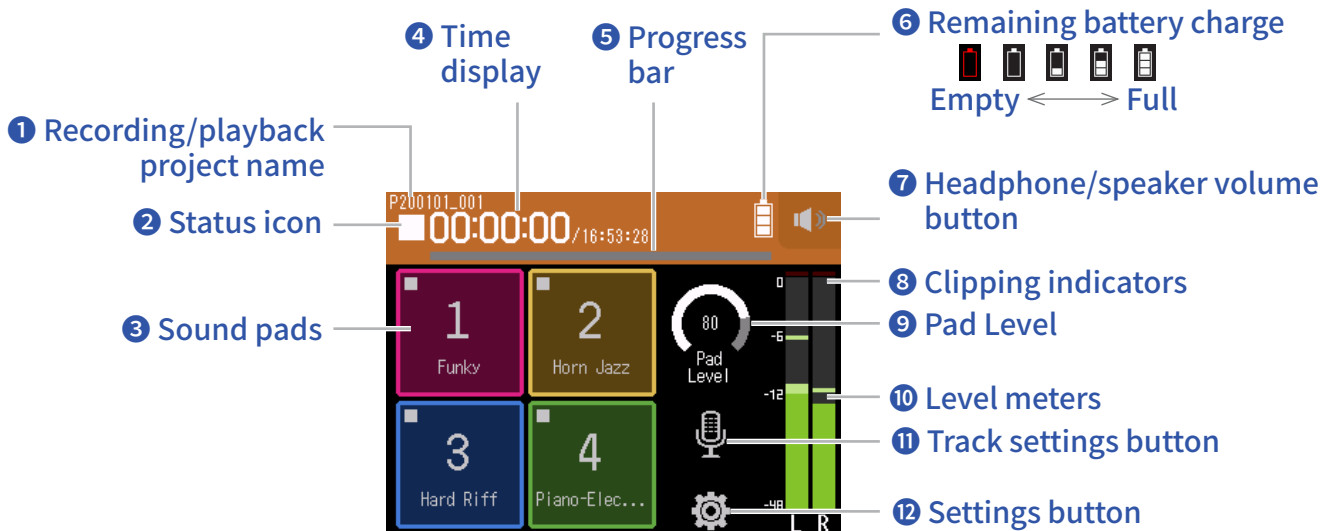
4. Press .

This starts recording.

5. Press  to stop.

Recording with the PODCAST app

Display overview



1 Recording/playback project name

2 Status icon

This shows the recording/playback status.

■ : Stopped ● : Recording || : Recording/playback paused ► : Playing

3 Sound pads

Sounds assigned to each pad can be played.

4 Time display

Left: Current elapsed recording/playback time

Right: Remaining available recording/playback time

5 Progress bar

This shows the current playback location.

Mark positions are shown above the progress bar.

Slide ▼ to change the playback position.

6 Remaining battery charge

This shows the remaining battery charge. When the remaining battery charge becomes low, replace the batteries (→ [“Using batteries” on page 16](#)) or connect an AC adapter (→ [“Using an AC adapter” on page 16](#)).

7 Headphone/speaker volume button

Touch this to show the headphone/speaker volume slider. (→ [page 40](#))

8 Clipping indicators

If a clipping indicator lights, adjust the input level (→ [“Setting recording \(input\) levels” on page 26](#)) or set the limiter (→ [“Comp/Limiter/Gate” on page 32](#)).

9 Pad level

Use this to adjust the sound pad level.

10 Level meters

These are the level meters for the LR track.

When the LR track is on, LR becomes red.

11 Track settings button

Press to make track settings, including Lo Cut and Phantom functions. (→ [page 26](#))

12 Settings button

Press to access a list of projects on the SD card (→ [page 99](#)) and to make recording format settings (→ [page 86](#)).

Recording




Recording process

Recording follows the process shown below.

Prepare to record

- Use batteries or an AC adapter
- Insert an SD card
- Connect the XY mic
- Connect mics, instruments, mixers and other equipment
- Turn the power on
- Set the recording format
- Make input and output settings

Record

- Press  to start recording and press  to stop recording
- Sound pads can also be recorded
- Marks can also be added
- Press  to pause

Play and check

- Press  to start playback and  to stop
- Cue to mark positions and to make project mixer settings, for example

Recording

1. Press  on the PODCAST app screen.


This starts recording.

NOTE

- When sound pads are used during recording, their sounds are mixed in stereo and recorded on tracks 3/4.
- In PODCAST mode, Inputs 3/4 cannot be used.

2. Press  to pause.

NOTE

- When recording is paused, a mark is added at that point. Press  again to resume recording.
- A maximum of 99 marks can be added in a project.

HINT

Marks can be added without pausing. (→ [“Setting how marks are added when recording/playing” on page 124](#))

3. Press  to stop.

NOTE

If the file size exceeds 2 GB during recording, a new file will be created automatically in the same project and recording will continue without pause. When this happens, numbers will be added to the ends of the file names: “_0001” for the first file, “_0002” for the second file and so on. No gap in sound will occur between the two files when this happens.

HINT







Files are automatically saved at regular intervals during recording. If the power is interrupted or another problem occurs during recording, an affected file can be restored to normal by playing the automatically saved file with the **H8**.

Playing recordings





1. Press .

Playback operations

| Operation | Touchscreen/button operation |
|--------------------------------------|---|
| Select playback project/move to mark | Tap  |
| Search forward/backward | Press and hold  Slide  left/right. |
| Skip 15 seconds | Tap  |
| Pause/resume playback | Press  |
| Stop | Press  |

HINT

- Slide the progress bar left/right to change the playback position.
 - During playback, press track buttons to switch between playing back (lit green) and muted (unlit).
 - If the selected project is not valid, an "Invalid Project!" message will appear.
 - If no playable project exists, a "No Project!" message will appear.
 - During playback, press  to add marks that can be used for cueing. (→ ["Setting how marks are added when recording/playing" on page 124](#))
-

2. Press  to return the top screen of the PODCAST app.

Using sound pads

Audio files (WAV format) can be assigned to the sound pads. Tap one to play the assigned file. These are useful, for example, for playing effect sounds during podcasting and streaming as well as during live theater and music performances.

NOTE

- When sound pads are used during recording, their sounds are mixed in stereo and recorded on tracks 3/4.
- In PODCAST mode, Inputs 3/4 cannot be used.

Playing sounds with sound pads

When shipped new from the factory, the **H8** has 13 built-in sounds, and 4 are pre-assigned to sound pads.

1. Tap a sound pad.



NOTE

When sound pads are played during recording, they will be recorded on tracks 3/4.

HINT

Slide the **Pad Level** knob up and down to adjust the overall level of the pads.

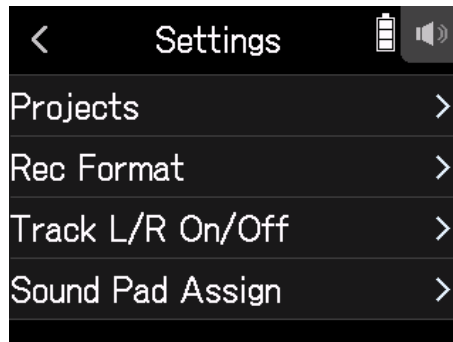
Assigning audio files to sound pads

Built-in sounds and audio files saved on an SD card can be assigned to sound pads.

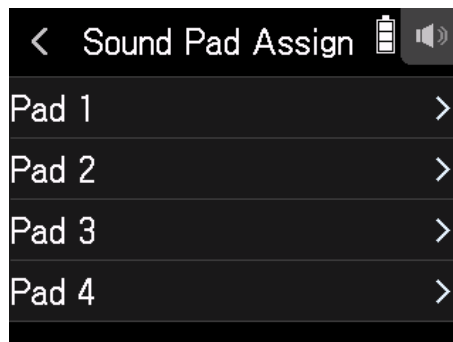
1. Tap .



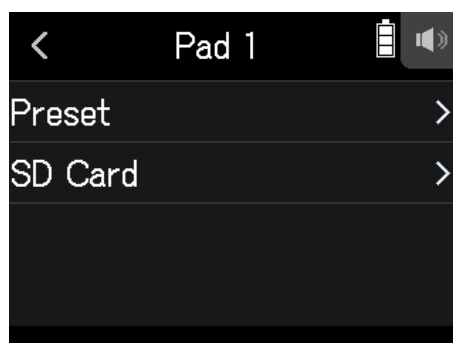
2. Tap Sound Pad Assign.



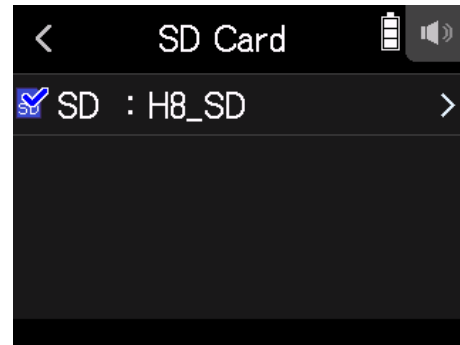
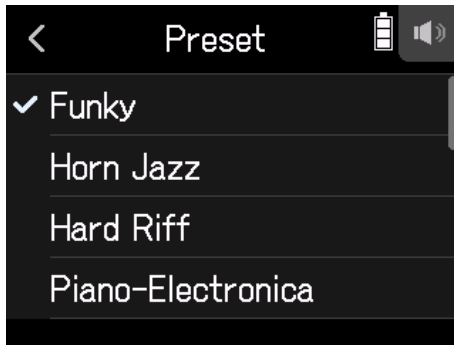
3. Tap the number of the pad to be reassigned.



4. Tap Preset or SD CARD.



5. Tap the desired file.



6. Tap Assign.



NOTE

- Use a computer to store audio files for sound pad assignment in the SOUND PAD folder on the card. (→ [“Using as a card reader” on page 113](#))
- Sound pads support the following file types.
 - File format: WAV
 - Sampling rate: 44.1/48 kHz
 - Bit rate: 16/24-bit
 - Channels: Mono/stereo
- Files that are not inside the SOUND PAD folder will be copied to the SOUND PAD folder when they are assigned.

Making recording settings

Setting the recording format

Considering audio quality and file size, select the format.

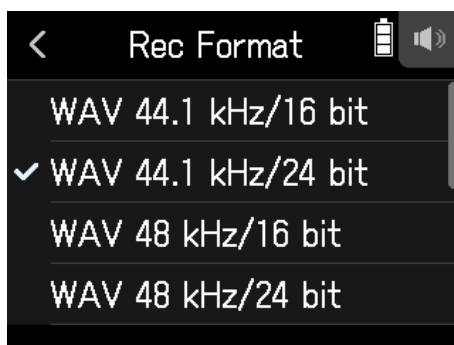
1. Tap .



2. Tap Rec Format.



3. Set the recording format



The following formats can be set.

| Setting | Explanation |
|---------------------|---|
| WAV 44.1 kHz/16 bit | The higher the sampling frequency (kHz) and bit rate (bit) are, the better the audio quality will be. |
| WAV 44.1 kHz/24 bit | |
| WAV 48 kHz/16 bit | |
| WAV 48 kHz/24 bit | |

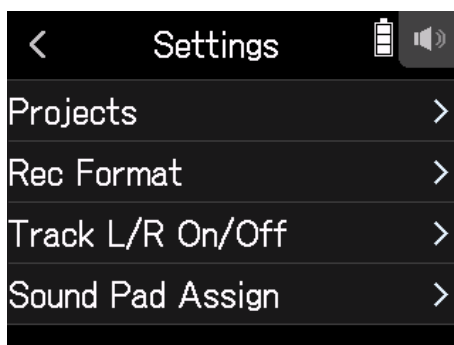
Recording L/R tracks

During recording, a stereo file can be created based on the mix from the internal mixer.

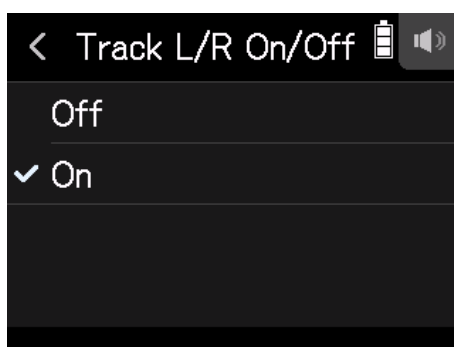
1. Tap .



2. Tap Track L/R On/Off.



3. Tap On.



Using effects

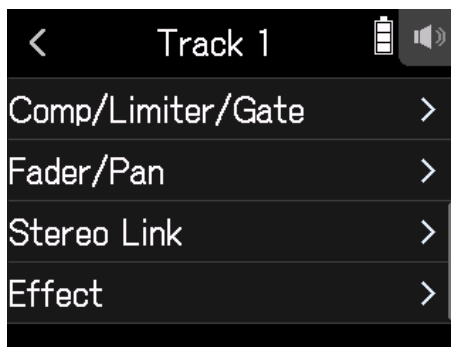
There are 76 types of effects that can be used.

1. Tap .

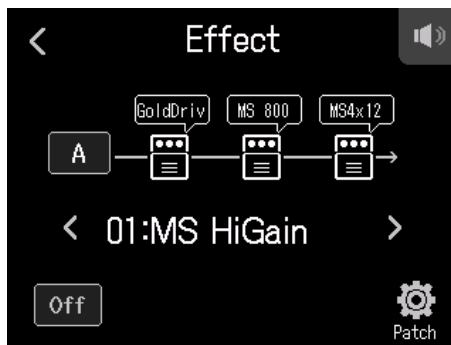


2. Select a track.

3. Tap Effect.



This opens the Effect Screen.



Refer to “Using effects” (→ [page 89](#)) for setting procedures and other details.

NOTE

Effects can only be used when the recording format is 44.1 kHz/16 bit or 44.1 kHz/24 bit.

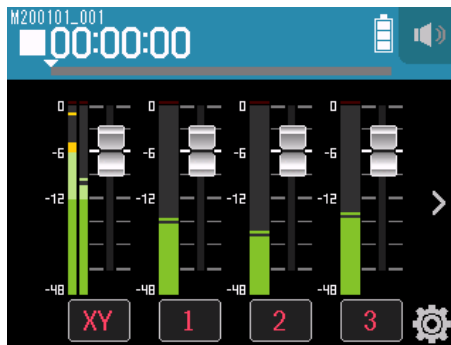
Using effects

These alter the sounds of instruments, voices and other sources. The included effects, which are equivalent to those in ZOOM multi-effects processors, can be used with a variety of instruments. Using the free Guitar Lab effect management application on a computer (Mac/Windows), you can add effects that are distributed online as well as edit and back up patch memories, for example.

Selecting tracks and patch memories to use effects

Setting tracks to use effects from the MUSIC app screen

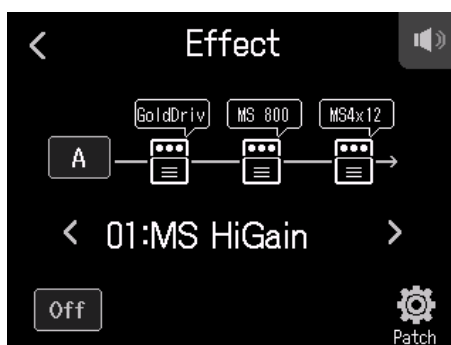
1. Select a track.



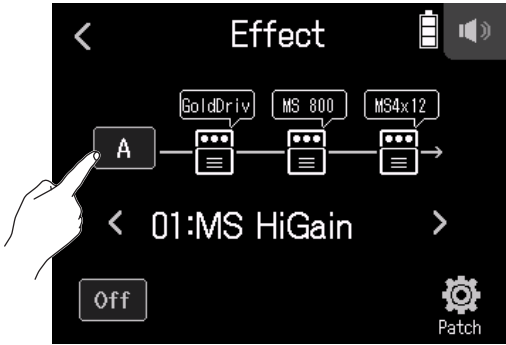
2. Tap  EFFECT.



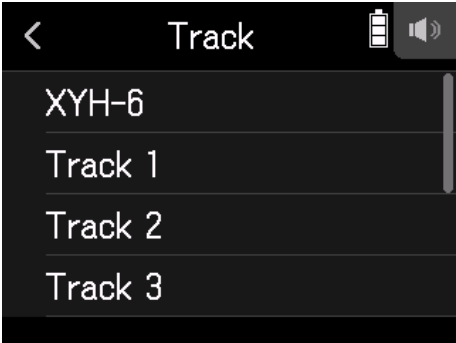
This opens the Effect Screen.



3. Tap the input icon.



4. Select the track to use the effect on.



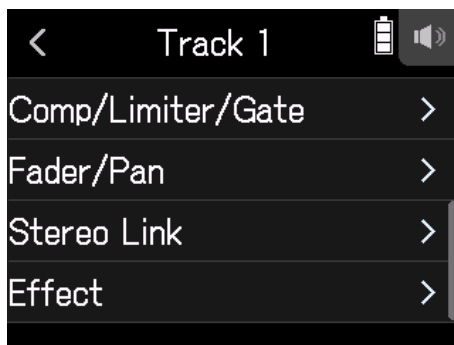
Setting tracks to use effects from the PODCAST app screen

1. Tap .

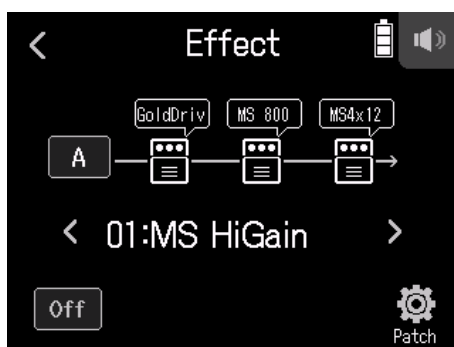


2. Select a track.

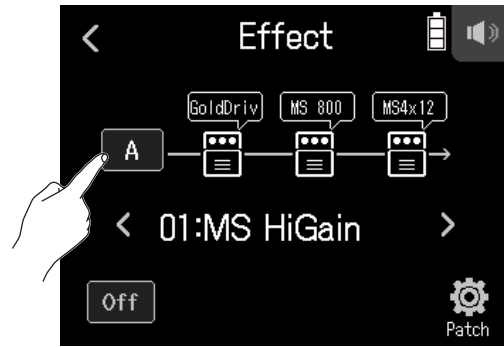
3. Tap Effect.



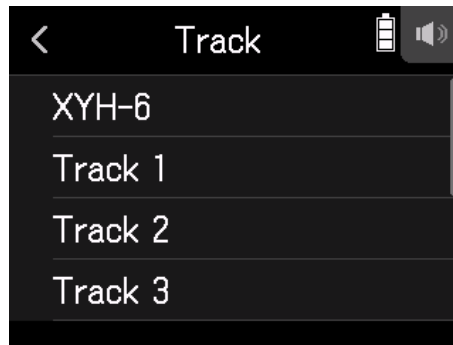
This opens the Effect Screen.



4. Tap the input icon.

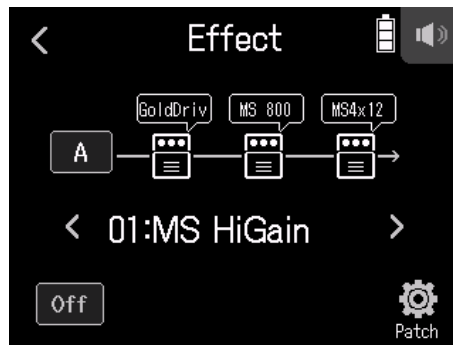


5. Select the track to use the effect on.

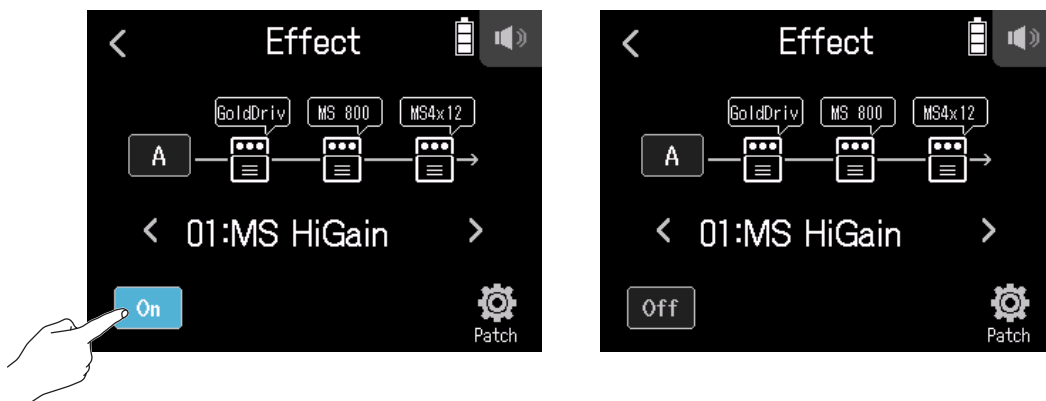


Selecting patch memories and turning them on/off

1. Tap < and > on the Effect Screen to select a patch memory.

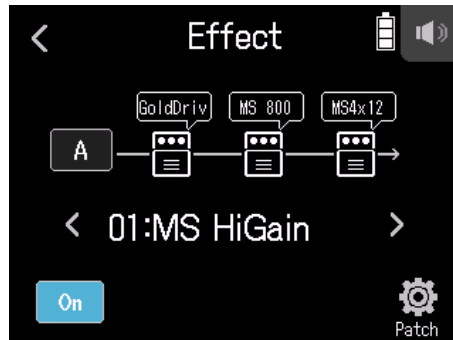


2. Tap On/Off.

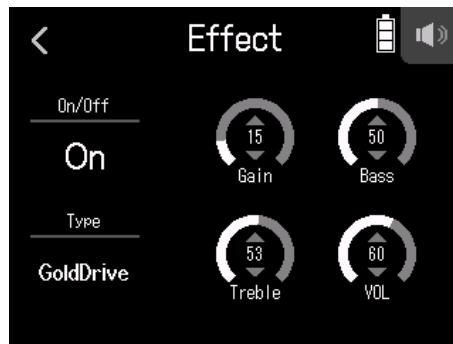


Adjusting effect parameters

1. Tap the effect to adjust on the Effect Screen.



2. Adjust the effect.



- Tap **On/Off** to change its on/off setting.
- Tap **Type** to change the effect.
- Slide parameters up and down to adjust their settings.

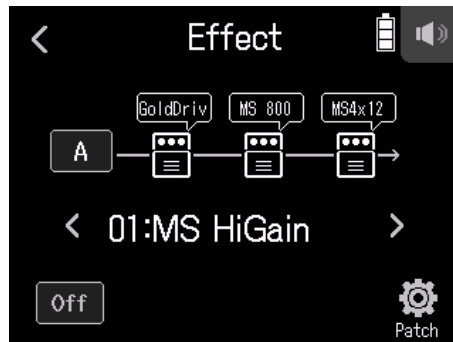
NOTE

- If there are five or more parameters, tap > to change the screen.
- Using the **H8**, you can combine three effects as you like. If the processing capability limit is exceeded, however, a "Process Overflow. Change effect" warning will appear and effects will be bypassed. Change one of the effects to end this condition.
- The parameters that can be adjusted depend on the effect.

Making patch memory settings

Saving patch memories

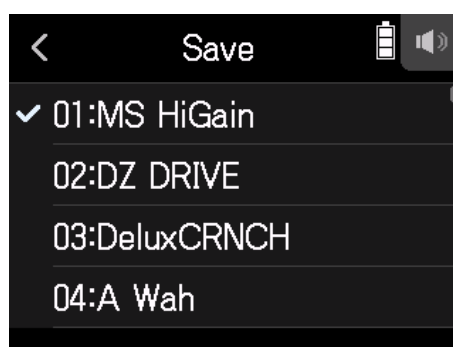
1. Tap Patch  on the Effect Screen.



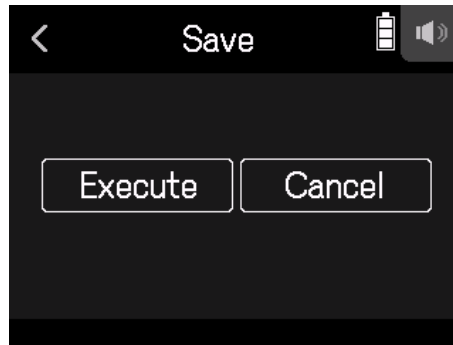
2. Tap Save.



3. Tap the name of the save destination patch.



4. Tap Execute.



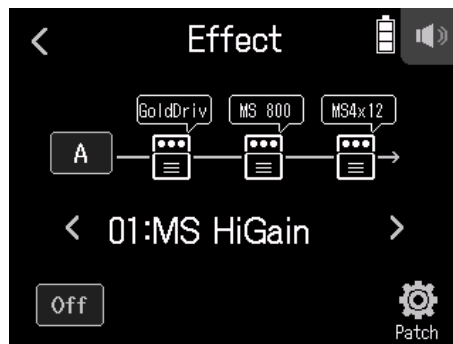
NOTE

- Patch memories are not saved in projects.
- 50 patch memories can be saved as **H8** settings.

Changing patch names

1. Select the patch memory with the name you want to change on the Effect Screen.

2. Tap  Patch.



3. Tap Patch Name.



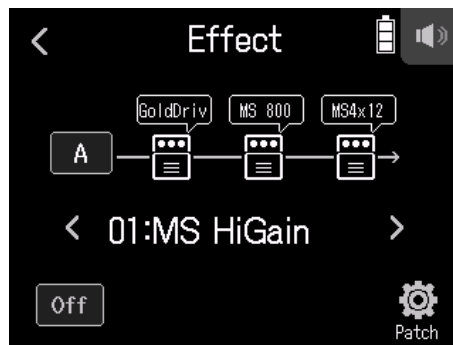
4. Input the patch name, and tap Enter.



See "Character Input Screen overview" (→ [page 14](#)) for how to input characters.

Changing patch levels

1. Tap  Patch on the Effect Screen.



2. Tap Patch Level.



3. Slide up and down to change the level.



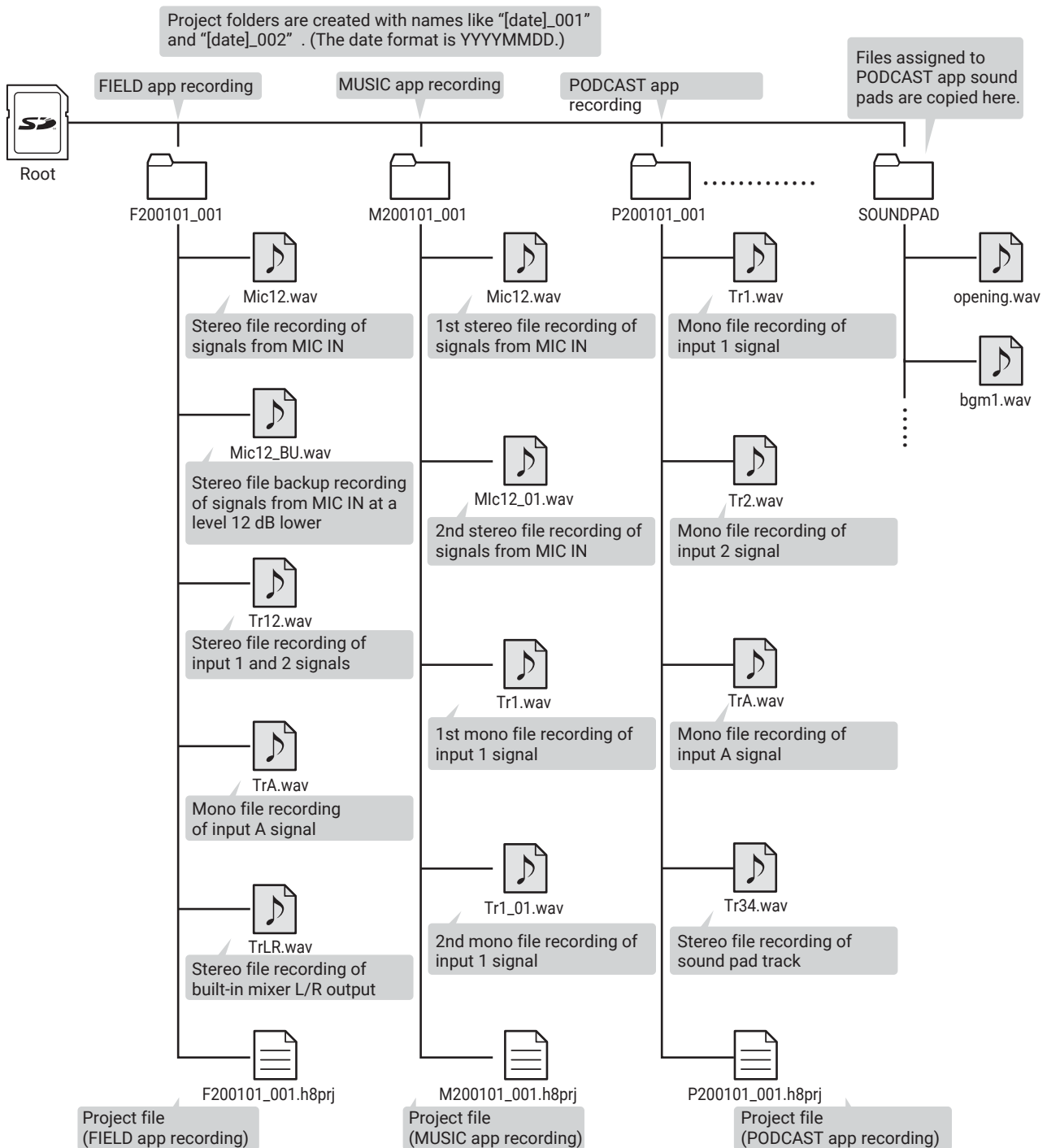
Managing projects

Folder and file structure

When recording with the **H8**, folders and files are created on SD cards in the following manner.

Projects that are created can be used with all three apps (FIELD, MUSIC and PODCAST). (Recording and playback of 96kHz/16-bit and 96kHz/24-bit WAV files is only supported by the FIELD app.)


The **H8** manages recording and playback data in units called projects.



Managing projects

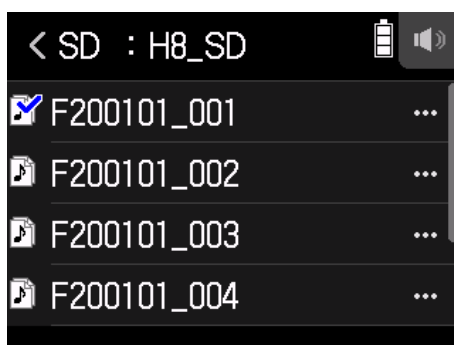
The contents of SD cards can be viewed and folders can be created. Recording/playback folders can also be set and deleted and have their information checked, for example.

Project Operation Screen

1. Tap  on an app screen.

2. Tap Projects.

The Project Operation Screen shows the folders and files on the SD card.



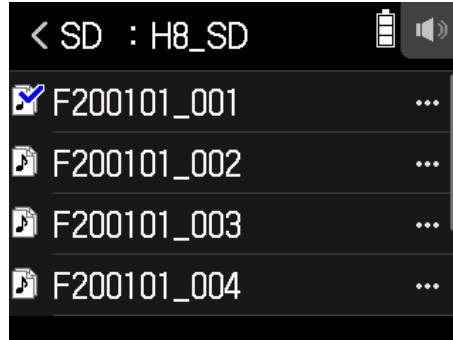
• The following operations are possible.

| Action | Operation |
|-------------------|--------------|
| Move down a level | Tap a folder |
| Move up a level | Tap < |
| Show options | Tap ... |

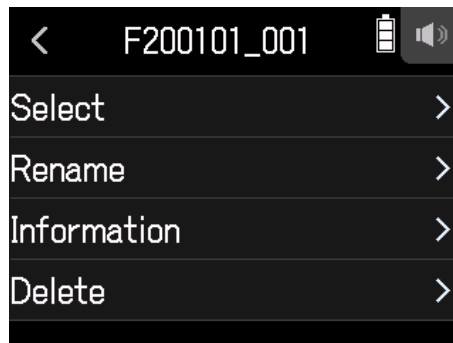
Selecting the project recording/playback folder

Select the folder that contains the project to be played and to use for recording projects, and return to the top screen of the app.

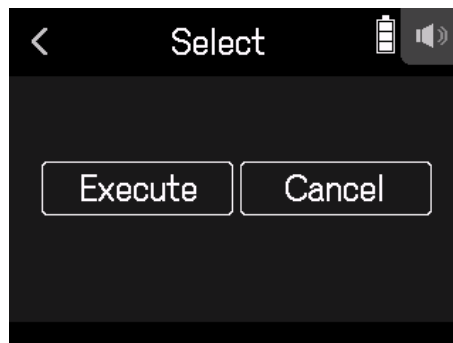
1. Tap ... on the Project Operation Screen.



2. Tap Select.



3. Tap Execute.

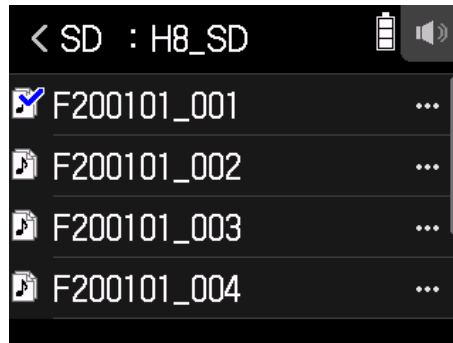


NOTE

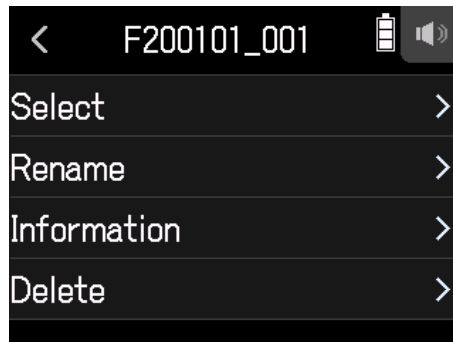
The first project inside the selected folder will be set as the playback project.

Changing folder and project names

1. Tap ... on the Project Operation Screen.



2. Tap Rename.



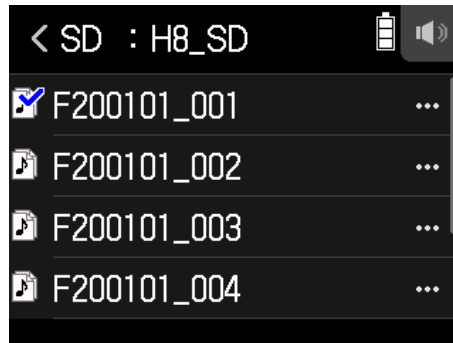
3. Input the folder/project name.



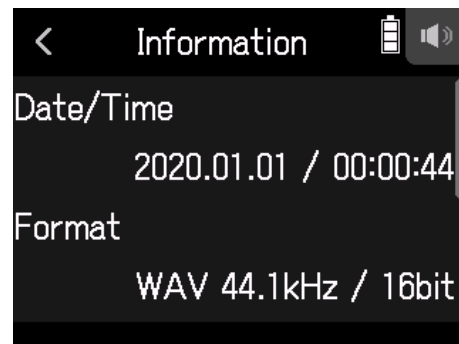
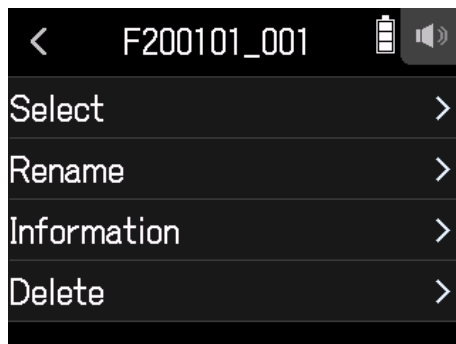
See "Character Input Screen overview" (→ [page 14](#)) for how to input characters.

Checking project information

1. Tap ... on the Project Operation Screen.



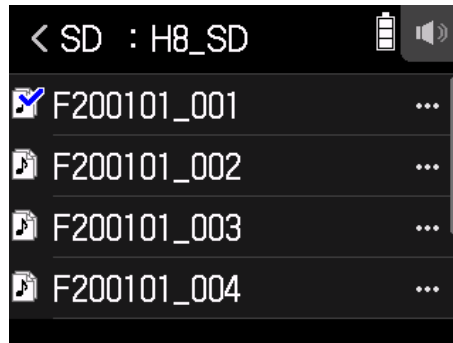
2. Tap Information.



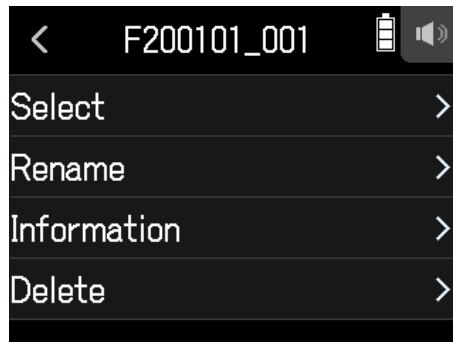
| Item | Explanation |
|-----------|------------------------|
| Date/Time | Date and time recorded |
| Format | Recording format |
| Size | Recording file size |
| Length | Recording time |

Deleting folders and projects

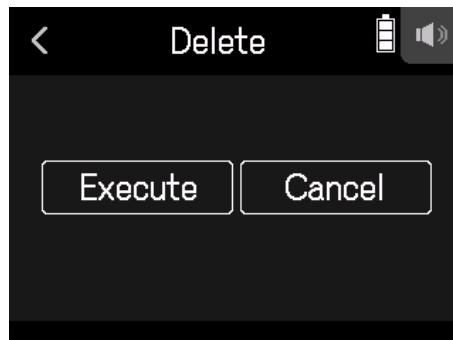
1. Tap ... on the Project Operation Screen.



2. Tap Delete.



3. Tap Execute.



Using as an audio interface

Signals input to the **H8** can be input to a computer or iOS/iPadOS device. Moreover, signals played back on a computer or iOS/iPadOS device can be output from the **H8**.

Connecting the H8 with a computer or iOS/iPadOS device

1. Tap  Audio Interface on the Home Screen.



2. Select the mode.



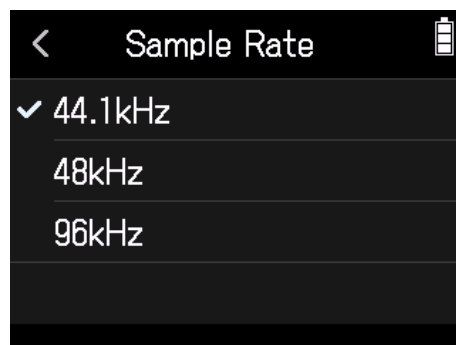
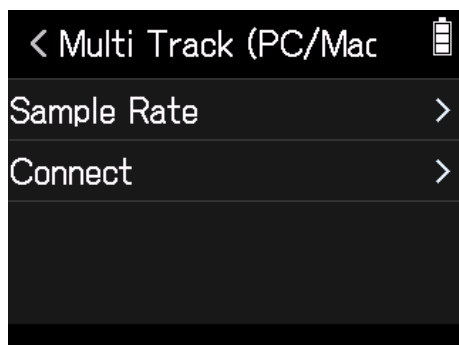
| Mode | Explanation |
|----------------------|--|
| Stereo Mix (PC/Mac) | This is a 2-in/2-out connection mode for Mac/Windows that sends all tracks as a stereo mix. |
| Stereo Mix (iPad) | This is a 2-in/2-out connection mode for iPadOS devices that sends all tracks as a stereo mix. |
| Multi Track (PC/Mac) | This is a 12-in/2-out connection mode for Mac/Windows that sends the signals of each track separately. |

NOTE

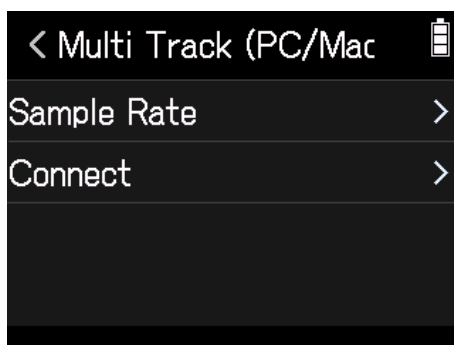
A driver is necessary for use with Windows. Download the driver from the ZOOM website (www.zoom.co.jp/).

If a Stereo Mix has been selected, skip to step 5.

3. Tap **Sample Rate**, and select a sample rate.



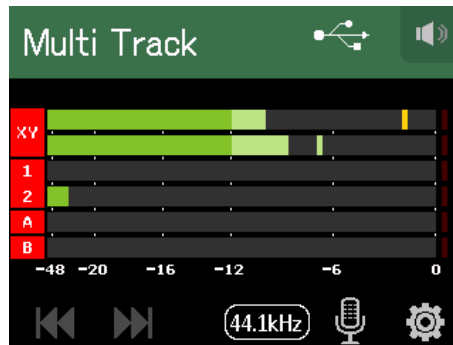
4. Tap **Connect**.



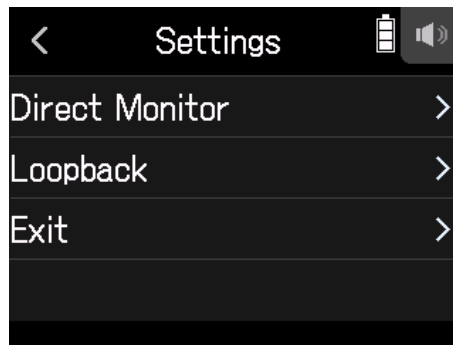
5. Use a USB cable to connect the **H8** with a computer or iOS/iPadOS device.

Disconnecting from a computer or iOS/iPadOS device

1. Tap **Settings** on the audio interface top screen.



2. Tap **Exit**.



3. Tap **Execute**.




4. Disconnect the USB cable connecting the **H8** with a computer or iOS/iPadOS device.

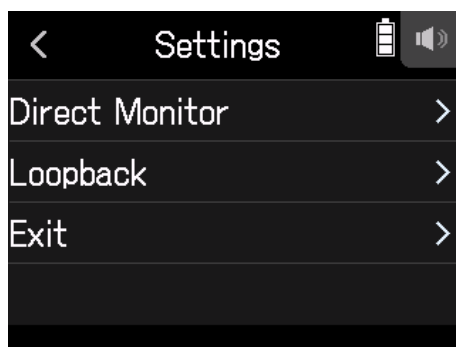
Making audio interface settings

The following two settings can be made when using the **H8** as an audio interface.

Enabling direct monitoring

This directly outputs the sound being recorded through the **H8** from the **H8** before sending it to the computer or iOS/iPadOS device. This enables monitoring without latency.


1. After connecting a computer or iOS/iPadOS device, tap  on the app screen.
2. Tap **Direct Monitor**, and set it to **On**.

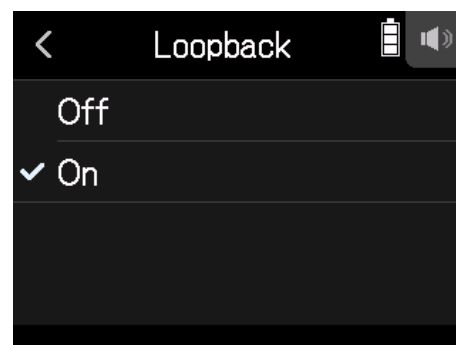
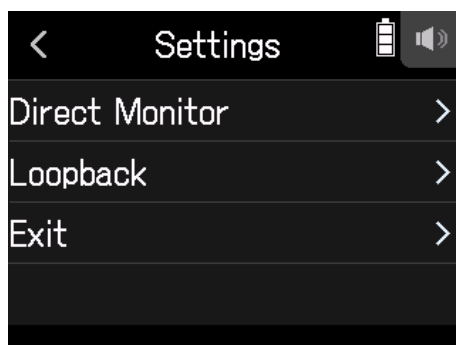


Setting loop back (Stereo Mix only)

This function mixes the playback sound from the computer or iOS/iPadOS device with the **H8** input and sends the mix back to the computer or iOS/iPadOS device (loop back).

This function can be used to add narration to music played back from the computer and to record the mix or stream it on the computer, for example.

1. After connecting a computer or iOS/iPadOS device, tap  on the app screen.
2. Tap **Loopback**, and set it to **On**.



Mixing inputs

The mix balance of the inputs can be adjusted. Input signals will be sent to the computer or iOS/iPadOS device using the balance settings made here. When using a Stereo Mix setting, the mixed stereo signal will be sent.

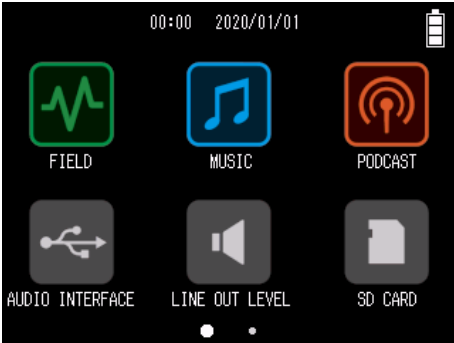
See "Adjusting input signal monitoring balance using fader and pan settings" (→ [page 37](#)) for how to mix inputs.

Managing SD cards

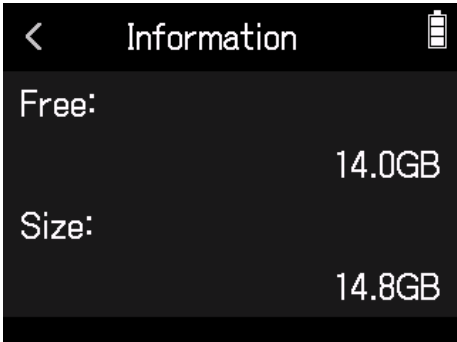
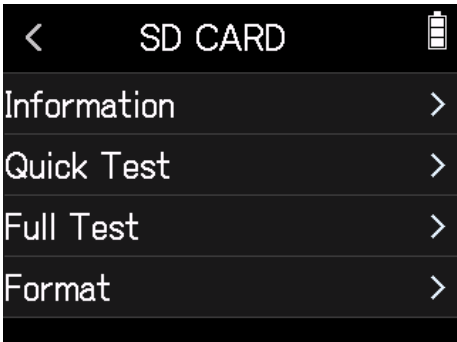
Checking SD card information

The open space and size of SD cards can be checked.

1. Tap  SD CARD on the Home Screen.



2. Tap Information.



Testing SD card performance

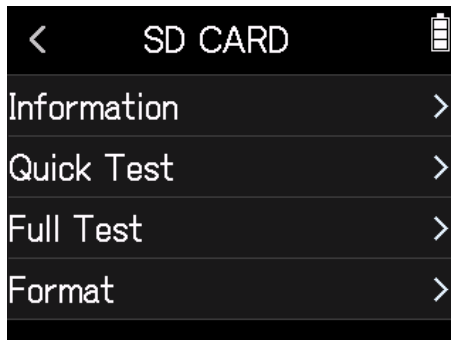
Purchased SD cards can be tested to confirm that they can be used with the **H8**. A basic test can be done quickly, while a full test examines the entire SD card.

Conducting a quick test

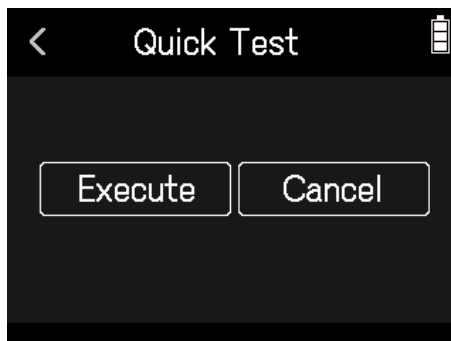
1. Tap  SD CARD on the Home Screen.



2. Tap Quick Test.



3. Select Execute.



The card performance test will start and should take about 30 seconds. The result of the test will be shown when it completes.

HINT

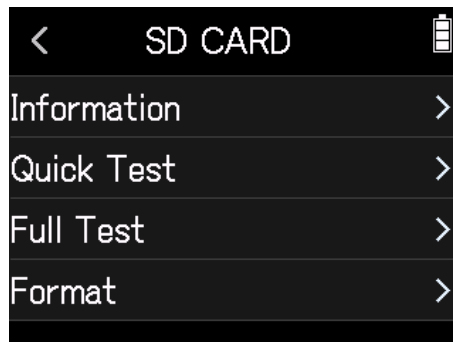
Tap < to cancel the test.

Conducting a full test

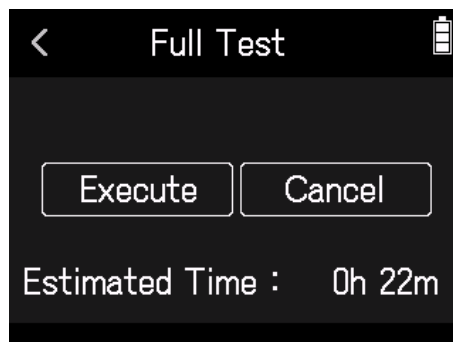
1. Tap  SD CARD on the Home Screen.



2. Tap Full Test.



3. Select Execute.



The card performance test will start. If the access rate MAX reaches 90%, the card will fail (NG).

HINT

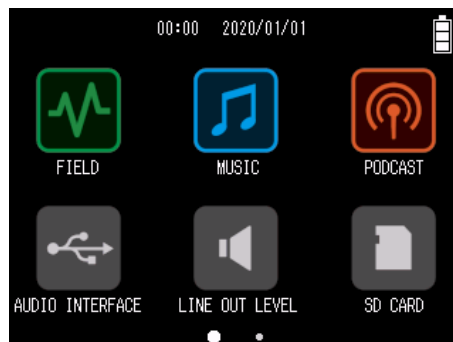
Tap < to cancel the test.

NOTE

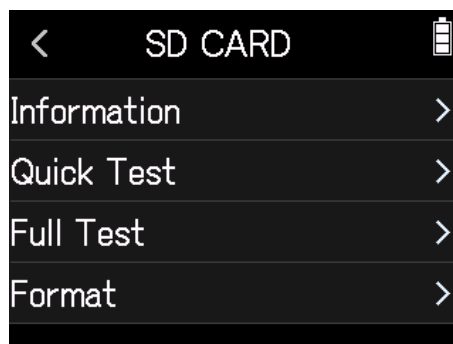
Even if a performance test result is "OK", there is no guarantee that writing errors will not occur. This information is just to provide guidance.

Formatting SD cards

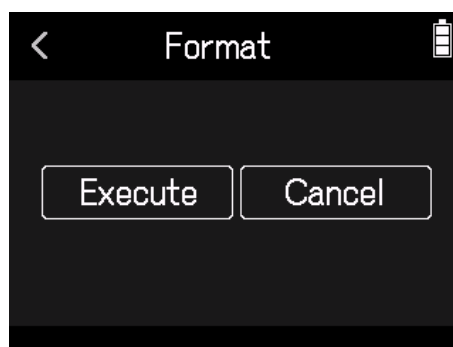
1. Tap  SD CARD on the Home Screen.



2. Tap Format.



3. Select Execute.



NOTE

- Before using SD cards that have just been purchased or that have been formatted on a computer, they must be formatted by the **H8**.
- All data previously saved on the SD card will be deleted when it is formatted. Please use caution.

Using as a card reader

When connected to a computer, data on the SD card can be checked and copied.

Connecting the H8 with a computer

1. Tap  SD CARD READER on the Home Screen.




2. Use a USB cable to connect the H8 and the computer.

Disconnecting a computer from the H8

1. Conduct procedures on the computer to disconnect.
 - Windows: Select **H8** from "Safely Remove Hardware".
 - macOS: Drag the **H8** icon to the Trash and drop it.

NOTE

Always conduct computer ejection procedures before disconnecting the USB cable.


2. Disconnect the USB cable connecting the H8 with the computer, and press .
3. Tap Execute.

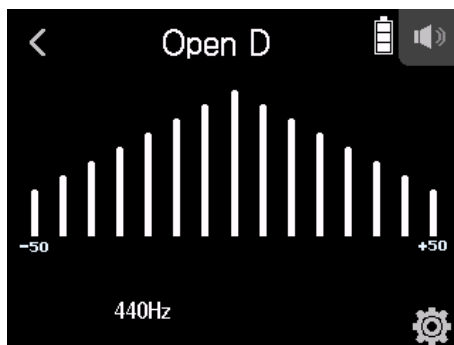
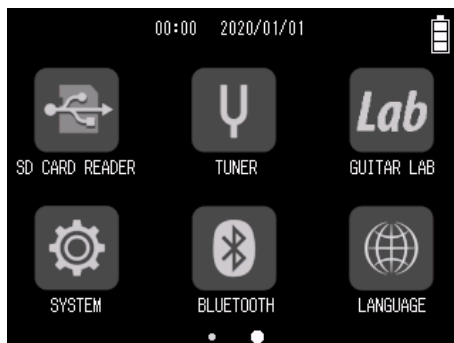


Using the tuner

Using the tuner function, you can tune guitars and other instruments.

Tuning guitars


1. Tap  TUNER on the Home Screen.



← Low pitch – Correct pitch – High pitch →

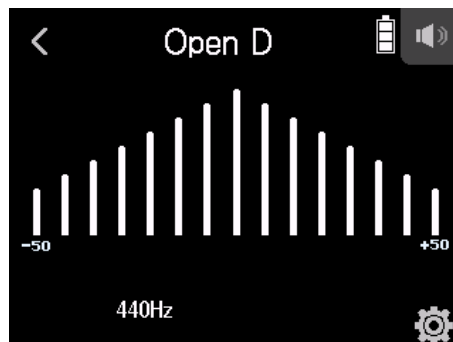
2. Play the open string that you want to tune and adjust its pitch.
The pitch detuning with the nearest note name or string number will be shown.

Changing the tuner type

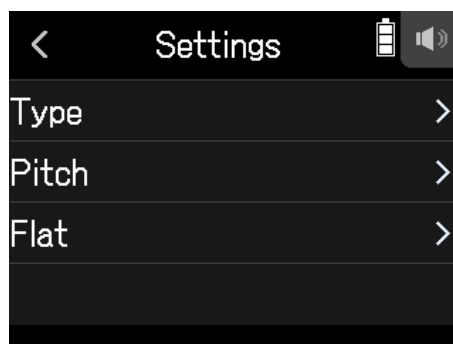
1. Tap  TUNER on the Home Screen.



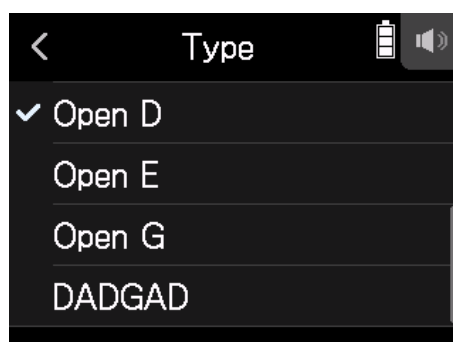
2. Tap .



3. Tap Type.



4. Tap the guitar type to select it.

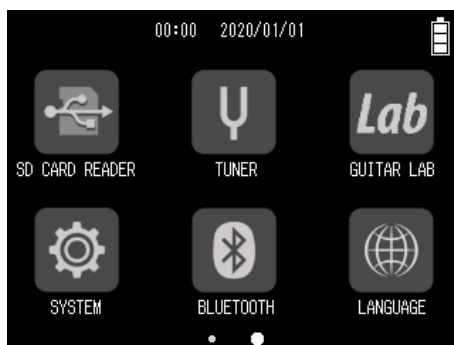


Available tuner type settings

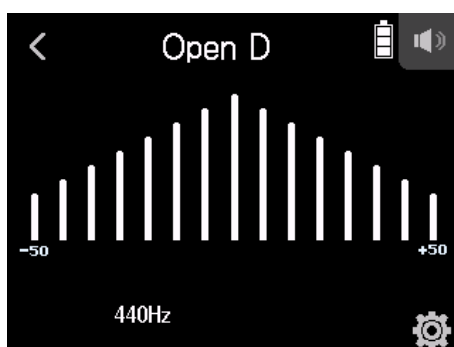
| Setting | Explanation | String number/note | | | | | | |
|-------------|---|--------------------|---|---|---|----|----|---|
| | | 7 | 6 | 5 | 4 | 3 | 2 | 1 |
| Chromatic | The name of the nearest note (in semitones) and the amount of detuning are shown. | - | - | - | - | - | - | - |
| Guitar | Standard guitar tuning with a 7th string | B | E | A | D | G | B | E |
| Bass guitar | Standard bass guitar tuning with a 5th string. | - | - | B | E | A | D | G |
| Open A | Open A tuning (open strings play A chord) | - | E | A | E | A | C# | E |
| Open D | Open D tuning (open strings play D chord) | - | D | A | D | F# | A | D |
| Open E | Open E tuning (open strings play E chord) | - | E | B | E | G# | B | E |
| Open G | Open G tuning (open strings play G chord) | - | D | G | D | G | B | D |
| DADGAD | Alternate tuning often used for tapping and other techniques | - | D | A | D | G | A | D |

Setting the standard pitch of the tuner

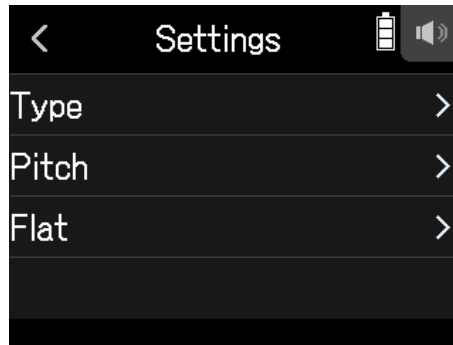
1. Tap  TUNER on the Home Screen.



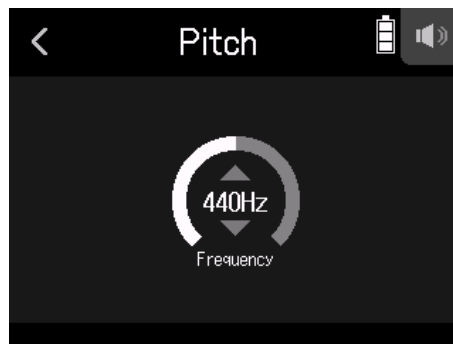
2. Tap .



3. Tap Pitch.



4. Slide up and down to set the standard pitch, and tap.




HINT

This can be set from 435 Hz to 445 Hz.

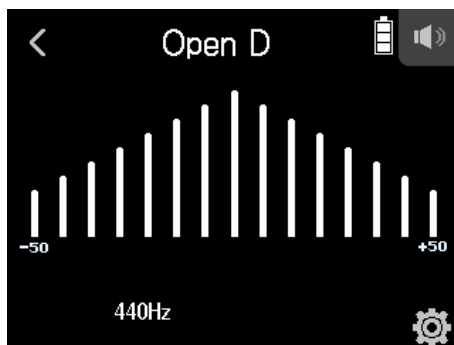
Using flat tunings

All strings can be tuned down from standard tuning by 1–3 semitones.

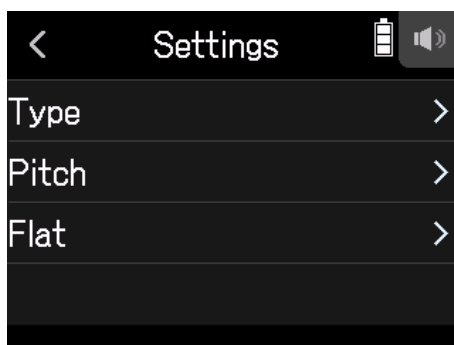
1. Tap  TUNER on the Home Screen.



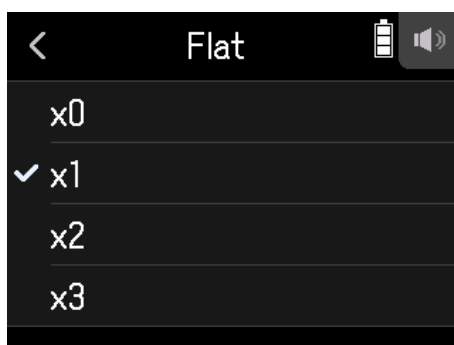
2. Tap .



3. Tap Flat.



4. Tap a setting to select it.



HINT

This can be set from x0 to x3 (3 semitones lower).

NOTE

Flat tuning cannot be used when the tuner type is Chromatic.

Using Guitar Lab

Guitar Lab can be used on a computer (PC/Mac) to add effects that are distributed online as well as to edit and back up patch memories, for example.

Connecting Guitar Lab

1. Tap  GUITAR LAB on the Home Screen.



2. Use a USB cable to connect the **H8** and the computer.
3. Launch Guitar Lab on the Computer.


Disconnecting Guitar Lab

1. Press .
2. Tap Execute.

Setting the date and time

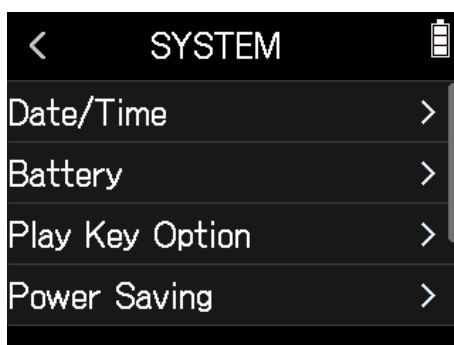
Setting the date and time

Set the date and time added to recording files.

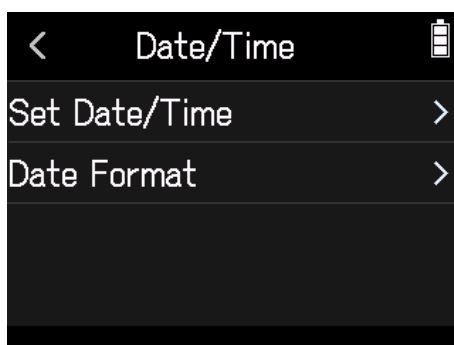
1. Tap  SYSTEM on the Home Screen.



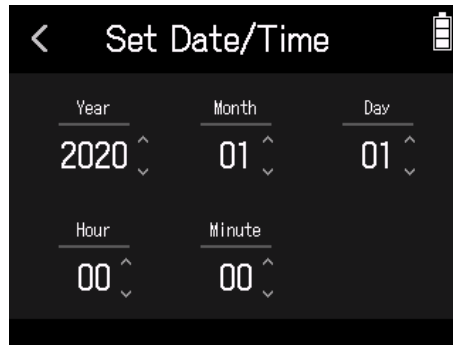
2. Tap Date/Time.




3. Tap Set Date/Time.



4. Swipe the date and time items to set them.

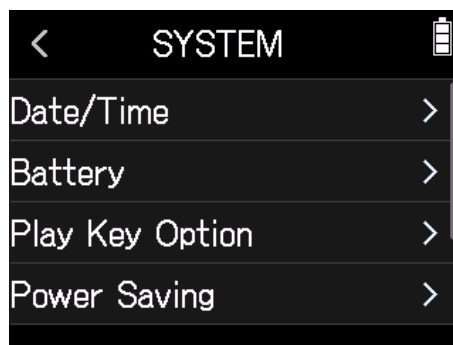


Setting the date format

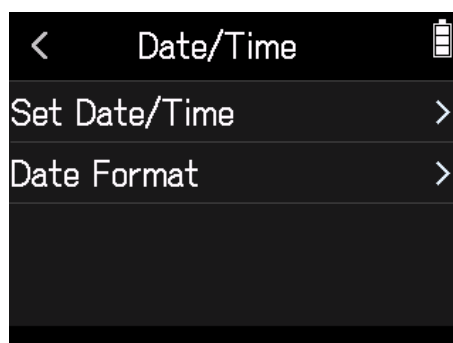
1. Tap  SYSTEM on the Home Screen.



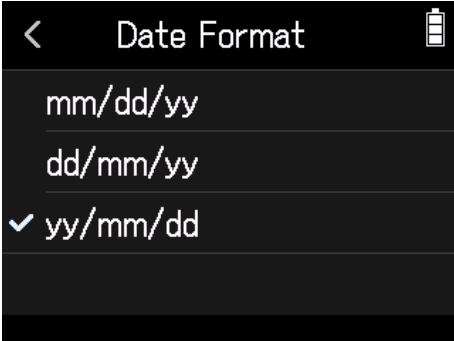
2. Tap Date/Time.



3. Tap Date Format.




4. Tap the date format to select it.



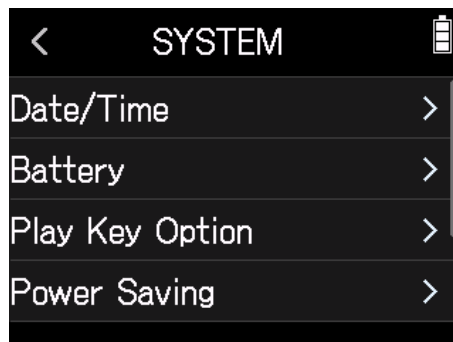
Setting the battery type

Set the type of battery used by the **H8** to alkaline, Ni-MH or lithium so that the amount of remaining battery charge can be accurately displayed.

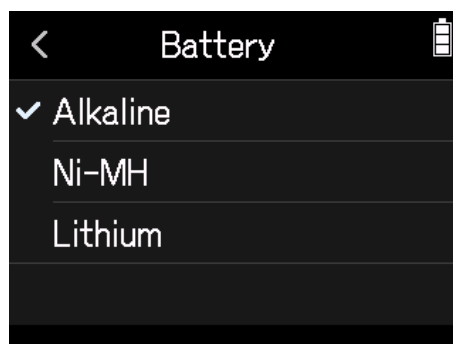
1. Tap  **SYSTEM** on the Home Screen.



2. Tap **Battery**.




3. Tap a battery type to select it.



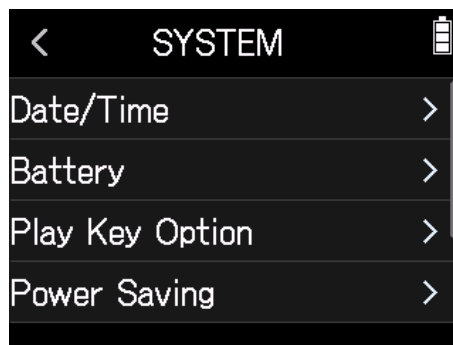
Setting how marks are added when recording/playing

You can set how marks are added when  is pressed while recording or playing back a WAV format file.

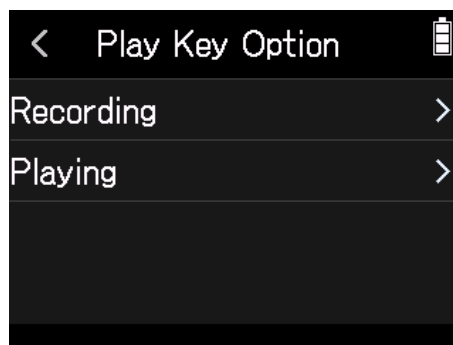
1. Tap  SYSTEM on the Home Screen.






2. Tap Play Key Option.



3. Tap Recording or Playing.




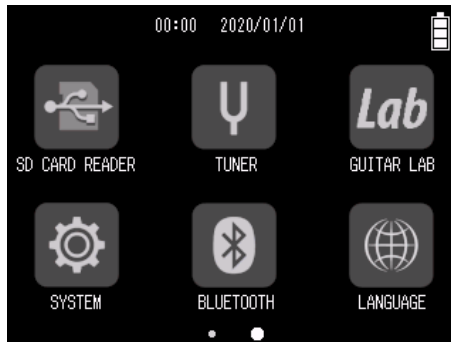
4. Tap a mark adding option to select it.

| Mark adding method | Explanation |
|--------------------|--|
| Pause | Pressing  will pause without adding a mark. |
| Pause & Mark | Pressing  will pause and add a mark. |
| Mark | Pressing  will add a mark without pausing. |

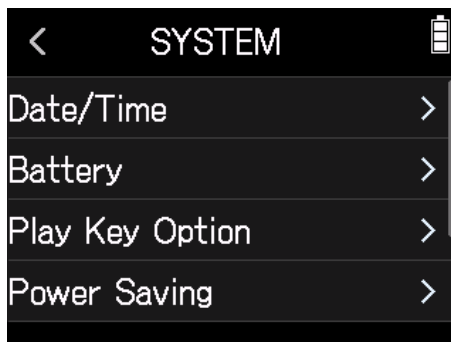
Making display settings

Setting the display brightness

1. Tap  SYSTEM on the Home Screen.



2. Tap Power Saving.



3. Tap LCD Brightness.




- Slide up and down to adjust the brightness.



HINT

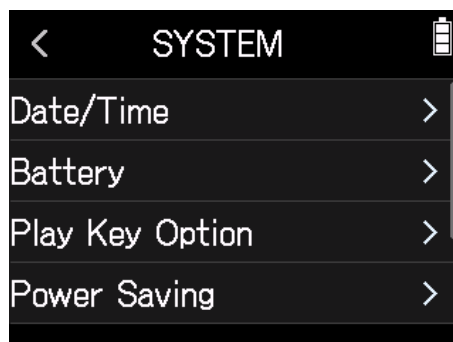
This can be set from 5 to 100.

Setting the display backlight

- Tap  SYSTEM on the Home Screen.



- Tap Power Saving.



3. Tap LCD Backlight.



4. Tap a setting to select it.



| Setting | Explanation |
|------------|--|
| On | The backlight always stays bright. |
| 30 seconds | The backlight will dim after the set time has elapsed. |
| 1 min | |
| 2 min | |
| 3 min | |
| 4 min | |
| 5 min | |


Operating from an iOS/iPadOS device

Connecting an iOS/iPadOS device

The **H8** can be operated from an iOS/iPadOS device by connecting a dedicated wireless adapter (e.g. BTA-1) and using the dedicated H8 Control app.

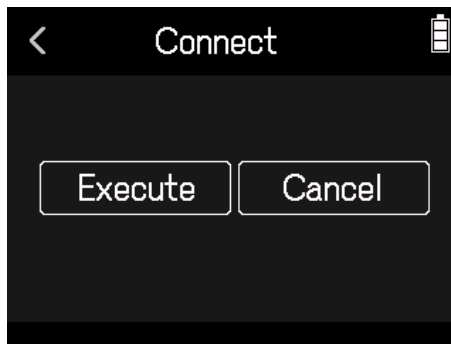
NOTE

- The H8 Control app must be installed on the iOS/iPadOS device beforehand. The H8 Control app can be downloaded from the App Store.
- For app setting and operation procedures, see the manual for the H8 Control app.

1. Remove the REMOTE connector cover and connect a BTA-1 or other dedicated wireless adapter.
2. Tap  **BLUETOOTH** on the Home Screen.



3. Tap Execute.



4. Launch the H8 Control app on the iOS/iPadOS device, and conduct connection procedures.

HINT

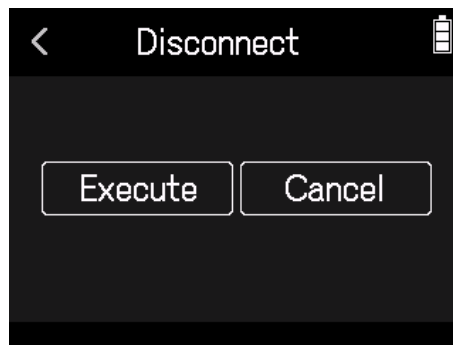
For app setting and operation procedures, see the manual for the H8 Control app.

Disconnecting from an iOS/iPadOS device

1. Tap  BLUETOOTH on the Home Screen.



2. Tap Execute.



HINT

After disconnecting, tap **BLUETOOTH** on the Home Screen, and reconnect to the iOS/iPadOS device to use it again for operation.

Setting the language shown

1. Tap  LANGUAGE on the Home Screen.



2. Tap a language to select it.




HINT

The first time the power is turned on after purchase, this screen opens automatically.

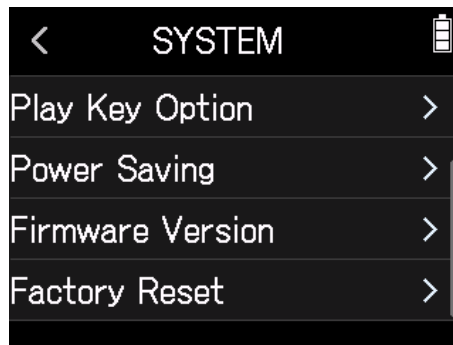
Restoring default setting values

The factory default settings can be restored.

1. Tap  SYSTEM on the Home Screen.



2. Tap Factory Reset.




3. Tap Execute.



The settings will be reset and the power will automatically turn off.

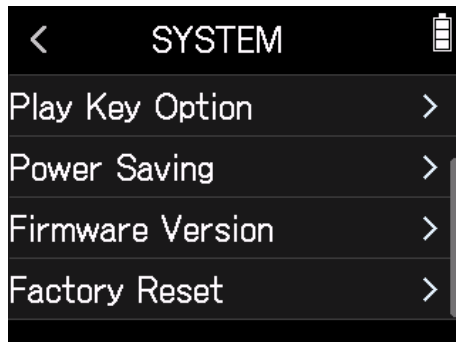
Managing the firmware

Checking the firmware versions

1. Tap  SYSTEM on the Home Screen.



2. Tap Firmware Version.



Updating the firmware

The **H8** firmware can be updated to the latest versions.

Files for the latest firmware updates can be downloaded from the ZOOM website (www.zoom.co.jp).

Follow the instructions in the "H8 Firmware Update Guide" on the **H8** download page.

Appendix

Troubleshooting

If you think that the **H8** is operating strangely, check the following items first.

Recording/playback trouble

■ There is no sound or output is very quiet

- Check the connections to the monitoring system and its volume setting.
- Confirm that the **H8** volume is not too low. (→ [“Setting the headphone output level” on page 40](#))

■ Sound from connected equipment or inputs cannot be heard or is very quiet

- If you are using a mic capsule, confirm that it is oriented correctly.
- Check the input level setting. (→ [“Setting recording \(input\) levels” on page 26](#))
- If a CD player or other device is connected to an input jack, raise the output level of that device.
- Check the input signal monitoring settings. (→ [“Adjusting input signal monitoring balance using fader and pan settings” on page 37](#))
- Check the phantom power and plug-in power settings. (→ [“Setting phantom power” on page 29](#), [“Using plug-in power” on page 27](#))

■ Recording is not possible

- Confirm that the track button indicators are lit red.
- Confirm that the SD card has open space. (→ [“Checking SD card information” on page 109](#))
- Confirm that an SD card is loaded properly in a card slot.
- If “Card Protected!” appears on the display, the SD card write-protection is enabled. Slide the lock switch on the SD card to disable write-protection.

■ Recorded sound cannot be heard or is very quiet

- Confirm that the volume levels of the tracks are not too low. (→ [“Setting recording \(input\) levels” on page 26](#))
- Confirm that the track button indicators are lit green during playback.

Other trouble

■ Computer does not recognize it even though it is connected to a USB port

- Confirm that the operating system is compatible. (→ www.zoom.co.jp)
- The operation mode must be set on the **H8** to allow the computer to recognize the **H8**. (→ [“Using as an audio interface” on page 104](#), [“Using as a card reader” on page 113](#))

■ Battery operation time is short

Making the following settings could increase the battery operation time.

- Set the correct type of batteries being used. (→ [“Setting the battery type” on page 123](#))
- Turn unnecessary tracks off. (→ [“Enabling tracks for recording” on page 25](#))
- Set the phantom power voltage to 24 V. (→ [“Setting phantom power voltage” on page 30](#))
- Reduce the display brightness. (→ [“Setting the display brightness” on page 125](#))
- Set the display to dim when not used for some time. (→ [“Setting the display backlight” on page 126](#))
- Reduce the sampling rate used to record files. (→ [page 45](#), [“Setting the recording format” on page 86](#))
- Due to their characteristics, using nickel metal hydride batteries (especially high-capacity ones) or lithium batteries should enable longer use than alkaline batteries when power consumption is high.

Specifications

| | | |
|---|---|---|
| Number of input channels | 8 (XY mic capsule, 1-4, A, B) | |
| Number of output channels | 1 (combined headphone/line) | |
| Connectors | MIC IN | ZOOM mic connector |
| | INPUT 1-4 | XLR jacks (2: HOT) |
| | INPUT A/B | XLR/TRS combo jacks (XLR: 2 hot, TRS: TIP hot) |
| | USB | USB Micro-B (audio interface, mass storage and Guitar Lab connection functions) Note: Use a USB cable that supports data transfer. Operation using USB bus power is possible. |
| | REMOTE | ZOOM BTA-1 or other dedicated wireless adapter |
| | LINE OUT | 3.5 mm stereo mini |
| | PHONE OUT | 3.5 mm stereo mini |
| Phantom power | +24 V/+48 V (independent ON/OFF for INPUTS 1–4, A and B) | |
| Recorder | Recording media | Cards that support SD/SDHC/SDXC specifications |
| | Formats | WAV: 44.1/48/96kHz, 16/24-bit, mono/stereo MP3: 128/192/320kbps |
| | Maximum simultaneous recording tracks | 12 (MIC IN, backup recording, 1-4, A, B, and LR) |
| Audio interface | Multitrack mode | 44.1/48/96kHz, 16/24-bit, 12-in/2-out |
| | Stereo mix mode | 44.1/48kHz, 24-bit, 2-in/2-out |
| Tuner | Chromatic/Guitar/Bass/Open A/Open D/Open E/Open G/DADGAD | |
| Built-in speaker | 400mW 8Ω mono speaker | |
| Display | 2.4" (320×240) full-color touchscreen LCD | |
| Power | 4 AA batteries (alkaline, NiMH or lithium) AC adapter (ZOOM AD-17): DC 5V/1A Note: USB bus power supported | |
| Estimated continuous operation time using batteries | Using alkaline batteries with XY mic, 44.1kHz/24-bit (stereo × 1): about 15:00 (hours: minutes) • The above value is approximate. • The continuous battery operation time was determined using in-house testing methods. It will vary greatly according to use conditions. | |
| External dimensions | H8: 116.4 mm (W) × 163.3 mm (D) × 48.6 mm (H) XYH-6: 78.9 mm (W) × 60.2 mm (D) × 45.2 mm (H) | |
| Weight | H8: 354 g | XYH-6: 130 g |

Note: When using a USB cable designed only for recharging, audio interface, SD card reader and Guitar Lab connection functions cannot be used.



ZOOM CORPORATION

4-4-3 Kanda-surugadai, Chiyoda-ku, Tokyo 101-0062 Japan
www.zoom.co.jp

Z2I-4105-01