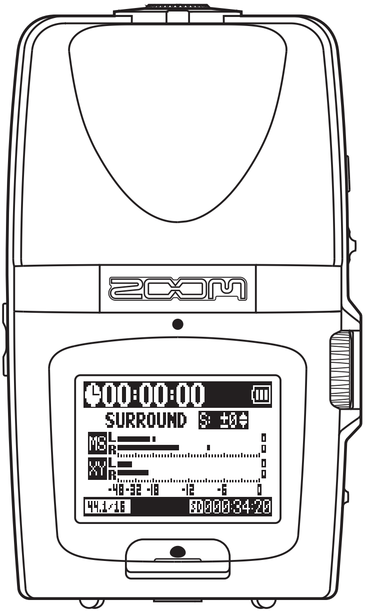
00:00:00
SURROUND
S: ±0
MS
L
R
XY
L
R
-48 -32 -18 -12 -6 0
44.1/16
SD000:34:20

H2next
Handy Recorder

Operation manual

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Usage and safety precautions

SAFETY PRECAUTIONS

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

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

Other symbols

❗	Required (mandatory) actions
⊘	Prohibited actions

⚠ Warning

Operation using an AC adapter

- ❗ Use only a ZOOM AD-17 (sold separately) AC adapter with this unit.
- ⊘ Do not use do anything that could exceed the ratings of outlets and other electrical wiring equipment. Before using the equipment in a foreign country or other region where the electrical voltage differs from that indicated on the AC adapter, always consult with a shop that carries ZOOM products beforehand and use the appropriate AC adapter.

Operation using batteries

- ❗ Use 2 conventional 1.5-volt AA batteries (alkaline or nickel-metal hydride).
- ❗ Read battery warning labels carefully.
- ❗ Always close the battery compartment cover when using the unit.

Alterations

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

⚠ Precautions

Product handling

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

Operating environment

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

AC adapter handling

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

Battery handling

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

Connecting cables with input and output jacks

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

Volume

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

Usage Precautions

Interference with other electrical equipment

In consideration of safety, the H2n has been designed to minimize the emission of electromagnetic radiation from the device and to minimize external electromagnetic interference. However, equipment that is very susceptible to interference or that emits powerful electromagnetic waves could result in interference if placed nearby. If this occurs, place the H2n and the other device farther apart. With any type of electronic device that uses digital control, including the H2n, electromagnetic interference could cause malfunction, corrupt or destroy data and result in other unexpected trouble. Always use caution.

Cleaning

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

Malfunction

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

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* All other product names, trademarks and company names in this document are the property of their respective owners.

Introduction

Thank you very much for purchasing a ZOOM **H2n** Handy Recorder.
The features of the **H2n** include the following.

• Four-channel recording captures sound in 360°

The built in microphones are divided into mid-side (MS) mics on the rear side and XY mics on the front side. This independent placement allows you to record sound coming from every direction. This unrestricted range means you can record diverse sound sources in all kinds of conditions.

• New microphone array allows control of stereo width

The MS mic includes a directional mid mic that covers the front and a bidirectional side mic that covers both sides. By controlling the amount of side mic signal, you can freely adjust the stereo width of recordings.

• Stereo recording is clear and three-dimensional

Using the XY mic, you can realize three-dimensional stereo recordings that faithfully capture a sense of depth.

• Uninterrupted long recordings possible at high-quality

Recording is possible without interruption for very long times. You can even fill an entire 32GB SDHC card in one session!

• Runs for a long time on standard batteries

You can record for up to 20 hours (44.1kHz/16bit WAV format) with one set of alkaline batteries. So, even in situations where you must rely on batteries, you can keep recording without worrying about the time.

• Use as an SD card reader and computer audio interface

The built-in USB 2.0 high-speed port allows direct connection with a computer. Use the recorder as an SD card reader with a computer to transfer recordings to your computer for use in DAW software or to burn them to CDs. You can even use the recorder as a computer audio interface at USB 1.0 speed.

• Tuner, metronome and other practice features

In addition to standard chromatic tuning, the tuner also supports seven-string guitar, five-string bass and alternate tunings. The convenient metronome can even provide a count in and the speed and pitch of playback can be adjusted, making it a useful practice companion.

Please read this manual carefully to fully understand the **H2n** so that you can maximize your use of its features. After reading the manual once, please keep it with the warranty in a safe place.

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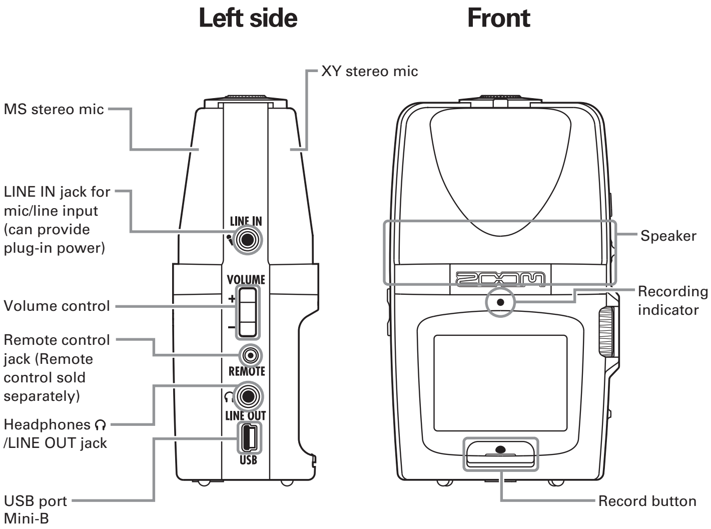
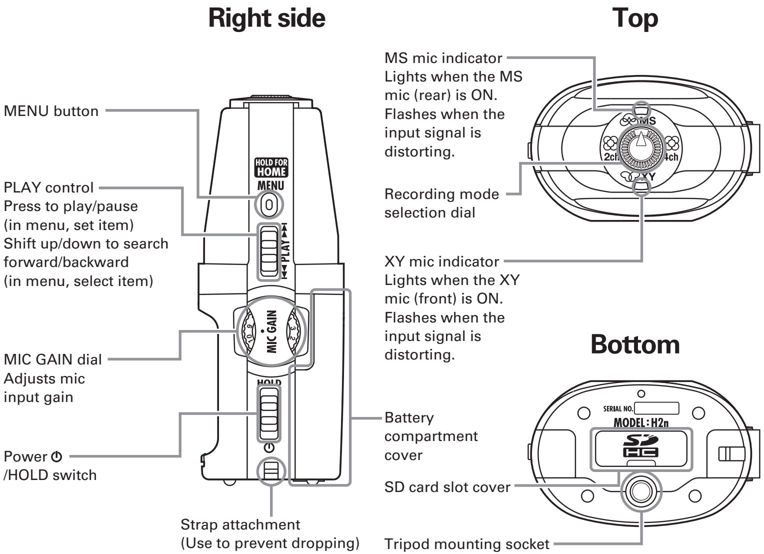
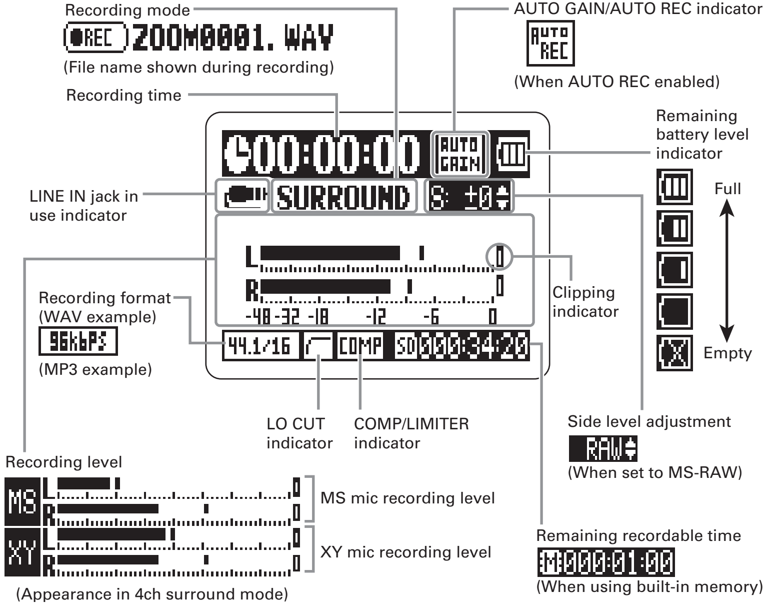
Part names


Left side
Front
MS stereo mic
XY stereo mic
LINE IN jack for mic/line input (can provide plug-in power)
Volume control
Remote control jack (Remote control sold separately)
Headphones /LINE OUT jack
USB port Mini-B
Speaker
Recording indicator
Record button
LINE IN
VOLUME
+
–
REMOTE
LINE OUT
USB
ZOOM

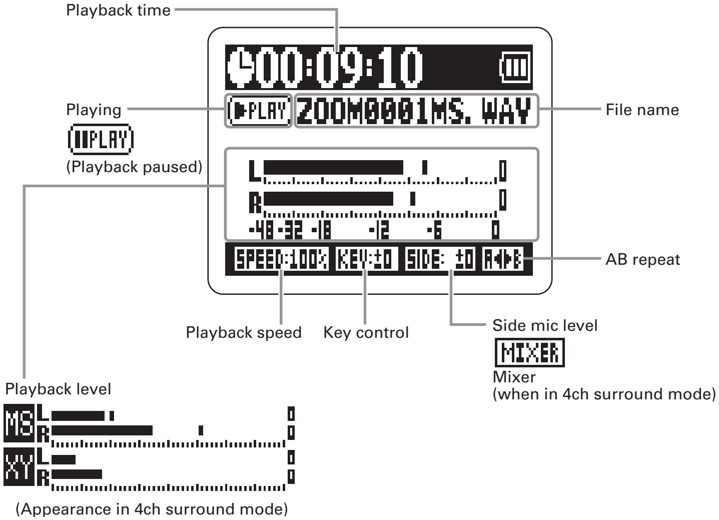

Right side
Top
Bottom
MENU button
PLAY control Press to play/pause (in menu, set item) Shift up/down to search forward/backward (in menu, select item)
MIC GAIN dial Adjusts mic input gain
Power ⏻ /HOLD switch
Strap attachment (Use to prevent dropping)
Battery compartment cover
MS mic indicator Lights when the MS mic (rear) is ON. Flashes when the input signal is distorting.
Recording mode selection dial
XY mic indicator Lights when the XY mic (front) is ON. Flashes when the input signal is distorting.
SD card slot cover
Tripod mounting socket
HOLD FOR HOME
MENU
PLAY
MIC GAIN
HOLD
MS
2ch
4ch
XY
SERIAL NO.
MODEL : H2n
SD HC

Display

Home (recording) screen


Recording mode
●REC ZOOM0001. WAV
(File name shown during recording)
Recording time
AUTO GAIN/AUTO REC indicator
AUTO REC
(When AUTO REC enabled)
Remaining battery level indicator
Full
Empty
00:00:00
AUTO GAIN
LINE IN jack in use indicator
SURROUND
S: ±0
L
R
-48 -32 -18 -12 -6 0
Clipping indicator
Recording format (WAV example)
96kbPS
(MP3 example)
44.1/16
COMP
SD 000:34:20
LO CUT indicator
COMP/LIMITER indicator
Side level adjustment
RAW
(When set to MS-RAW)
Recording level
MS
XY
MS mic recording level
XY mic recording level
(Appearance in 4ch surround mode)
Remaining recordable time
M:000:01:00
(When using built-in memory)

Playback screen


Playback time
00:09:10
Playing
▶PLAY
ZOOM0001MS. WAV
File name
PLAY
(Playback paused)
L
R
-48 -32 -18 -12 -6 0
SPEED:100%
KEY:±0
SIDE: ±0
A↔B
AB repeat
Playback speed
Key control
Side mic level
MIXER
Mixer
(when in 4ch surround mode)
Playback level
MS
XY
(Appearance in 4ch surround mode)

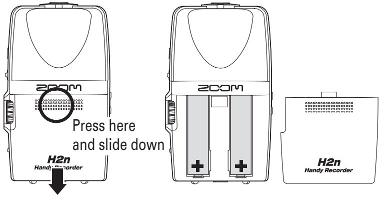
Powering the recorder

Using batteries

1. Turn the power OFF, and then remove the battery cover.

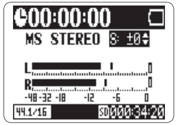
2. Insert batteries.

3. Close the cover.



NOTE

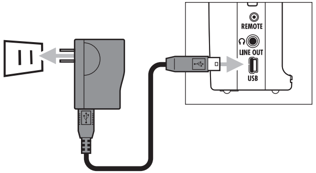
- Use alkaline or nickel-metal hydride batteries.
- If the “Low battery!” warning appears, turn the power OFF soon and put in new batteries.
- Set the type of battery used. (→P.18)



Using an AC adapter (sold separately)

1. Connect the cable to the USB port.

2. Plug the adapter into a power outlet.

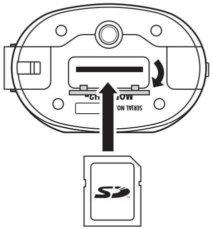


Installing an SD card

1. After turning the power OFF, open the SD card slot cover.

2. Insert the card into the slot.

To remove a 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. Doing so when the power is ON could cause data to be lost.
- Be sure to insert the SD card correctly, using the cut-off corner illustration next to the slot as a guide.
- The built-in memory will be used if no SD card is in the recorder.
- Format the SD card if necessary. (→ P.83)

HINT

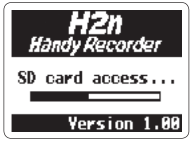
Built-in memory

- The built-in memory only keeps the most recent recording.
- The recording format is fixed at 96kbps MP3.
- It cannot be used to record in 4ch surround or MS-RAW modes.
- Recording time is limited to 1 minute.
- Recordings saved to the built-in memory cannot be copied to an SD card or a computer.

Turning the power ON and OFF

Turning the power ON

- Slide down.



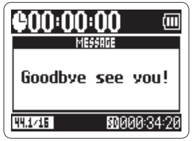
H2n
Handy Recorder
SD card access...
Version 1.00

NOTE

- If "No SD card!" appears, confirm that an SD card is correctly inserted into the recorder.
- If "Card Protected" appears, SD card write protection is ON. Turn write protection OFF by sliding the "Lock" switch on the card.
- If "Invalid card" appears, the card format is incorrect. Use a different card or format the card. (→ P.83)

Turning the power OFF

- Slide down and hold it until "Goodbye see you!" appears on the screen.



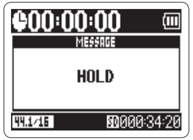
00:00:00
MESSAGE
Goodbye see you!
44.1/16 SD000:34:20

Using the hold function

In order to prevent accidental operation during recording, the **H2n** has a hold function that disables the use of controls other than the MIC GAIN.

Enabling the hold function

- Slide up to the HOLD position.



00:00:00
MESSAGE
HOLD
44.1/16 SD000:34:20

NOTE

Even when the hold function is on, the remote control (sold separately) can still be used.

Disabling the hold function

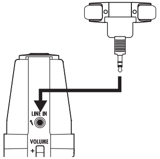
- Slide back to the middle.

Connecting an external mic

1. Connect an external mic (sold separately) to the **H2n** LINE IN jack.

NOTE

- An external mic can be used instead of the XY stereo mic.
- An external mic cannot be used with MS Stereo mode.

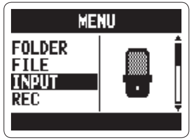


Using plug-in power

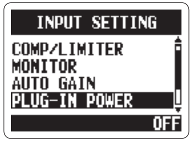
Make the following setting before connecting a mic that requires plug-in power.

1. Press MENU .

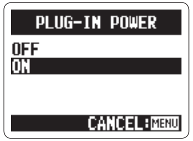
2. Use ↑↓PLAY to select INPUT, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↑↓PLAY to select PLUG-IN POWER, and then press →PLAY .


INPUT SETTING
COMP/LIMITER
MONITOR
AUTO GAIN
PLUG-IN POWER
OFF

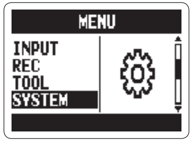
4. Use ↑↓PLAY to select ON, and then press →PLAY .


PLUG-IN POWER
OFF
ON
CANCEL:MENU

Setting the date and time

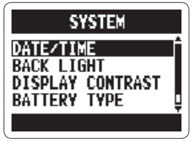
The date and time is added to recording files automatically, so set it correctly whenever the batteries are replaced.

1. Press MENU .


MENU
INPUT
REC
TOOL
SYSTEM

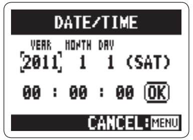
2. Use ↑↓PLAY to select SYSTEM, and then press →PLAY .

3. Use ↑↓PLAY to select DATE/TIME, and then press →PLAY .

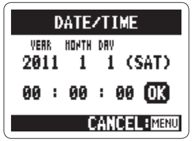

SYSTEM
DATE/TIME
BACK LIGHT
DISPLAY CONTRAST
BATTERY TYPE

4. Adjust the settings.

Use ↑↓PLAY to move the cursor
Press →PLAY to select the item
Use ↑↓PLAY to change the value
Press →PLAY to confirm the setting


DATE/TIME
YEAR MONTH DAY
2011 1 1 (SAT)
00 : 00 : 00 OK
CANCEL:MENU

5. Use ↑↓PLAY to select OK, and then press →PLAY .

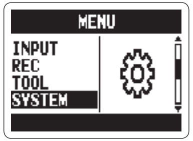

DATE/TIME
YEAR MONTH DAY
2011 1 1 (SAT)
00 : 00 : 00 OK
CANCEL:MENU

Setting the battery type

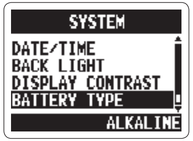
Set the battery type in order to show the remaining battery charge accurately.

1. Press MENU ⓪ .

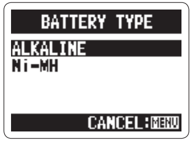
2. Use ⇅ to select SYSTEM, and then press → .


MENU
INPUT
REC
TOOL
SYSTEM

3. Use ⇅ to select BATTERY TYPE, and then press → .


SYSTEM
DATE/TIME
BACK LIGHT
DISPLAY CONTRAST
BATTERY TYPE
ALKALINE

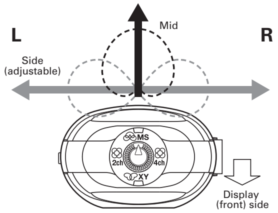
4. Use ⇅ to select the battery type, and then press → .


BATTERY TYPE
ALKALINE
Ni-MH
CANCEL:MENU

Recording mode overview

The **H2n** has four recording modes that can be selected according to your purposes.

Mid-side (MS) stereo mode MS

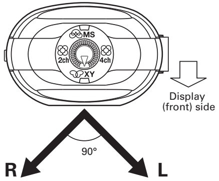


This mode uses a mid mic to capture the sound directly ahead and a bidirectional side mic to capture sound from left and right.

The recording level of the side mic (S level) can be adjusted, allowing the stereo width to be changed. If you record with the S level set to MS-RAW, you can also adjust the S level after recording.

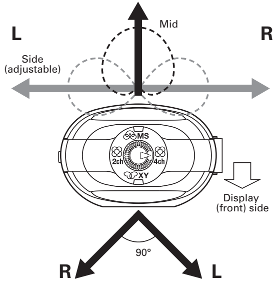
MS mics can capture a rich stereo image, so it is ideal for recording sounds in wide and open conditions, including orchestras, live concerts and soundscapes.

XY stereo mode XY



This mode records in stereo with mics at 90° angles. This allows a natural, deep and accurate sound image to be captured, making it optimal for recording sources nearby, including solo performances, chamber music, interviews, live rehearsals and field recordings.

2ch and 4ch surround modes 2ch 4ch



Sound can be captured in all directions using both MS and XY mics.

You can select 2ch, which mixes the signals from the MS and XY mics, or 4ch, which records the signals from the MS and XY mics separately.

With 4ch surround, you can adjust the balance between the MS and XY signals after recording.

The S level can be adjusted for both 2ch and 4ch recordings.

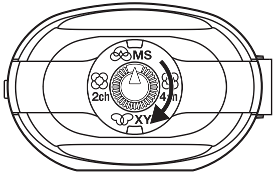
These modes are suitable for recording live rehearsals, studio sessions, business meetings and soundscapes, for example.

Selecting the recording mode

1. Turn so that the triangle points to the desired mode.

NOTE

- The 4ch surround mode can only be used when an SD card is in the unit.
- In 4ch surround mode, only WAV formats (44.1/48kHz, 16/24bit) can be used.
- In 4ch surround mode, two stereo files are created (MS mic recording and XY mic recording).

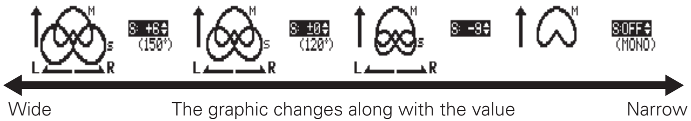

MS
2ch
4ch
XY

2. Make settings for the recording mode.

Adjusting the S level (MS stereo, 2ch/4ch surround modes)

You can adjust the stereo width (S level) before recording.

- Use PLAY to adjust the stereo width.


M
S
L
R
S: +6
(150°)
S: ±0
(120°)
S: -9
S:OFF
(MONO)
Wide
The graphic changes along with the value
Narrow

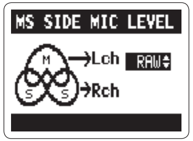
NOTE

Set to OFF, RAW or between –24 and +6 dB.

Using MS-RAW mode (WAV format only)

If you want to adjust the stereo width after recording, record using MS-RAW mode.

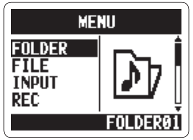
- Hold PLAY down until RAW appears.


MS SIDE MIC LEVEL
M
S
S
Lch
RAW
Rch

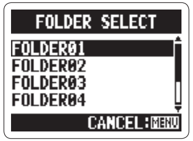
Selecting where recordings are saved

1. Press MENU.

2. Use PLAY to select FOLDER, and then press PLAY.


MENU
FOLDER
FILE
INPUT
REC
FOLDER01

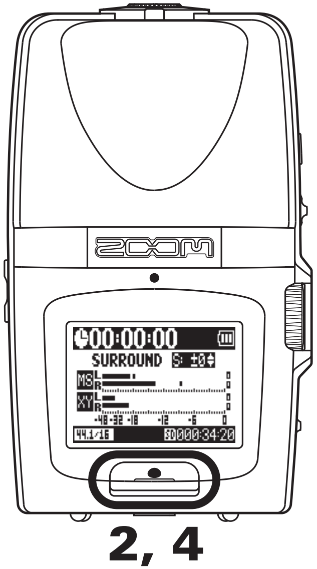
3. Use PLAY to select the folder where you want to save files, and then press PLAY.

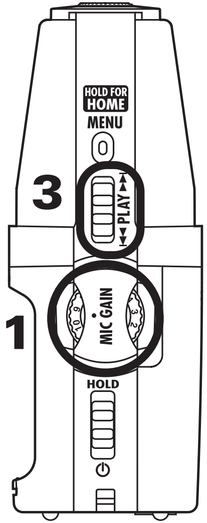

FOLDER SELECT
FOLDER01
FOLDER02
FOLDER03
FOLDER04
CANCEL:MENU

NOTE

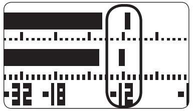
Select from among 10 folders. There are separate sets of folders for stereo and 4ch recordings.

Recording manually


00:00:00
SURROUND S: ±0
MS
XY
-48 -32 -18 -12 -6 0
44.1/16
0000:34:20
2, 4


HOLD FOR HOME
MENU
3
PLAY
1
MIC GAIN
HOLD

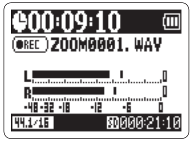
1. Turn to adjust the input level.



HINT

- Adjust the MIC GAIN so that the peak level stays around -12 dB.
- If an input signal is too strong, the MS/XY indicator on the top will flash immediately.
- The recorder can also adjust mic gain automatically. (→ P.70)
- You can change the recording format beforehand. (→ P.72)
- The mic can also be set to cut wind and other unwanted noise. (→ P.66)

2. Press to start recording.


00:09:10
REC ZOOM0001.WAV
L
R
-48 -32 -18 -12 -6 0
44.1/16
0000:21:10

3. Press → to add a mark.

4. Press to stop recording.

NOTE

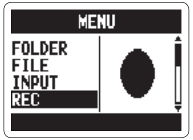
- One file can have a maximum of 99 marks.
- The mic can also be set to pause immediately after adding a mark. (→ P.77)
- During recording, if the size of the file exceeds 2 GB, recording will continue in a new file that will be created automatically.

Recording automatically

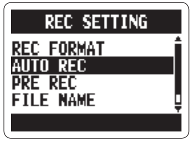
The mic can be set to start and stop recording automatically in response to changes in the input level.

1. Press MENU.

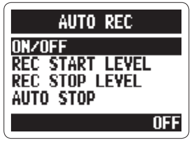
2. Use ↕ to select REC, and then press →.


MENU
FOLDER
FILE
INPUT
REC

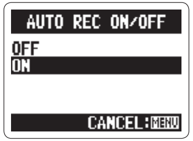
3. Use ↕ to select AUTO REC, and then press →.


REC SETTING
REC FORMAT
AUTO REC
PRE REC
FILE NAME

4. Use ↕ to select ON/OFF, and then press →.


AUTO REC
ON/OFF
REC START LEVEL
REC STOP LEVEL
AUTO STOP
OFF

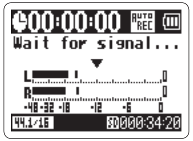
5. Use ↕ to select ON, and then press →.


AUTO REC ON/OFF
OFF
ON
CANCEL:MENU

NOTE

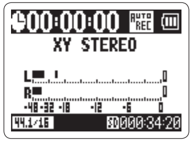
Other settings can also be made for automatic recording. (→ P.74)

6. After the home screen reopens, press ● to put the recorder in standby.


00:00:00
AUTO REC
Wait for signal...
L
R
-48 -32 -18 -12 -6 0
44.1/16
SD000:34:20

Recording will start automatically when the input signal exceeds the REC START LEVEL.
Recording will stop automatically when the input signal becomes less than the REC STOP LEVEL.

7. Press ● to end recording standby and stop recording.


00:00:00
AUTO REC
XY STEREO
L
R
-48 -32 -18 -12 -6 0
44.1/16
SD000:34:20

NOTE

Automatic recording can only be used with an SD card.

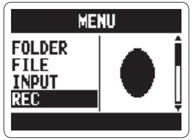
Pre-recording

When pre-recording is on, this recorder can continuously capture two seconds of sound before recording is started manually. When ● is pressed, these two seconds are included at the beginning of the recording. This is useful when, for example, performances start suddenly.

1. Press MENU 0 .

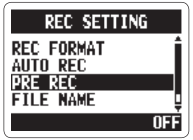
2. Use ↑↓ PLAY to select REC, and then

press → PLAY .

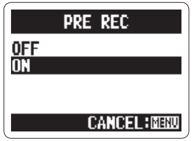

MENU
FOLDER
FILE
INPUT
REC

3. Use ↑↓ PLAY to select PRE REC, and then

press → PLAY .


REC SETTING
REC FORMAT
AUTO REC
PRE REC
FILE NAME
OFF

4. Use ↑↓ PLAY to select ON, and then press → PLAY .


PRE REC
OFF
ON
CANCEL:MENU

5. Press ● after returning to the home screen to start recording.

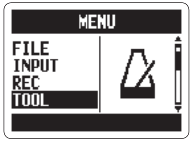
NOTE

- PRE REC cannot be used at the same time as the metronome PRE COUNT function.
- Pre-recording can only be used with an SD card.

Counting in before recording

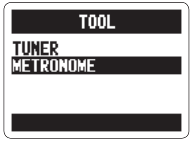
The built-in metronome can play a count-in sound before recording starts. This pre-count sound is output through the 🎧/LINE OUT jack.

1. Press MENU 0 .


MENU
FILE
INPUT
REC
TOOL

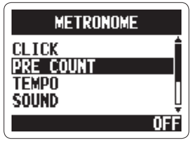
2. Use ↑↓ PLAY to select TOOL, and then

press → PLAY .


TOOL
TUNER
METRONOME

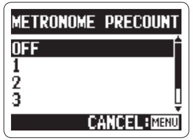
3. Use ↑↓ PLAY to select METRONOME, and then

press → PLAY .


METRONOME
CLICK
PRE COUNT
TEMPO
SOUND
OFF

4. Use ↑↓ PLAY to select PRE COUNT, and then

press → PLAY .


METRONOME PRECOUNT
OFF
1
2
3
CANCEL:MENU

5. Use ↑↓ PLAY to select the pre-count number,

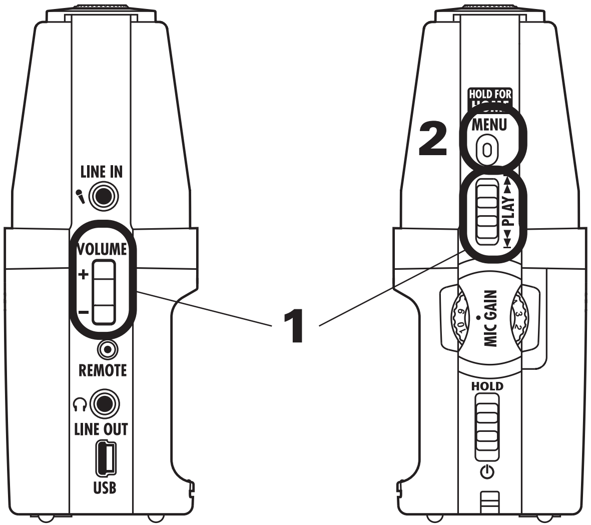
and then press → PLAY .

6. Press ● after returning to the home screen to start pre-count and recording.

NOTE

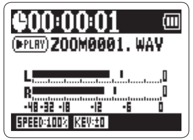
PRE COUNT cannot be used at the same time as PRE REC.

Playing back recordings


LINE IN
VOLUME
+
–
REMOTE
LINE OUT
USB
HOLD FOR HOME
MENU
PLAY
MIC GAIN
HOLD
1
2

You can play files in the current folder. Change the folder to play files in a different folder.

1. Press → PLAY .


00:00:01
PLAY ZOOM0001.WAV
L
R
-48 -32 -18 -12 -6 0
SPEED:100% KEY:±0

Use ↑↓ PLAY to jump between marks and files

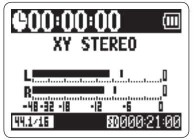
Hold ↑↓ PLAY to search forward or backward

Press → PLAY to pause and restart playback

Use VOLUME +– to adjust the volume

HINT
The longer you hold the PLAY control the faster it will search in that direction.

2. Press and hold MENU 0 to return to the home screen.

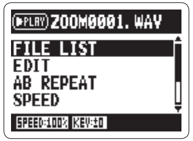

00:00:00
XY STEREO
L
R
-48 -32 -18 -12 -6 0
44.1/16 00000:21:00

Selecting the file to playback from a list

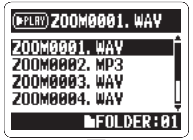
You can select a file in the current folder for playback. Change the folder to select files from a different folder.

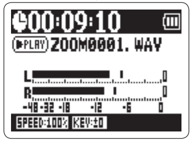
1. When the playback screen is open, press MENU 0.

2. Use ↑↓PLAY to select FILE LIST, and then press →PLAY.


PLAY ZOOM0001.WAV
FILE LIST
EDIT
AB REPEAT
SPEED
SPEED:100% KEY:±0

3. Use ↑↓PLAY to select a file, and then press →PLAY to start playback of that file.


PLAY ZOOM0001.WAV
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01


00:09:10
PLAY ZOOM0001.WAV
L
R
-48 -32 -18 -12 -6 0
SPEED:100% KEY:±0

NOTE

After a file plays once, playback will stop or continue according to the PLAY MODE setting.

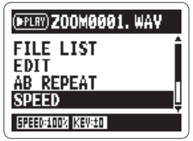
4. Press and hold MENU 0 to return to the home screen.

Changing the playback speed

You can change the playback speed to between 50% and 150% of normal speed.

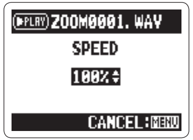
1. When the playback screen is open, press MENU 0.

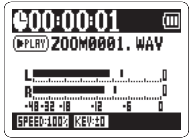
2. Use ↑↓PLAY to select SPEED, and then press →PLAY.


PLAY ZOOM0001.WAV
FILE LIST
EDIT
AB REPEAT
SPEED
SPEED:100% KEY:±0

3. Use ↑↓PLAY to set the playback speed, and then press →PLAY.

Files will be played at the set speed.


PLAY ZOOM0001.WAV
SPEED
100%
CANCEL:MENU


00:00:01
PLAY ZOOM0001.WAV
L
R
-48 -32 -18 -12 -6 0
SPEED:100% KEY:±0

NOTE

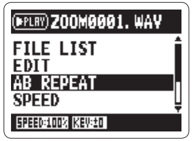
The set value will be saved even when the power is turned OFF.

Loop playback of a set interval (AB REPEAT)

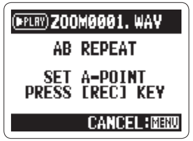
You can loop playback between two set points. Select the file that you want to play back first.

1. When the playback screen is open, press MENU 0.

2. Use ↑↓PLAY to select AB REPEAT, and then press →PLAY.


PLAY ZOOM0001.WAV
FILE LIST
EDIT
AB REPEAT
SPEED
SPEED:100% KEY:±0

3. Press ● at the point you want to start playback.

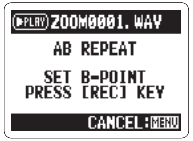

PLAY ZOOM0001.WAV
AB REPEAT
SET A-POINT
PRESS [REC] KEY
CANCEL:MENU

NOTE

Use ↑↓PLAY to search for the starting point quickly.

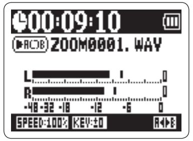
4. Press ● at the point you want to stop playback.

Loop playback between the points will start.


PLAY ZOOM0001.WAV
AB REPEAT
SET B-POINT
PRESS [REC] KEY
CANCEL:MENU

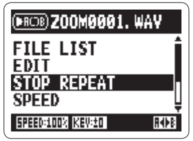
NOTE

- Use ↑↓PLAY to search for the stopping point quickly.
- If you set the stopping point before the starting point, they will be automatically swapped.

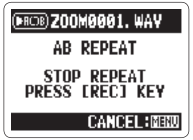

00:09:10
A-B ZOOM0001.WAV
L
R
-48 -32 -18 -12 -6 0
SPEED:100% KEY:±0 A↔B

5. Press MENU 0 to stop loop playback.

6. Use ↑↓PLAY to select STOP REPEAT, and then press →PLAY.


A-B ZOOM0001.WAV
FILE LIST
EDIT
STOP REPEAT
SPEED
SPEED:100% KEY:±0 A↔B

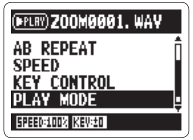
7. Press ●.


A-B ZOOM0001.WAV
AB REPEAT
STOP REPEAT
PRESS [REC] KEY
CANCEL:MENU

Changing the play mode

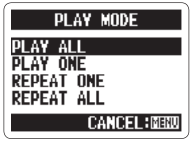
1. When the playback screen is open, press MENU 0 .

2. Use ↕ PLAY to select PLAY MODE, and then press → PLAY .



▶PLAY ZOOM0001.WAV
AB REPEAT
SPEED
KEY CONTROL
PLAY MODE
SPEED:100% KEY:±0

3. Use ↕ PLAY to set the mode, and then press → PLAY .

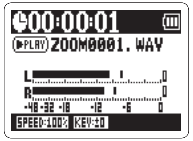


PLAY MODE
PLAY ALL
PLAY ONE
REPEAT ONE
REPEAT ALL
CANCEL:MENU

NOTE

PLAY ALL:	Play all the files in the current folder once.
PLAY ONE:	Play the current file once.
REPEAT ONE:	Play the current file repeatedly.
REPEAT ALL:	Play all the files in the current folder repeatedly.

4. Press MENU 0 to start playback in the selected mode.



00:00:01
▶PLAY ZOOM0001.WAV

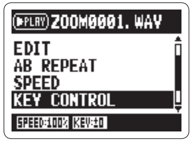
SPEED:100% KEY:±0

Adjusting the playback pitch (KEY CONTROL)

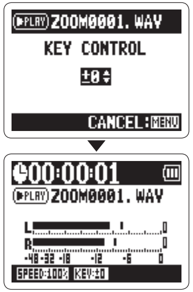
You can change the pitch without changing the playback speed.

1. When the playback screen is open, press MENU 0.

2. Use ↕PLAY to select KEY CONTROL, and then press →PLAY.


PLAY ZOOM0001.WAV
EDIT
AB REPEAT
SPEED
KEY CONTROL
SPEED:100% KEY:±0

3. Use ↕PLAY to adjust the playback pitch, and then press →PLAY to start playback at the adjusted pitch.


PLAY ZOOM0001.WAV
KEY CONTROL
±0
CANCEL:MENU
00:00:01
PLAY ZOOM0001.WAV
L
R
-48 -32 -18 -12 -6 0
SPEED:100% KEY:±0

NOTE

- The pitch can be adjusted by ±6 semitones.
- The set value will be saved even when the power is turned OFF.
- KEY CONTROL cannot be used with 96kHz WAV files.

Changing the S level MS-RAW only

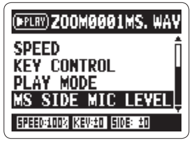
The S level (stereo width) of files recorded using MS-RAW mode can be changed. Select a file that has been recorded in MS-RAW mode first.

1. When the playback screen is open, press MENU 0.

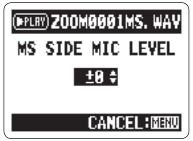
HINT

If you select a file recorded using MS-RAW mode the S: ±0 icon will appear.

2. Use ↕PLAY to select MS SIDE MIC LEVEL, and then press →PLAY.


PLAY ZOOM0001MS.WAV
SPEED
KEY CONTROL
PLAY MODE
MS SIDE MIC LEVEL
SPEED:100% KEY:±0 SIDE: ±0

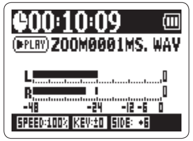
3. Use ↕PLAY to adjust the S level, and then press →PLAY.


PLAY ZOOM0001MS.WAV
MS SIDE MIC LEVEL
±0
CANCEL:MENU

NOTE

Set to OFF or between –24 and +6 dB.

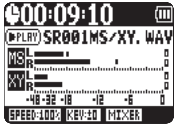
4. Press MENU 0 to start playback with the adjusted S level.


00:10:09
PLAY ZOOM0001MS.WAV
L
R
-48 -24 -12 -6 0
SPEED:100% KEY:±0 SIDE: +6

Mixing a 4ch surround file

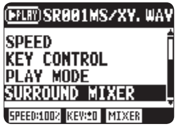
You can adjust the levels and panning of the MS and XY recordings made for 4ch surround files.

1. Set the recorder to 4ch surround mode, select the file you want to mix, and then press .


00:09:10
PLAY SR001MS/XY.WAV
MS
XY
-48 -32 -18 -12 -6 0
SPEED:100% KEY:±0 MIXER

2. Press MENU 0 .

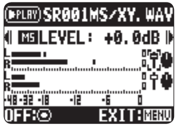
3. Use to select SURROUND MIXER, and then press .


PLAY SR001MS/XY.WAV
SPEED
KEY CONTROL
PLAY MODE
SURROUND MIXER
SPEED:100% KEY:±0 MIXER

4. Change the values of the parameters.

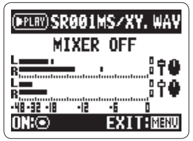
Use to move the cursor and change values

Push to select a parameter to change


PLAY SR001MS/XY.WAV
MS LEVEL: +0.0dB
-48 -32 -18 -12 -6 0
OFF:
EXIT:MENU

Parameter setting ranges		Explanation
MS LEVEL	MUTE, –48 ~ +12 dB (0.5 dB increments)	Adjusts volume
XY LEVEL		
MS PAN	L100 ~ CENTER ~ R100 (even values only)	Adjusts left-right balance
XY PAN		

5. Press to turn the mixer ON or OFF.


PLAY SR001MS/XY.WAV
MIXER OFF
-48 -32 -18 -12 -6 0
ON:
EXIT:MENU

NOTE

The mixer setting is only applied to playback. It does not change the recordings.

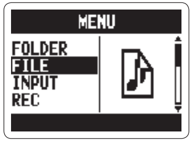
6. Press MENU 0 twice to return to the playback screen.

Checking file information

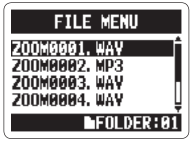
You can check various types of information about the current file.

1. Press MENU 0 .

2. Use ↕ to select FILE, and then press → .

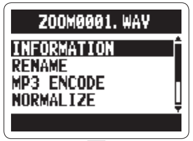

MENU
FOLDER
FILE
INPUT
REC

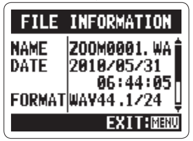
3. Select the file that you want to check, and then press → .


FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕ to select INFORMATION, and then press → to show information about the file.

Use ↕ to scroll through the screen to see additional information


ZOOM0001.WAV
INFORMATION
RENAME
MP3 ENCODE
NORMALIZE


FILE INFORMATION

NAME ZOOM0001.WA

DATE 2010/05/31 06:44:05

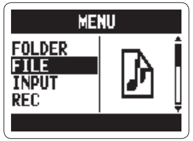
FORMAT WAV44.1/24

Checking track marks WAV files only

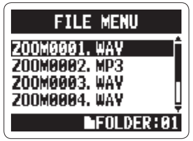
You can view a list of the marks in a WAV file.

1. Press MENU 0 .

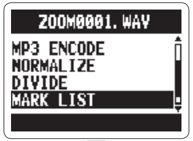
2. Use ↕ to select FILE, and then press → .

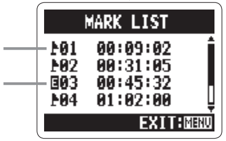

MENU
FOLDER
FILE
INPUT
REC

3. Select the file that you want to check, and then press → .


FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕ to select MARK LIST, and then press → to open the mark list.


ZOOM0001.WAV
MP3 ENCODE
NORMALIZE
DIVIDE
MARK LIST


MARK LIST

01 00:09:02

02 00:31:05

03 00:45:32

04 01:02:00

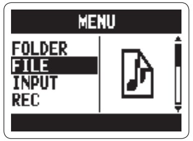
Shows an added mark

This mark appears when skipping occurred during recording

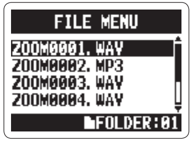
Changing file names **Stereo files only**

1. Press MENU ⓪.

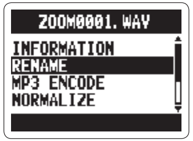
2. Use ↕ to select FILE, and then press →.


MENU
FOLDER
FILE
INPUT
REC

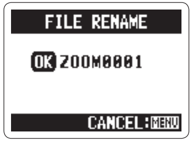
3. Use ↕ to select the file name that you want to change, and then press →.


FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕ to select RENAME, and then press →.


ZOOM0001.WAV
INFORMATION
RENAME
MP3 ENCODE
NORMALIZE

5. Edit the name.


FILE RENAME
OK ZOOM0001
CANCEL:MENU

Use ↕ to move the cursor and change characters

Push → to select a character to change and to confirm a change

6. Use ↕ to select OK, and then press →.

NOTE

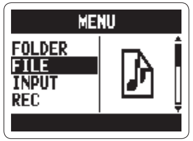
- The following characters can be used in file names.
  (Space)!#$% &'()+,-0123456789;=@ABCDEFGHIJKLMNOPQRSTUVWXYZ[]^_`
  abcdefghijklmnopqrstuvwxyz{ }~
- A file name cannot be only spaces.
- If a file with the same name already exists in the same folder, a warning appears and the screen shown in step five automatically reopens.

Convert WAV files into MP3 files **Stereo files only**

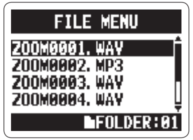
WAV files (other than MS-RAW) that have been recorded in any mode other than 4ch surround can be converted to MP3 files.

1. Press MENU .

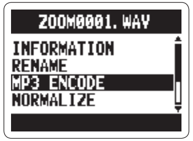
2. Use to select FILE, and then press .


MENU
FOLDER
FILE
INPUT
REC

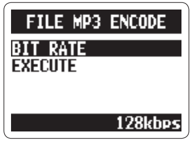
3. Use to select the file you want to convert, and then press .


FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

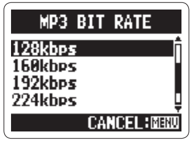
4. Use to select MP3 ENCODE, and then press .


ZOOM0001.WAV
INFORMATION
RENAME
MP3 ENCODE
NORMALIZE

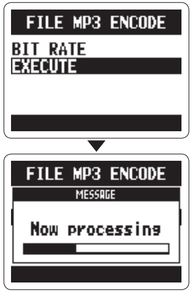
5. If you want to change the bit rate, use to select BIT RATE, and then press .


FILE MP3 ENCODE
BIT RATE
EXECUTE
128kbps

6. Use to select the bit rate, and then press .


MP3 BIT RATE
128kbps
160kbps
192kbps
224kbps
CANCEL:MENU

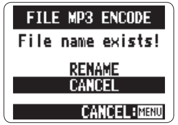
7. Use to select EXECUTE, and then press to start encoding.


FILE MP3 ENCODE
BIT RATE
EXECUTE
FILE MP3 ENCODE
MESSAGE

Now processing

NOTE

- The converted file will be created in the same folder.
- If the SD card lacks open space, the screen shown in step 4 will reopen automatically.
- If a file already exists with the name that will be given to the converted file, the screen at right will appear. Rename the file before conversion.


FILE MP3 ENCODE
RENAME
CANCEL
CANCEL:MENU

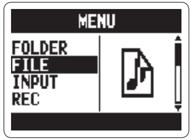
File name exists!

Normalizing WAV files

If the volume of a recording is lower than desired, you can raise the level of the recording as a whole.

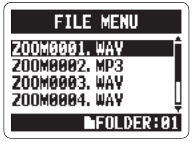
1. Press MENU 0 .

2. Use ↕PLAY to select FILE, and then press →PLAY .



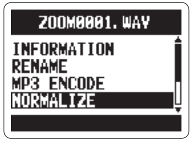
MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select the file you want to change, and then press →PLAY .



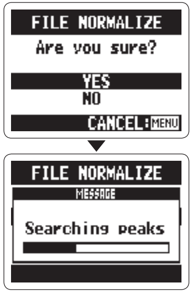
FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕PLAY to select NORMALIZE, and then press →PLAY .



ZOOM0001.WAV
INFORMATION
RENAME
MP3 ENCODE
NORMALIZE

5. Use ↕PLAY to select YES, and then press →PLAY to start normalization.



FILE NORMALIZE
Are you sure?
YES
NO
CANCEL:MENU

FILE NORMALIZE
MESSAGE
Searching peaks

NOTE

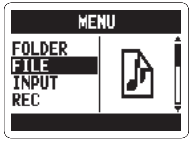
Normalization increases the overall level of the recording so that the maximum level in the file is 0 dB.

Dividing files **Stereo files only**

You can divide a file into two at any point.

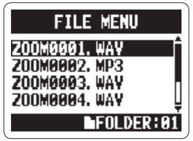
1. Press MENU 0 .

2. Use ↕PLAY to select FILE, and then press →PLAY .



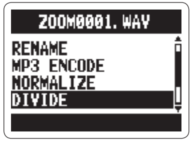
MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select the file you want to divide, and then press →PLAY .



FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕PLAY to select DIVIDE, and then press →PLAY .



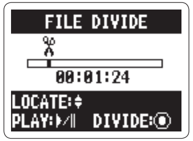
ZOOM0001.WAV
RENAME
MP3 ENCODE
NORMALIZE
DIVIDE

5. Set the dividing point.

Use ↕PLAY to move the point

Press →PLAY to play and pause the file

Press ● to confirm the dividing point

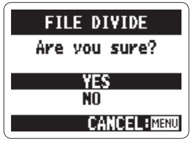


FILE DIVIDE
00:01:24
LOCATE:⇕
PLAY:▶/II DIVIDE:●

HINT

The longer you hold the PLAY control the faster it will search in that direction.

6. Use ↕PLAY to select YES, and then press →PLAY .



FILE DIVIDE
Are you sure?
YES
NO
CANCEL:MENU

NOTE

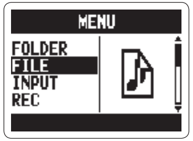
- If a file already exists with the name that will be given to a divided file, rename the file before dividing.
- When a file is divided, “A” will be added to the end of the name of the file made from the part before the dividing point, and “B” will be added to the end of the name of the file made from the part after the dividing point.
- The original file is deleted.

Deleting files

You can delete unwanted files.

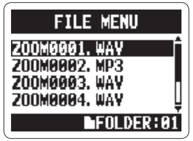
1. Press MENU 0.

2. Use ↕PLAY to select FILE, and then press →PLAY.



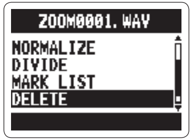
MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select the file you want to delete, and then press →PLAY.



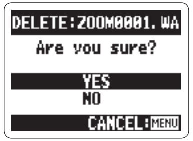
FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕PLAY to select DELETE, and then press →PLAY.



ZOOM0001.WAV
NORMALIZE
DIVIDE
MARK LIST
DELETE

5. Use ↕PLAY to select YES, and then press →PLAY.



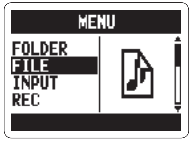
DELETE:ZOOM0001.WA
Are you sure?
YES
NO
CANCEL:MENU

Deleting all files in a folder

You can delete all the files in the current folder at once.

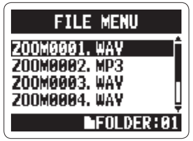
1. Press MENU 0.

2. Use ↕PLAY to select FILE, and then press →PLAY.



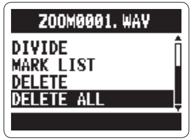
MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select one file you want to delete, and then press →PLAY.



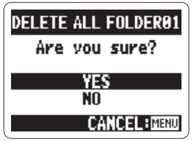
FILE MENU
ZOOM0001.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

4. Use ↕PLAY to select DELETE ALL, and then press →PLAY.



ZOOM0001.WAV
DIVIDE
MARK LIST
DELETE
DELETE ALL

5. Use ↕PLAY to select YES, and then press →PLAY.



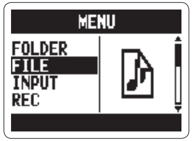
DELETE ALL FOLDER01
Are you sure?
YES
NO
CANCEL:MENU

Converting MS-RAW files into stereo files

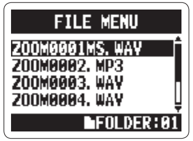
You can convert an MS-RAW file into a stereo file. S level (stereo width) adjustments will affect stereo files.

1. Press MENU 0 .

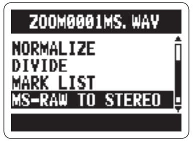
2. Use ↕PLAY to select FILE, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

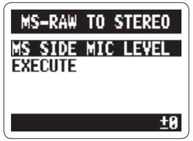
3. Use ↕PLAY to select the file you want to change, and then press →PLAY .


FILE MENU
ZOOM0001MS.WAV
ZOOM0002.MP3
ZOOM0003.WAV
ZOOM0004.WAV
FOLDER:01

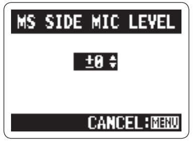
4. Use ↕PLAY to select MS-RAW TO STEREO, and then press →PLAY .


ZOOM0001MS.WAV
NORMALIZE
DIVIDE
MARK LIST
MS-RAW TO STEREO

5. If you want to adjust the S level, use ↕PLAY to select MS SIDE MIC LEVEL, and then press →PLAY .


MS-RAW TO STEREO
MS SIDE MIC LEVEL
EXECUTE
±0

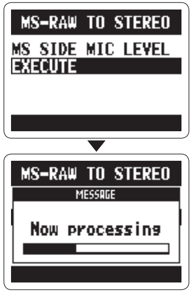
6. Use ↕PLAY to adjust the S level, and then press →PLAY .


MS SIDE MIC LEVEL
±0
CANCEL:MENU

NOTE

Set to OFF or between –24 and +6 dB.

7. Use ↕PLAY to select EXECUTE, and then press →PLAY to start conversion.


MS-RAW TO STEREO
MS SIDE MIC LEVEL
EXECUTE
MS-RAW TO STEREO
MESSAGE
Now processing

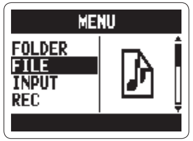
NOTE

- If a file already exists with the name that will be given to the converted file, you will have a chance to change the name to be given to the converted file.
- When a file is converted, the S level value will be added to the end of the name of the file.
- The original file is not deleted.

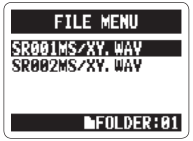
Converting 4ch surround files into stereo files

1. Press MENU.

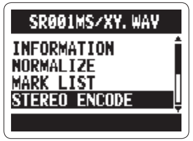
2. Use ↕ to select FILE, and then press →.


MENU
FOLDER
FILE
INPUT
REC

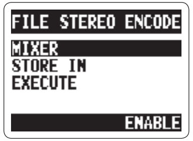
3. Use ↕ to select the file you want to change, and then press →.


FILE MENU
SR001MS/XY.WAV
SR002MS/XY.WAV
FOLDER:01

4. Use ↕ to select STEREO ENCODE, and then press →.


SR001MS/XY.WAV
INFORMATION
NORMALIZE
MARK LIST
STEREO ENCODE

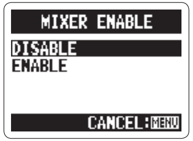
5. Use ↕ to select MIXER, and then press →.


FILE STEREO ENCODE
MIXER
STORE IN
EXECUTE
ENABLE

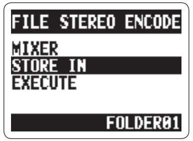
6. Use ↕ to select ENABLE or DISABLE, and then press →.

NOTE

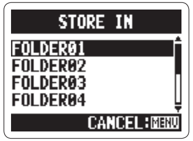
For an explanation about how to mix, see P.40.


MIXER ENABLE
DISABLE
ENABLE
CANCEL:MENU

7. Use ↕ to select STORE IN, and then press →.


FILE STEREO ENCODE
MIXER
STORE IN
EXECUTE
FOLDER01

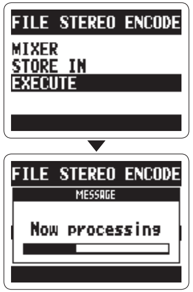
8. Use ↕ to select the folder where you want to save the file, and then press →.


STORE IN
FOLDER01
FOLDER02
FOLDER03
FOLDER04
CANCEL:MENU

9. Use ↕ to select EXECUTE, and then press → to start conversion.

NOTE

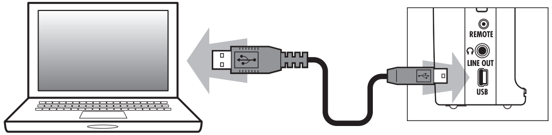
- If a file already exists with the name that will be given to the converted file, you will be given a chance to change the name to be given to the converted file.
- When a file is converted, "MIX" will be added to the end of the name of the file.
- The original file is not deleted.


FILE STEREO ENCODE
MIXER
STORE IN
EXECUTE
FILE STEREO ENCODE
MESSAGE
Now processing

Exchanging files with a computer (Card reader)

You can connect the recorder to a computer to check and copy data on the SD card.

1. After turning the power on, connect the ***H2n*** to a computer by a USB cable.

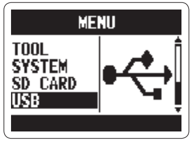

REMOTE
LINE OUT
USB

NOTE

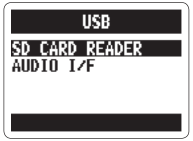
- To run the ***H2n*** using USB bus power, connect it to a computer by USB while the power is OFF.

2. Press MENU.

3. Use ↕ to select USB, and then press →.

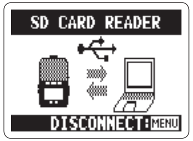

MENU
TOOL
SYSTEM
SD CARD
USB

4. Use ↕ to select SD CARD READER, and then press →.


USB
SD CARD READER
AUDIO I/F

The SD card will appear on the computer as a connected drive where you can check the files on it.

5. Unmount the card from the computer before disconnecting the recorder.


SD CARD READER
DISCONNECT: MENU

Windows: Use "Safely Remove Hardware" to select the ***H2n***

Mac: Drag and drop the ***H2n*** icon into the Trash

NOTE

Always follow the proper procedures on your computer to unmount the ***H2n*** SD card before disconnecting the USB cable.

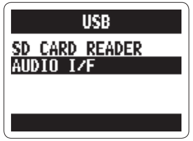
6. Disconnect the cable from the computer and the ***H2n***, and then press MENU.

Audio interface use MS/XY stereo and 2ch surround modes only

You can record the signal from the **H2n** directly to a computer, and output the playback signal from a computer through the **H2n**.

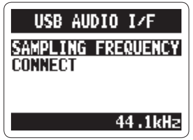
1. Follow steps 1–3 in "Exchanging files with a computer" on P.58.

2. Use ↕ to select AUDIO I/F, and then press →.



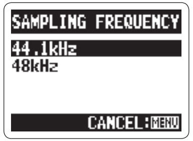
USB
SD CARD READER
AUDIO I/F

3. Use ↕ to select SAMPLING FREQUENCY, and then press →.



USB AUDIO I/F
SAMPLING FREQUENCY
CONNECT
44.1kHz

4. Use ↕ to select the sampling frequency, and then press →.

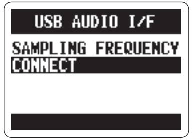


SAMPLING FREQUENCY
44.1kHz
48kHz
CANCEL:MENU

NOTE

Make sure that the sampling frequency settings are the same for both the **H2n** and the software you are using.

5. Use ↕ to select CONNECT, and then press →.

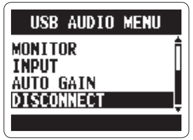


USB AUDIO I/F
SAMPLING FREQUENCY
CONNECT

NOTE

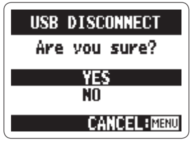
- For information about the menu items that can be used see the following.
  LO CUT (→P.66)
  COMP/LIMITER (→P.68)
  MS-RAW MONITOR (→P.71)
  PLUG-IN POWER (→P.16)
  MONITOR (→P.67)
  TUNER (→P.62)
  AUTO GAIN (→P.70)
  DISCONNECT
  INPUT
- If you want to send signals from the recorder to the computer, set INPUT to ON in the USB AUDIO MENU.

6. To disconnect the recorder, press MENU 0, use ↕ to select DISCONNECT, and then press →.



USB AUDIO MENU
MONITOR
INPUT
AUTO GAIN
DISCONNECT

7. Use ↕ to select YES, and then press →.



USB DISCONNECT
Are you sure?
YES
NO
CANCEL:MENU

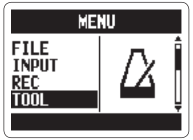
8. Disconnect the cable from the computer and the **H2n**.

Using the tuner

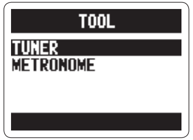
The built-in tuner can help you tune instruments by detecting the pitches of input signals.

1. Press MENU ⓪ .

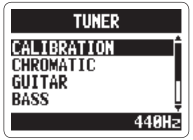
2. Use ↕ to select TOOL, and then press → .


MENU
FILE
INPUT
REC
TOOL

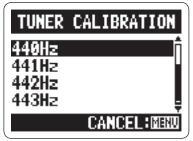
3. Use ↕ to select TUNER, and then press → .


TOOL
TUNER
METRONOME

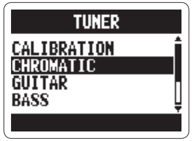
4. If you want to change the standard pitch, use ↕ to select CALIBRATION, and then press → .


TUNER
CALIBRATION
CHROMATIC
GUITAR
BASS
440Hz

5. Use ↕ to select the pitch you want to use, and then press → .


TUNER CALIBRATION
440Hz
441Hz
442Hz
443Hz
CANCEL:MENU

6. Use ↕ to select the tuner type, and then press → .


TUNER
CALIBRATION
CHROMATIC
GUITAR
BASS

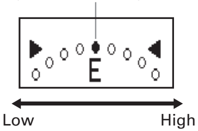
7. Tune the instrument.

The available tuner types works as follows.

■ Using the chromatic tuner

The input pitch is automatically detected and the nearest pitch is shown along with the amount of discrepancy.

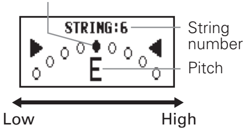
The correct pitch is indicated by the middle circle



■ Using the guitar and bass tuners

The input pitch is automatically detected and the nearest string and pitch are shown along with the amount of discrepancy.

The correct pitch is indicated by the middle circle


STRING:6
String number
E
Pitch
Low
High

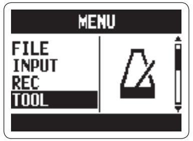
Tuner type	String number/pitch						
	1	2	3	4	5	6	7
GUITAR	E	B	G	D	A	E	B
BASS	G	D	A	E	B	–	–
OPEN A	E	C#	A	E	A	E	–
OPEN D	D	A	F#	D	A	D	–
OPEN E	E	B	G#	E	B	E	–
OPEN G	D	B	G	D	G	D	–
DADGAD	D	A	G	D	A	D	–

Using the metronome

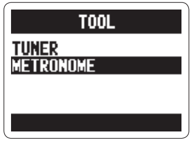
You can use the metronome to count in before recording and to provide a guide tempo.

1. Press MENU ⓪ .

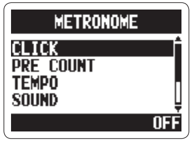
2. Use ↕ to select TOOL, and then press → .


MENU
FILE
INPUT
REC
TOOL

3. Use ↕ to select METRONOME, and then press → .

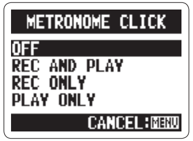

TOOL
TUNER
METRONOME

4. Use ↕ to select the desired menu item, and then press → .


METRONOME
CLICK
PRE COUNT
TEMPO
SOUND
OFF

■ Setting the CLICK

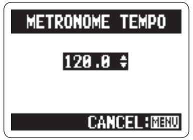
Use ↕ to select when the click should sound, and then press → .


METRONOME CLICK
OFF
REC AND PLAY
REC ONLY
PLAY ONLY
CANCEL:MENU

■ Setting the PRE COUNT (→P.29)

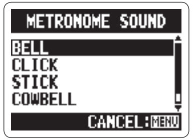
■ Setting the TEMPO

Use ↕ to adjust the metronome tempo (BPM), and then press → .


METRONOME TEMPO
120.0
CANCEL:MENU

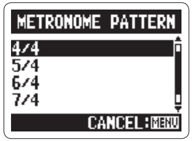
■ Setting the SOUND

Use ↕ to select the metronome sound, and then press → .


METRONOME SOUND
BELL
CLICK
STICK
COWBELL
CANCEL:MENU

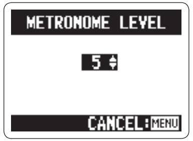
■ Setting the PATTERN

Use ↕ to select the metronome pattern, and then press → .


METRONOME PATTERN
4/4
5/4
6/4
7/4
CANCEL:MENU

■ Setting the LEVEL

Use ↕ to adjust the metronome volume, and then press → .

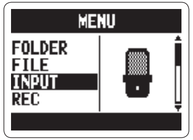

METRONOME LEVEL
5
CANCEL:MENU

Reducing noise (LO CUT)

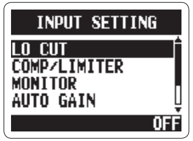
The recorder can be set to reduce the sound of wind, vocal pops and other noise.

1. Press MENU .

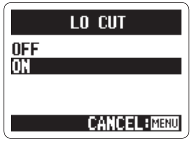
2. Use ↕PLAY to select INPUT, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select LO CUT, and then press →PLAY .


INPUT SETTING
LO CUT
COMP/LIMITER
MONITOR
AUTO GAIN
OFF

4. Use ↕PLAY to select ON, and then press →PLAY .

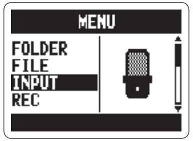

LO CUT
OFF
ON
CANCEL:MENU

Monitoring the input signal

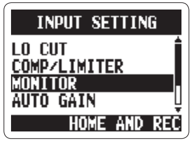
You can listen to the input signal level through headphones.

1. Press MENU .

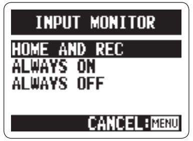
2. Use ↕PLAY to select INPUT, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select MONITOR, and then press →PLAY .


INPUT SETTING
LO CUT
COMP/LIMITER
MONITOR
AUTO GAIN
HOME AND REC

4. Use ↕PLAY to select when monitoring is enabled, and then press →PLAY .


INPUT MONITOR
HOME AND REC
ALWAYS ON
ALWAYS OFF
CANCEL:MENU

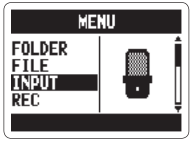
Setting	Explanation
HOME AND REC	Monitoring enabled when home screen open and when recording
ALWAYS ON	Monitoring always enabled
ALWAYS OFF	Monitoring disabled

Compressing/limiting the input signal

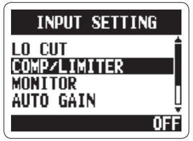
The recorder can be set to automatically increase the level of input signals that are too weak and decrease the level of input signals that are too strong for each input.

1. Press MENU 0 .

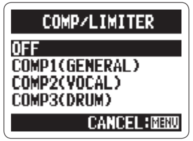
2. Use ↕PLAY to select INPUT, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select COMP/LIMITER, and then press →PLAY .


INPUT SETTING
LO CUT
COMP/LIMITER
MONITOR
AUTO GAIN
OFF

4. Use ↕PLAY to select the setting you want to use, and then press →PLAY .


COMP/LIMITER
OFF
COMP1(GENERAL)
COMP2(VOCAL)
COMP3(DRUM)
CANCEL:MENU

Setting	Explanation	
OFF	Compressor/limiter disabled	
COMP1(GENERAL)	Standard compressor	Compressors decrease high levels and increase low levels.
COMP2(VOCAL)	Compressor for vocals	
COMP3(DRUM)	Compressor for drums and percussion	
LIMIT1(GENERAL)	Standard limiter	Limiters reduce high levels that exceed a set threshold.
LIMIT2(CONCERT)	Limiter for live performances	
LIMIT3(STUDIO)	Limiter for studio recording	

NOTE

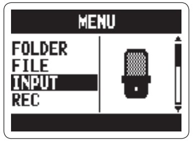
This cannot be used at the same time as the AUTO GAIN function.

Automatically adjusting the input gain

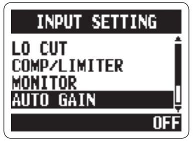
The recorder can automatically adjust the amount of gain used on signals input through the built-in microphones and the LINE IN input in order to avoid distortion.

1. Press MENU 0 .

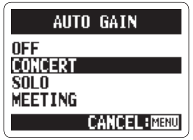
2. Use ↕PLAY to select INPUT, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select AUTO GAIN, and then press →PLAY .


INPUT SETTING
LO CUT
COMP/LIMITER
MONITOR
AUTO GAIN
OFF

4. Use ↕PLAY to select the setting you want to use, and then press →PLAY .


AUTO GAIN
OFF
CONCERT
SOLO
MEETING
CANCEL:MENU

Setting	Explanation
OFF	AUTO GAIN disabled
CONCERT	For concerts and other loud sound sources
SOLO	For acoustic guitars and other solo performances
MEETING	For meetings and other quiet sound sources

NOTE

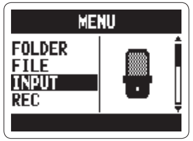
- When AUTO GAIN is ON, the MIC GAIN dial setting has no effect.
- This cannot be used at the same time as the automatic recording function.

Monitoring MS-RAW signals MS stereo mode only

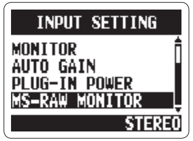
When recording in MS-RAW mode, you can monitor the MID input signal on the left output channel and the SIDE input signal on the right output channel.

1. Press MENU 0 .

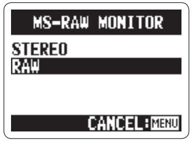
2. Use ↕PLAY to select INPUT, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select MS-RAW MONITOR, and then press →PLAY .


INPUT SETTING
MONITOR
AUTO GAIN
PLUG-IN POWER
MS-RAW MONITOR
STEREO

4. Use ↕PLAY to select RAW, and then press →PLAY .


MS-RAW MONITOR
STEREO
RAW
CANCEL:MENU

NOTE

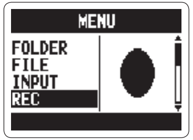
If you want to monitor an ordinary stereo mix of the signals, select STEREO.

Setting the recording format

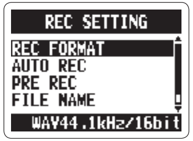
You can set the recording format according to your sound quality and file size needs.

1. Press MENU 0 .

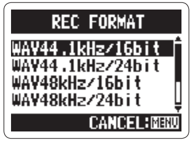
2. Use ↕ to select REC, and then press → .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕ to select REC FORMAT, and then press → .

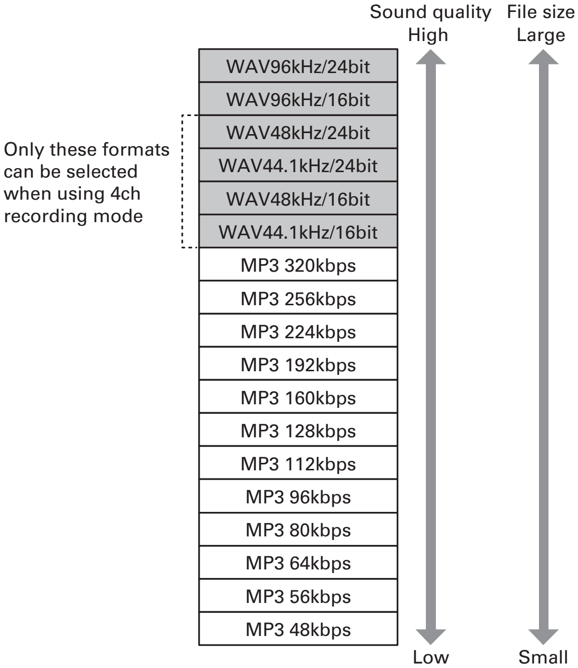

REC SETTING
REC FORMAT
AUTO REC
PRE REC
FILE NAME
WAV44.1kHz/16bit

4. Use ↕ to select the recording format, and then press → .


REC FORMAT
WAV44.1kHz/16bit
WAV44.1kHz/24bit
WAV48kHz/16bit
WAV48kHz/24bit
CANCEL:MENU

NOTE

- Use WAV formats for higher audio quality.
- Use MP3 formats, which are compressed and have much smaller file sizes, to save space on the SD card. Beware, however, that MP3 compression reduces audio quality.



WAV96kHz/24bit
WAV96kHz/16bit
WAV48kHz/24bit
WAV44.1kHz/24bit
WAV48kHz/16bit
WAV44.1kHz/16bit
MP3 320kbps
MP3 256kbps
MP3 224kbps
MP3 192kbps
MP3 160kbps
MP3 128kbps
MP3 112kbps
MP3 96kbps
MP3 80kbps
MP3 64kbps
MP3 56kbps
MP3 48kbps

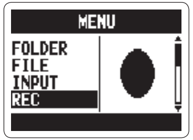
Only these formats can be selected when using 4ch recording mode

Changing automatic recording settings

You can change settings related to the input level threshold that causes recording to start and stop automatically, as well as the amount of delay before automatic stopping.

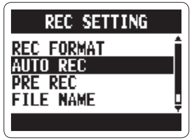
1. Press MENU 0 .

2. Use ⇕ to select REC, and then press → .



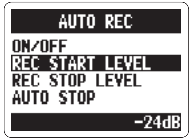
MENU
FOLDER
FILE
INPUT
REC

3. Use ⇕ to select AUTO REC, and then press → .



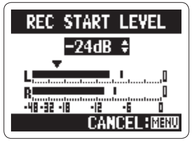
REC SETTING
REC FORMAT
AUTO REC
PRE REC
FILE NAME

4. If you want to adjust the recording start threshold, use ⇕ to select REC START LEVEL, and then press → .



AUTO REC
ON/OFF
REC START LEVEL
REC STOP LEVEL
AUTO STOP
-24dB

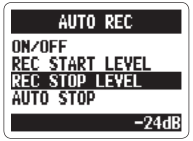
5. Use ⇕ to adjust the recording start threshold, and then press → .



REC START LEVEL
-24dB ⇕

CANCEL:MENU

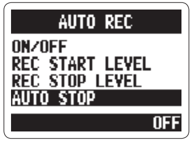
6. If you want to set the recording stop threshold, use ⇕ to select REC STOP LEVEL, and then press → .



AUTO REC
ON/OFF
REC START LEVEL
REC STOP LEVEL
AUTO STOP
-24dB

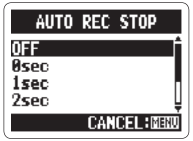
7. Use ⇕ to set the recording stop threshold, and then press → .

8. If you want to set the delay before recording stops, use ⇕ to select AUTO STOP, and then press → .



AUTO REC
ON/OFF
REC START LEVEL
REC STOP LEVEL
AUTO STOP
OFF

9. Use ⇕ to set the time, and then press → .



AUTO REC STOP
OFF
0sec
1sec
2sec
CANCEL:MENU

NOTE

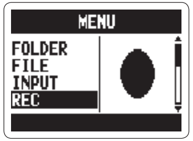
The AUTO REC STOP time is the delay until recording stops after the input level drops below the REC STOP LEVEL.

Setting how files are named Stereo files only

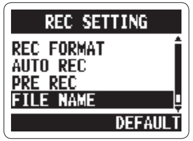
You can change how stereo files are automatically named.

1. Press MENU ⓪ .

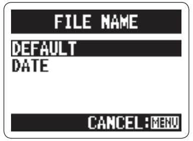
2. Use ↕PLAY to select REC, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select FILE NAME, and then press →PLAY .


REC SETTING
REC FORMAT
AUTO REC
PRE REC
FILE NAME
DEFAULT

4. Use ↕PLAY to select, and then press →PLAY .


FILE NAME
DEFAULT
DATE
CANCEL:MENU

NOTE

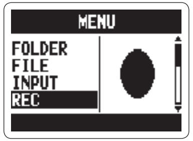
- File names are assigned in the following manner.
  DEFAULT: ZOOM0001(MS).wav/mp3 ~ ZOOM9999(MS).wav/mp3
  DATE: YYMMDD-HHMMSS(MS).wav/mp3
  (for example, 110531-130512.wav)
- DATE uses the starting time of the recording.
- If a file already exists with the same name in the folder, the new file will have a number added to the end of its name. Numbers will be added sequentially in the case of multiple duplicates.

Pausing recording when adding marks WAV format only

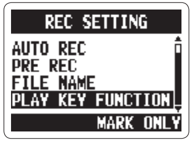
You can set the unit to pause when you add a mark during recording.

1. Press MENU ⓪ .

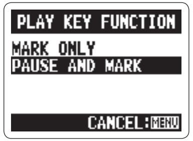
2. Use ↕PLAY to select REC, and then press →PLAY .


MENU
FOLDER
FILE
INPUT
REC

3. Use ↕PLAY to select PLAY KEY FUNCTION, and then press →PLAY .


REC SETTING
AUTO REC
PRE REC
FILE NAME
PLAY KEY FUNCTION
MARK ONLY

4. Use ↕PLAY to select PAUSE AND MARK, and then press →PLAY .


PLAY KEY FUNCTION
MARK ONLY
PAUSE AND MARK
CANCEL:MENU

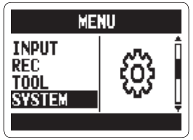
NOTE

Marks cannot be added to MP3 files, so this setting has no effect when recording MP3 files.

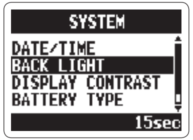
Changing the display backlight time

You can set the amount of time that the display backlight stays lit.

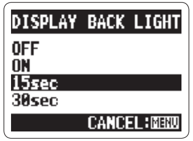
1. Press MENU 0 .


MENU
INPUT
REC
TOOL
SYSTEM

2. Use ↕PLAY to select SYSTEM, and then press →PLAY .


SYSTEM
DATE/TIME
BACK LIGHT
DISPLAY CONTRAST
BATTERY TYPE
15sec

3. Use ↕PLAY to select BACK LIGHT, and then press →PLAY .

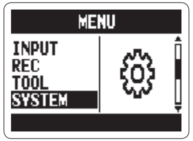

DISPLAY BACK LIGHT
OFF
ON
15sec
30sec
CANCEL:MENU

4. Use ↕PLAY to select the amount of time, and then press →PLAY .

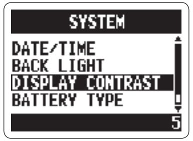
Setting	Explanation
OFF	The backlight stays unlit.
ON	The backlight stays lit when the unit is on.
15sec	The backlight stays lit for 15 seconds after the last time that a control (besides MIC GAIN) was used.
30sec	The backlight stays lit for 30 seconds after the last time that a control (besides MIC GAIN) was used.

Adjusting the display contrast

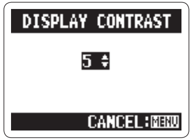
1. Press MENU 0 .


MENU
INPUT
REC
TOOL
SYSTEM

2. Use ↕PLAY to select SYSTEM, and then press →PLAY .


SYSTEM
DATE/TIME
BACK LIGHT
DISPLAY CONTRAST
BATTERY TYPE
5

3. Use ↕PLAY to select DISPLAY CONTRAST, and then press →PLAY .


DISPLAY CONTRAST
5 ⇕
CANCEL:MENU

4. Use ↕PLAY to adjust the contrast, and then press →PLAY .

NOTE

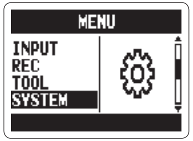
- The contrast can be set to a value from 1–8.
- The higher the number, the greater the contrast.

Checking the software versions

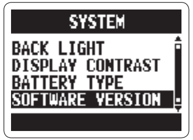
You can view the versions of the system and other software used by the **H2n**.

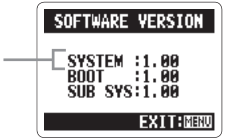
1. Press MENU 0 .

2. Use ↕PLAY to select SYSTEM, and then press →PLAY .


MENU
INPUT
REC
TOOL
SYSTEM

3. Use ↕PLAY to select SOFTWARE VERSION, and then press →PLAY to show the software versions in use.


SYSTEM
BACK LIGHT
DISPLAY CONTRAST
BATTERY TYPE
SOFTWARE VERSION


SOFTWARE VERSION
EXIT:MENU

SYSTEM :1.00
BOOT :1.00
SUB SYS:1.00

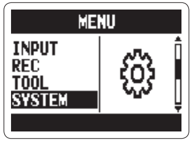
System software version

Restoring the unit to its factory settings

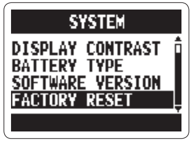
You can restore the recorder to the settings it had when it was shipped from the factory.

1. Press MENU 0 .

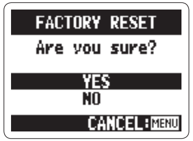
2. Use ↕PLAY to select SYSTEM, and then press →PLAY .


MENU
INPUT
REC
TOOL
SYSTEM

3. Use ↕PLAY to select FACTORY RESET, and then press →PLAY .


SYSTEM
DISPLAY CONTRAST
BATTERY TYPE
SOFTWARE VERSION
FACTORY RESET

4. Use ↕PLAY to select YES, and then press →PLAY .


FACTORY RESET
Are you sure?
YES
NO
CANCEL:MENU

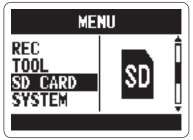
NOTE

- The date and time, recording mode and input gain settings are not reset by this.
- This also erases any recording in the built-in memory.

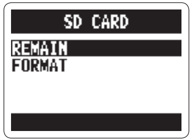
Checking the open capacity of the SD card

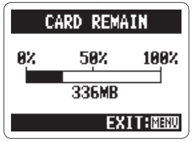
1. Press MENU 0.

2. Use ↕PLAY to select SD CARD, and then press →PLAY.


MENU
REC
TOOL
SD CARD
SYSTEM
SD

3. Use ↕PLAY to select REMAIN, and then press →PLAY to show the open space on the card.


SD CARD
REMAIN
FORMAT

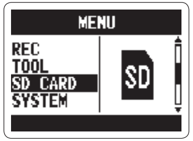

CARD REMAIN
0%
50%
100%
336MB
EXIT:MENU

Formatting an SD card

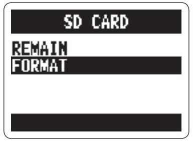
You can format an SD card for use with the **H2n**.

1. Press MENU 0.

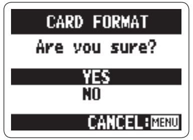
2. Use ↕PLAY to select SD CARD, and then press →PLAY.


MENU
REC
TOOL
SD CARD
SYSTEM
SD

3. Use ↕PLAY to select FORMAT, and then press →PLAY.


SD CARD
REMAIN
FORMAT

4. Use ↕PLAY to select YES, and then press →PLAY.


CARD FORMAT
Are you sure?
YES
NO
CANCEL:MENU

NOTE

- You must format an SD card after purchase or if it has been formatted by a computer or other device before using it with the **H2n**.
- Be aware that when you format an SD card, all data saved on it will be erased.

Updating the system software

You can update the system software used by your **H2n** to the latest version.

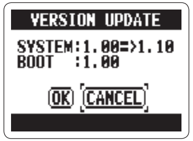
1. Copy the updater file to the root directory of the SD card.

NOTE

Download the latest system software at the ZOOM website (zoomcorp.com).

2. With the SD card in the **H2n**, turn the power ON while pressing and holding .

3. Use to select OK, and then press .

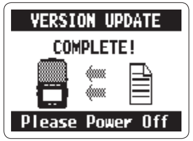


VERSION UPDATE

SYSTEM:1.00=>1.10

BOOT :1.00

4. After updating completes, turn the power OFF.



VERSION UPDATE

COMPLETE!

Please Power Off

NOTE

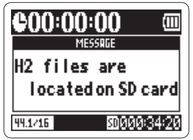
You cannot update the system software if the battery charge is low. In such a case, install new batteries or use an AC adapter (sold separately).

Using SD cards from older H series recorders

This recorder can read SD cards that have been used in older H series recorders and copy their files into folders for use by the **H2n**.

1. With the SD card inserted, turn the power ON.

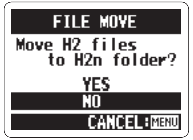
2. Use to select YES, and then press .



00:00:00

MESSAGE

H2 files are located on SD card



FILE MOVE

Move H2 files to H2n folder?

NOTE

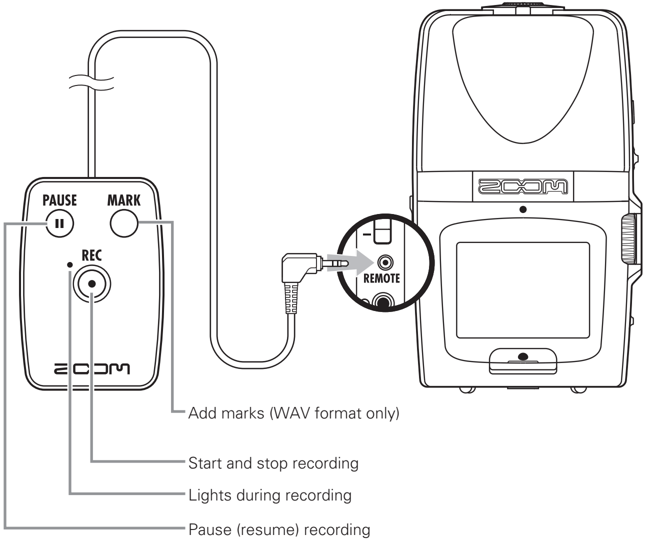
A file must be renamed before moving if another file with the same name already exists in the **H2n** folder.

Using a remote control

By using a remote control (sold separately) you can operate the **H2n** from a distance.

- **Connect the remote control to the REMOTE jack on the H2n.**

  The functions of the buttons on the remote are as follows.



Troubleshooting

If you think that the **H2n** is not operating properly, please check the following first.

Recording/playback trouble

◆ There is no sound or output is very quiet

- Check the connections to your monitoring system and its volume setting.
- Confirm that the volume of the **H2n** is not too low.

◆ The recorded sound cannot be heard or is very quiet

- If you are using built-in mics, confirm that the active mics are oriented correctly and that the recording mode is suitable. (→ P.20)
- Check the MIC GAIN setting. (→ P.24, 70)
- If you are recording from a CD player or other device connected to the LINE IN jack, raise the output level of the connected device.

◆ Recording is not possible

- Confirm that the SD card has open space. (→ P.82)
- If "Hold" appears on the display, the hold function is enabled. Disable the hold function. (→ P.15)

Other trouble

◆ The recorder is not recognized by a computer when connected by USB

- Check that the OS of the computer is compatible. (→ P.58)
- The **H2n** operation mode must be selected on the recorder before it will be recognized by a computer. (→ P.58)

Specifications

Recording media	16MB–2GB SD cards, 4GB–32GB SDHC cards (Cards that can be used with this recorder are to be verified individually)	
Built-in memory	Can be used to record up to 1 minute in 96 kbps MP3 format (recording to this memory overwrites any previous recording in it)	
Recording	Mic arrangements	MS stereo with adjustable side mic level 90° XY stereo
	Modes	MS, XY, MS+XY (stereo) and MS+XY (4ch)
Microphones	Types	Directional (XY, MS mid mics) Bidirectional (MS side mic)
	Maximum sound pressure input	120 dB spl (directional) 122 dB spl (bidirectional)
File formats	Stereo	
	Uncompressed PCM	44.1/48/96kHz, 16/24bit WAV (BWF)
	Compressed MP3 (recording)	44.1kHz, 48/56/64/80/96/112/128/160/192/224/256/320kbps (Not compatible with MS-RAW recording)
	Compressed MP3 (playback)	44.1/48kHz, 32/40/48/56/64/80/96/112/128/160/192/224/256/320kbps
	4ch	
	Uncompressed PCM	44.1/48kHz, 16/24bit WAV (BWF) Two stereo files for each recording
Digital processing	A/D conversion	24-bit 128× oversampling
	D/A conversion	24-bit 128× oversampling
	Signal processing	32-bit
Recording time	2GB card example	3:08:00 (44.1kHz/16bit WAV) 34:43:00 (128kbps MP3)
Features	LO CUT	80Hz high-pass filter
	COMP/LIMITER	3 types of compressors and 3 types of limiters
	AUTO GAIN	Automatic input gain adjustment
	PRE REC	2 seconds of pre-recording
	AUTO REC	Automatic recording start/stop, continuous standby
	TUNER	Chromatic, guitar, bass and alternate (A/E/G/D/DADGAD) tunings with automatic string detection
	METRONOME	40–250 BPM range, five tones, pre-count
	SPEED	Playback speed adjustable between 50–150%

Features	KEY CONTROL	Playback pitch adjustable ±6 semitones (cannot be used with 96kHz files)
	AB REPEAT	Repeats playback between selected points in a file
	FILE DIVIDE	Divides a file into two
	FILE NORMALIZE	Maximizes file volume (cannot be used with MP3s)
	FILE MP3 ENCODE	WAV files can be converted to MP3 formats at fixed bit rates
	MARK	Up to 99 marks can be added as desired when recording WAV files
	SURROUND MIXER	Mix balance can be adjusted when playing back 4ch surround recordings
Display	Graphic LCD (128×64 pixels) with backlight	
Input gain	0 to +39 dB	
Input jack	Line/mic stereo mini jack can supply plug-in power 2 kΩ impedance at input levels of 0 to –39 dBm	
Output jack	Line/headphone stereo mini jack Rated output level: –10 dBm (output impedance 10 kΩ or more) Headphones: 20 mW + 20 mW (into 32 Ω load)	
Built-in speaker	400mW, 8Ω, mono	
USB	Mini-B type Card reader operation USB 2.0 High Speed Audio interface operation USB 1.0 Full Speed Supports 44.1/48kHz sampling rates and 16-bit rate Bus power operation supported	
Power	AD-17 USB to AC adapter (DC 5V 1A), operates using two AA batteries Continuous operation of 20 or more hours when recording 44.1kHz/16-bit WAV files using alkaline batteries	
Physical features	Tripod mounting socket, strap attachment Dimensions (mm): 67.6 (W) × 113.85 (H) × 42.7 (D) Weight: 130 g (without batteries)	

* Recording concerts and public performances, for example, without permission from rights holders is prohibited by law.

* Product specifications and appearance might be changed for the purpose of improvement without warning.

* 0 dBm = 0.775 Vrms

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

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment to an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

For EU Countries

CE Declaration of Conformity

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