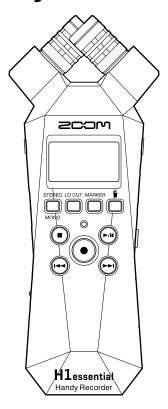


H1essential

Handy Recorder



Operation Manual

You must read the Usage and Safety Precautions before use.

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Proper display is not possible on grayscale devices.

Notes about this Operation Manual

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H1essential overview

Achieving high audio quality throughout recording and editing

With support for 32-bit float WAV files, the H1essential can maintain the highest audio quality from recording through editing in a DAW or other software.

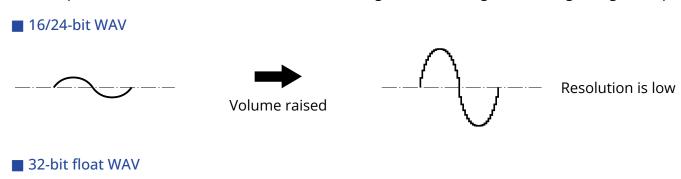


32-bit float WAV file overview

32-bit float WAV files have the following advantages over conventional 16/24-bit WAV files. Due to these advantages, the audio quality of recording can be maintained afterward when editing in a DAW or other software.

Resolution advantage

32-bit float WAV files have the advantage of being able to maintain high resolution even at low volumes. As a result, quiet sounds can be made louder when editing after recording without degrading their quality.

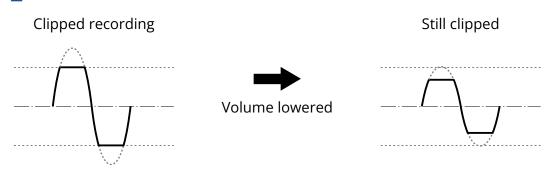




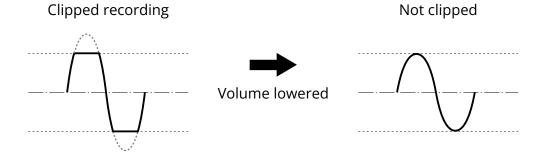
Clipping advantage

If a waveform sounds clipped when output from the H1essential or in a DAW, it can be edited after recording to lower its volume and restore an unclipped waveform because the data in the 32-bit float WAV file itself is not clipped.

■ 16/24-bit WAV



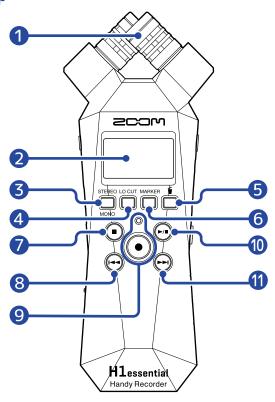
■ 32-bit float WAV



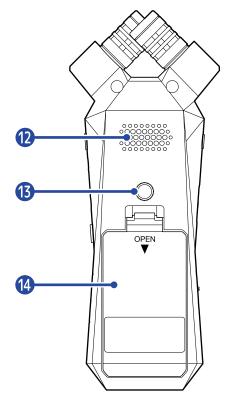
Functions of parts

Top and bottom





Bottom



Built-in XY mic

This stereo mic has two crossing directional mics. This mic can record three-dimensional sound with natural depth and width.

2 Display

This shows various types of information.

3 STEREO/MONO/operation button

When the <u>Home Screen</u> is open, this switches the audio recording format between stereo and mono. When any screen other than the Home Screen is open, this has the function of the icon shown at the bottom of the display. (→ Operation button overview)

4 LO CUT/operation button

When the Home Screen is open, this changes the LO CUT setting.

When any screen other than the Home Screen is open, this has the function of the icon shown at the bottom of the display. (→ Operation button overview)

5 Trash/operation button

When the Home Screen is open, this moves the recorded file to the trash.

When the Playback Screen is open, this moves the playing file to the trash.

When any screen other than the Home Screen or Playback Screen is open, this has the function of the icon shown at the bottom of the display. (→ Operation button overview)

6 MARKER/operation button

When the Home Screen is open, this adds a mark to the recording.

When any screen other than the Home Screen is open, this has the function of the icon shown at the bottom of the display. (→ Operation button overview)

STOP button

When the <u>Home Screen</u> is open, pressing and holding this will show the current time and the next file. When recording, this will stop recording.

When the <u>Playback Screen</u> is open, this stops playback. Pressing this again when stopped will return to the <u>Home Screen</u> (from most screens).

8 REW button

This moves to the beginning of the file.

If pressed near the beginning of a file, this will open the File List Screen where files can be selected. (→ Selecting files for playback (File List Screen))

If there are marks between the current playback position and the beginning, this will move to the nearest mark.

Press and hold to search backward.

REC button and indicator

This starts and stops recording.

The indicator lights during recording.

10 PLAY/PAUSE button

This starts and pauses playback.

When operating as a USB mic, this turns muting on/off. (\rightarrow Muting the USB mic)

When the File List Screen is open, this opens the Playback Screen for the selected file.

FF button

This opens the File List Screen where files can be selected. (\rightarrow Selecting files for playback (File List Screen))

If there are marks between the current playback position and the end, this will move to the nearest mark.

When playing back or paused, this moves to the next mark. If there is no mark, this opens the File List Screen.

Press and hold to search forward.

12 Speaker

Sound is output here during file playback.

If headphones are connected to the PHONE/LINE OUT jack, sound will not be output from the speaker.

13 Tripod mounting threads

This can be used to attach the H1essential to a tripod, for example.

14 Battery cover

Open this when installing or removing AAA batteries. (→ Installing batteries)

Operation button overview

When operation icons appear at the bottom of the display on the Menu Screen, Playback Screen, Playback Options Screen and other screens, press the operation keys directly below the operation icons to select or confirm items on screen.

■ Menu Screen example



- Operation icons
 The icons shown depend on the screen.
- 2 Operation button (BACK)
 This returns to the previous screen.
- 3 Operation button (_____)
 This selects the item above.
- 4 Operation button (▼)
 This selects the item below.
- 5 Operation button (ENTER)
 This confirms the selected item.

Other operation icons will appear. They are explained in the procedures for each item.

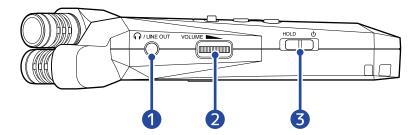
■ Note about the abbreviation of procedures in this operation manual

In this operation manual, procedures that include pressing operation buttons to conduct operations use icons and are abbreviated as follows.

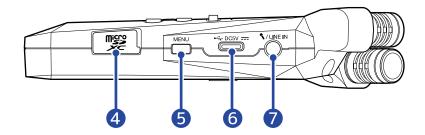
Abbreviation: Use _____ / ___ to select "Rec Settings" and press **ENTER** to confirm.

Left and right sides

■ Left side



■ Right side



- 1 PHONE/LINE OUT jack
 - Use this stereo mini jack to output sound to headphones or a connected device.
- 2 VOLUME

This adjusts the output to the built-in speaker, headphones or connected device.

3 POWER/HOLD switch

Use this to turn the power on/off and to disable button operation.

4 microSD card slot

Insert a microSD card here.

5 MENU button

Press this to open the Menu Screen.

When a screen other than the Menu Screen or <u>Playback Options Screen</u> is open, this returns to the Home Screen.

When the Playback Options Screen is open, this returns to the Playback Screen.

6 USB port (Type-C)

Connect this to a computer, smartphone or tablet to use file transfer functions and to use the H1essential as a USB mic.

Operation on USB bus power is supported.

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

A connected mic can be used to record.

Mics that require plug-in power can be used with this jack.

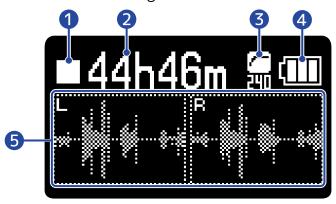
Overview of screens that appear

In this section, we explain the screens shown on the display of the H1essential.

Home Screen

This screen appears on the display when the H1essential power is turned on. This shows the state of the H1essential, including recording status and input signal waveforms.

When recording starts, the name of the file being recorded is shown at the top of the screen.



- 1 Status icon
 - The recording status is shown by an icon.
 - Stopped
 - Recording
- 2 Available recording time / recorded time

This shows the available recording time when recording is paused and the current elapsed recording time when recording.

- 3 LO CUT indicator
 - This shows the LO CUT setting. Nothing will be shown when this is set to OFF. (\rightarrow Reducing noise (Lo Cut))
- 4 Remaining battery charge

This is shown when operating on batteries. When the remaining battery charge becomes low, replace the batteries (\rightarrow Installing batteries) or connect an AC adapter (\rightarrow Connecting an AC adapter) or portable battery (\rightarrow Using other power sources).



6 Waveform display

This shows the waveforms of signals input into the H1essential.

Waveforms for both the L and R channels will be shown when stereo. A waveform that mixes the L and R channels will be shown when mono. (→ Switching between stereo and mono)

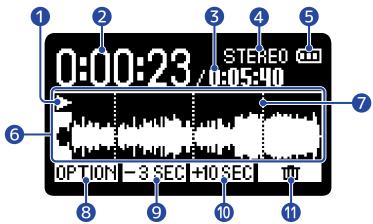
HINT When a screen other than the Home Screen is open, press MENU to return to the Home Screen. This function is useful when you want to return to the Home Screen quickly from various setting screens. (Moving to the Home Screen is not possible from some screens.)

Playback Screen

When the Home Screen is open, pressing (n) to start playback will open this screen on the display.

This shows playback conditions of the selected file, including the playback time and waveform.

When playback starts, the name of the file being played is shown at the top of the screen.



Status icon

The playback status is shown by an icon.

- Playing back
- Paused
- Searching backward
- Searching forward

2 Playback time

This shows the elapsed time since the start of playback.

3 File length

This shows the length of the file currently playing.

4 Stereo/mono indicator

"STEREO" will be shown when the file was recorded in stereo mode and "MONO" will be shown when recorded in mono.

5 Remaining battery charge

This is shown when operating on batteries. When the remaining battery charge becomes low, replace the batteries (\rightarrow Installing batteries) or connect an AC adapter (\rightarrow Connecting an AC adapter) or portable battery (\rightarrow Using other power sources).



6 Waveform display

This shows the waveform of the file being played. The colors are reversed for the part of the waveform that has already been played.

The positions of marks can also be checked. (→ Adding marks during recording, Adding/deleting marks in recorded files)

Mark bar

This shows a mark added to the file being played back.

8 OPTION

This opens the Playback Options Screen where the following can be done.

- Automatically adjusting the volume during playback (normalizing)
- Changing the file format and exporting files
- Adding/deleting marks in recorded files
- Repeating playback of a set interval (A-B repeat)
- · Changing the playback speed
- Checking file information
- Moving the file being played to the Trash folder
- 9 -3 SEC

This moves the file playback position back 3 seconds.

10 F-10 SEC

This moves the file playback position forward 10 seconds.

Use this to move the file being played to the Trash folder. (→ Moving the file being played to the Trash folder)

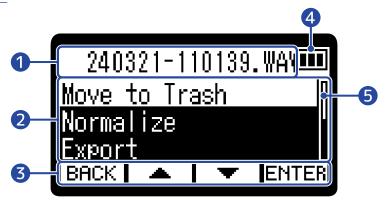
HINT

Press when playback is stopped to return to the Home Screen.

Playback Options Screen

Use this screen to make settings related to playback.

When the Playback Screen is open, press **OPTION** to open this.



- 1 File/option name
 - This shows the name of the selected file.

This shows the playback option when one is selected.

Playback option items

This shows setting items and setting values, for example.

3 Operation icons

Press operation buttons below the corresponding operation icons on the display to select option items and confirm selected items. (→ Operation button overview)

4 Remaining battery charge

This is shown when operating on batteries. When the remaining battery charge becomes low, replace the batteries (\rightarrow Installing batteries) or connect an AC adapter (\rightarrow Connecting an AC adapter) or portable battery (\rightarrow Using other power sources).



5 Scrollbar

This will appear when a list has more items than will fit on the display.



Menu Screen

Make recording, playback, system and repeat playback settings, use the overdub and USB functions, and manage SD cards on this screen.

When the Home Screen is open, press to open this.

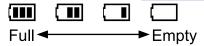


- Menu title
- Menu items
 This shows setting items and setting values, for example.
- 3 Operation icons

Press operation buttons below the corresponding operation icons on the display to select menu items and confirm selected items. (\rightarrow Operation button overview)

4 Remaining battery charge

This is shown when operating on batteries. When the remaining battery charge becomes low, replace the batteries (\rightarrow Installing batteries) or connect an AC adapter (\rightarrow Connecting an AC adapter) or portable battery (\rightarrow Using other power sources).



5 Scrollbar

This will appear when a list has more items than will fit on the display.

HINT

When the Menu Screen is open, press to return to the Home Screen. This function is useful when you want to return to the Home Screen quickly from various setting screens. (Moving to the Home Screen is not possible from some screens.)

Recording process

Recording follows the process shown below.

Preparation before recording

- Load a microSD card (→ Inserting microSD cards)
- Prepare the power (→ Installing batteries, Connecting an AC adapter)
- Turn the power on (→ Turning the power on)
- Make settings related to input (→ Making input settings)
- Make settings related to recording (→ Making recording settings)

Recording

Press or to start recording and press or to stop recording (→ Recording)

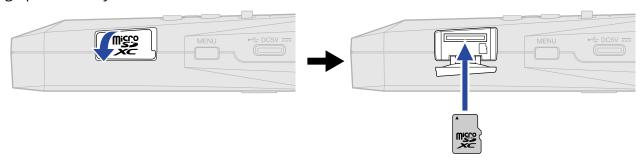
Playing back and reviewing

Press to start playback and press to stop (→ <u>Playing</u> recordings)

Making preparations

Inserting microSD cards

1. When the power is off, open the microSD card slot cover, and insert a microSD card with the logo facing up all the way into the slot.



To remove a microSD card, push it further into the slot and then pull it out.

2. Close the microSD card slot cover.

NOTE

- Always make certain that the power is off when inserting or removing a microSD card. Inserting or removing a card while the power is on could result in data loss.
- When inserting a microSD card, be sure to insert the correct end with the top side up.
- Recording and playback are not possible when a microSD card is not loaded in the H1essential.
- Always format microSD cards in order to maximize their performance after purchasing them new or using them with a different device. (→ Formatting microSD cards)
- A message will open when a card that has not been used with the H1essential before is loaded in it.



The SD Card Screen will be shown. Then, test the SD card. (→ Testing microSD cards)

- The following types of recording media are supported.
 - microSDHC: 4 GB 32 GB
 - microSDXC: 64 GB 1 TB

Supplying power

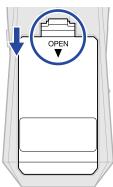
The H1essential can operate using batteries or a power supply connected to the USB port (AC adapter, USB bus power or portable battery).

Power from a power supply connected to the USB port will be used before batteries.

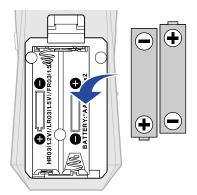
Installing batteries

Use 2 AAA batteries when operating the H1essential on battery power.

1. When the power is off, push the latch down to open the battery cover.



2. Install 2 AAA batteries.



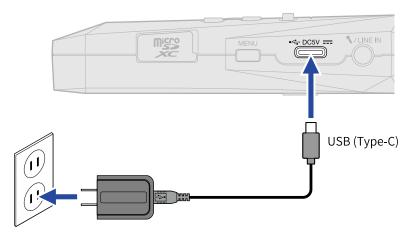
3. Replace the battery cover.

NOTE

- Use only one type of battery (alkaline, NiMH or lithium) at a time.
- Set the type of battery used correctly so that the amount of remaining battery charge can be shown accurately. (→ Setting the type of batteries used)
- If the batteries run out of charge, turn the power off immediately and install new batteries. The battery charge will always be shown when operating on battery power.

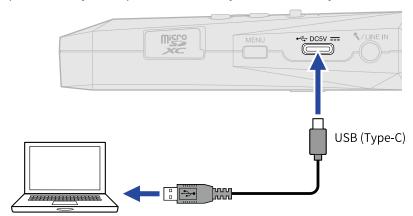
Connecting an AC adapter

Connect the cable of a dedicated AC adapter (AD-17) to the USB port (Type-C) and connect the adapter to an outlet.



Using other power sources

By connecting the USB port (Type-C) to a computer, the H1essential can be operated using USB bus power. Moreover, it can also be powered by a 5V portable battery (commercially-available).



Connecting input devices

Using the built-in XY microphone

The H1essential uses an XY stereo format employing two mic units oriented perpendicularly to each other. By having left and right diaphragms face inward perpendicularly to each other, a wide recording range can be covered while fully capturing sound sources in the center.

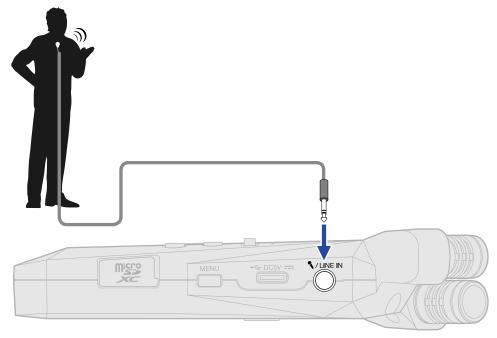
Moreover, since the points of recording are almost the same, no phase differences occur between the left and right channels.

Providing three-dimensional sound with natural depth and width, this recording technique is ideal for capturing specific sound sources that are nearby or at medium distance.

Use examples: solo and chamber music performances, live rehearsals, field recordings, etc.

Connect a lavalier mic, for example, to the MIC/LINE IN jack

The H1essential has a MIC/LINE IN jack that can be used to connect an external mic or line-level device. This jack can also provide plug-in power to mics that use it.

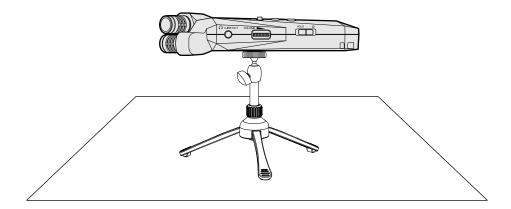


NOTE

When using the MIC/LINE IN jack, the built-in XY mic cannot also be used.

H1essential placement

If the H1essential is placed directly on a table when recording using its built-in XY mic, reflected sound could interfere with recording and reduce clarity. We recommend using a tripod, for example, to distance it from the table. Placing something like a handkerchief can also be effective in reducing sound reflected from a table.



Turning the power on/off

Turning the power on

1. Slide HOLD toward to



After the Startup Screen is shown, the Home Screen will open on the display.



The first time the power is turned on after purchase as well as when the H1essential has been reset to factory defaults, setting screens for the guide sound, display language and date and time will be shown. Make these settings. (→ Setting the guide sound (first time starting up), Setting the language shown (first time starting up), Setting the date format (first time starting up), Setting the date and time (first time starting up), Setting the type of batteries used (first time starting up))

NOTE

- The H1essential can be set so that its power will automatically turn off if it is not used for a set amount of time. (→ Setting the time until the power turns off automatically)
- If "No SD Card!" appears on the display, confirm that a microSD card is inserted properly. (→ <u>Inserting</u> microSD cards)
- If "Invalid SD Card!" appears on the display, the card is not formatted correctly. Format the microSD card
 or use a different microSD card. (→ Formatting microSD cards, Inserting microSD cards)

■ Turning the power off

1. Slide HOLD b toward b until "Please wait. Saving data..." appears on the display. The display will darken and the power will turn off.

NOTE

- While "Please wait. Saving data..." is shown, the current settings of the H1essential are being saved. While "Please wait. Saving data..." is shown, do not disconnect the AC adapter or remove the batteries.
- The power cannot be turned off while recording. Turn the power off after recording stops.

Setting the guide sound (first time starting up)

The first time the power is turned on after purchase as well as after the H1essential has been reset to factory defaults, set the guide sound when a screen to set it is shown.

1. Use / ▼ to select a setting item, and press ✓ to confirm.



Setting	Explanation
ABC + Beep ("ABC" shows the installed language.)	Setting items will be read aloud in the installed language. A beeping sound will be used to notify the occurrence of error messages, recording starting/stopping and volume adjustment, for example. English is installed at the time of purchase, but other languages can be installed and used for reading as desired. (→ Installing guide sounds)
Beep Only	A beeping sound will be used to notify when error messages occur, recording starts/stops and the volume changes, for example. Nothing will be read aloud.
Off	This turns off the guide sound.

After the guide sound setting is confirmed, set the language shown when a screen to set it opens. (→ Setting the language shown (first time starting up))

NOTE

The volume of the guide sound can also be adjusted. (→ Setting the guide sound volume)

HINT

The guide sound setting can also be changed later on the Menu Screen. (→ Setting the guide sound (Accessibility))

Setting the language shown (first time starting up)

The first time the power is turned on after purchase as well as when the H1essential has been reset to factory defaults, set the display language when a screen to set it is shown after setting the guide sound.

1. Use _____ / ___ to select the language shown, and press ____ to confirm.



After the display language setting is confirmed, set the date format when a screen to set it opens. (→ Setting the date format (first time starting up))

- The language shown setting can also be changed later on the Menu Screen. (→ Setting the language shown)
- Select **BACK** to return to the previous settings screen.

Setting the date format (first time starting up)

The first time the power is turned on after purchase as well as after the H1essential has been reset to factory defaults, set the date format when a screen to set it is shown after setting the display language. The date written to recorded files will use the date format selected here.

1. Use _____ / ___ to select"Date Format", and press _____ to confirm.

A specific example of the set date format will be shown at the bottom of the screen using the current date setting.



Setting	Explanation
YYMMDD	The date is shown in year, month, day order.
MMDDYY	The date is shown in month, day, year order.
DDMMYY	The date is shown in day, month, year order.

After the date format setting is confirmed, set the date and time when a screen to set them opens. (→ Setting the date and time (first time starting up))

- The date format setting can also be changed later on the Menu Screen. (→ Setting the date format)
- Select **BACK** to return to the previous settings screen.

Setting the date and time (first time starting up)

The first time the power is turned on after purchase as well as after the H1essential has been reset to factory defaults, set the date and time when a screen to set them is shown after setting the date format. The date and time are stored in recording files.

1. Use / to select the desired setting item, and press **ENTER** to confirm.



2. Use _____/ ____ to select a value and press ______ to confirm.



- **3.** Repeat steps 1–2 to set the date and time.
- **4.** After setting all the items, use ______/ _____ to select **[]K** and press ______.



After the date and time setting is confirmed, set the battery type when a screen to set it opens. (→ Setting the type of batteries used (first time starting up))

NOTE

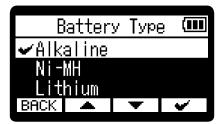
If power is not supplied for a long time, the date and time settings stored in the unit will be reset. If the Set Date/Time Screen appears during startup, set them again.

- The date and time setting can also be changed later from the Menu Screen. (→ Setting the date and time)
- Select **BACK** to return to the previous settings screen.

Setting the type of batteries used (first time starting up)

The first time the power is turned on after purchase as well as after the H1essential has been reset to factory defaults, set the type of batteries used in the H1essential when a screen to set it is shown after setting the date and time. This is necessary to accurately show the remaining battery charge on the display.

1. Use _____ / ___ to select the battery type and press ____ to confirm.



Setting	Explanation
Alkaline	Alkaline batteries
Ni-MH	Nickel-metal hydride batteries
Lithium	Lithium batteries

After first-time settings are complete, the Home Screen will open.

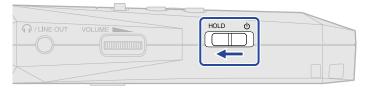
- The battery type setting can be changed later on the Menu Screen. (→ Setting the type of batteries used)
- Select **BACK** to return to the previous settings screen.

Preventing misoperation (HOLD function)

In order to prevent misoperation, the hold function can be used to disable the buttons on the H1essential.

1. Slide HOLD to HOLD.

This turns on the HOLD function, disabling operations using all buttons.



To deactivate the HOLD function, slide back to the center position.

Making input settings

Switching between stereo and mono

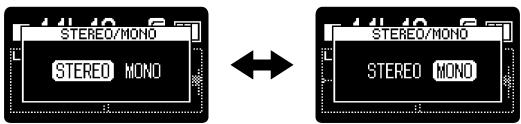
The channel format used for recording audio can be selected.

The L and R channels will be recorded together as stereo audio when set to "STEREO". The L and R channels will be mixed to one channel and recorded as mono audio when set to "MONO".

1. Press when the Home Screen is open.



Pressing this switches between STEREO and MONO.



The waveform display on the Home Screen changes according to the set channel format.

■ STEREO selected



■ MONO selected



NOTE

- The sound output from the PHONE/LINE OUT jack and the sound during USB mic operation is also switched
- The recording file format will be changed in the same way. (→ H1essential folder and file structure)
 - Set to "STEREO": stereo files
 - Set to "MONO": mono files

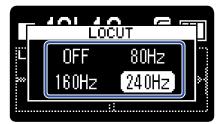
Reducing noise (Lo Cut)

Low frequencies can be cut to reduce the sound of wind and vocal pop noises, for example.

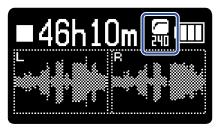
1. Press on the Home Screen repeatedly to select the cutoff frequency.



The cutoff frequency can be selected and set to OFF, 80 Hz, 160 Hz or 240 Hz.



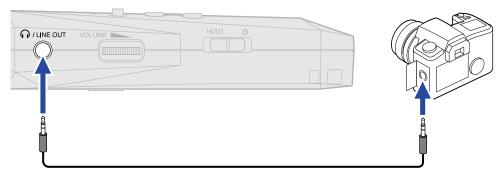
The selected frequency is shown on the Home Screen.



Making output settings

Settings can be made for output to headphones and connected devices.

When connecting another device, minimize its input gain and use an audio cable to connect its external mic jack to the PHONE/LINE OUT jack on the H1essential.



HINT

When output to an external device is unnecessary, disconnecting the cable from the PHONE/LINE OUT jack can increase the amount of operation time when using batteries.

Changing how the output level is adjusted

How the level is adjusted for output from the PHONE/LINE OUT jack to other devices can be changed.

When connecting another device, for example, select "Fixed" if you do not want use of



change the volume. This will cause sound to be output at the level set as explained in "Adjusting the fixed level".

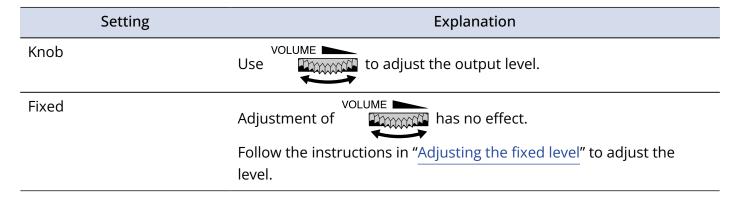
- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use _____/ ____ to select "Output" and press ENTER to confirm.





4. Use _____ / ___ to select how the output level is adjusted, and press _____ to confirm.





NOTE

The speaker volume can be adjusted using



regardless of this setting.

Adjusting the fixed level

The output level when "Volume Control" is set to "Fixed" can be adjusted. (→ Changing how the output level is adjusted)

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____/ ___ to select "Output" and press ENTER to confirm.



3. Use _____ / ___ to select "Fixed Level" and press ENTER to confirm.



4. Use ____ / ___ to adjust the fixed level and press ____ to confirm. The setting value is shown on the display.



HINT

It can be set from -40 to +40.

5. To output a test tone from the H1essential and adjust the output level, press . While checking the audio level meter of the connected device, adjust the input gain of that device until the audio signal level is about –20 dB.



HINT

The test tone is a 1kHz sine wave at -20 dBFS.

6. After adjusting the input gain of the connected device, press . This stops test tone output.

NOTE

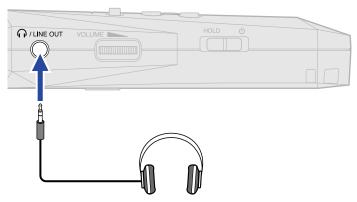
- See the manual of the connected device for information about its operation.
- If the automatic gain control function on the other device is on, turn it off.
- The level adjusted here does not affect the recorded audio or the audio level output from the USB port.

Recording

Monitoring input sounds

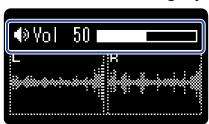
Use headphones, for example, to monitor input sounds and adjust the volume.

1. Connect headphones, for example, to the PHONE/LINE OUT jack.



2. Use VOLUME to adjust the volume.

The volume is shown on the display while the volume is being adjusted.



NOTE

- When nothing is connected to the PHONE/LINE OUT jack, operating speaker volume.
- volume will change the
- The built-in speaker cannot be used for monitoring while recording.
- When "Volume Control" is set to "Fixed", cannot be used to adjust the volume. To use



HINT

When monitoring with headphones is unnecessary, disconnecting headphones from the PHONE/LINE OUT jack can increase the amount of operation time when using batteries.

Making recording settings

Setting the sample rate

The sample rate used to record files can be set.

1. Press when the Home Screen is open. This opens the Menu Screen.

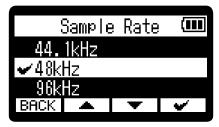
2. Use ____ / ___ to select "Rec Settings" and press ENTER to confirm.



3. Use _____/ ___ to select "Sample Rate" and press ENTER to confirm.



4. Use ____ / ___ to select the sample rate and press ____ to confirm.



You can select from the following sample rates.

44.1 kHz, 48 kHz, 96 kHz

NOTE

- The only bit depth that can be used for recording is 32-bit float.
- During use as a USB mic, the sample rate will be 48 kHz regardless of this setting.

Capturing audio before recording starts (pre-recording)

The input signal is always buffered for a set amount of time, so it can be captured (pre-recorded) for 2 seconds before the time when () is operated to start recording.

This is useful when () is operated late, for example.

1. Press when the Home Screen is open. This opens the Menu Screen.

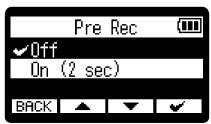
2. Use / / To select "Rec Settings" and press ENTER to confirm.



3. Use / to select "Pre Rec" and press ENTER to confirm.



4. Use _____/ ___ to select "On" and press _____ to confirm.



NOTE

This cannot be used with the self timer. When pre-recording is enabled, the self-timer will be disabled. (→ Setting the self-timer)

Recording automatically (Auto Rec)

Recording can start automatically when the input sound exceeds a set level.

1. Press when the Home Screen is open.
This opens the Menu Screen.

2. Use _____/ ___ to select "Rec Settings" and press ENTER to confirm.



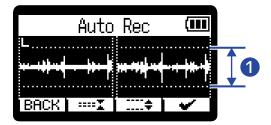
3. Use / to select "Auto Rec" and press ENTER to confirm.



4. Use ____ / ___ to select "On" and press **ENTER** to confirm.



5. Use ☐☐☐ to set the desired level (1) for starting recording and press ☐ to confirm.



This enables recording to start when the input level (waveform) becomes larger than \bigcirc .

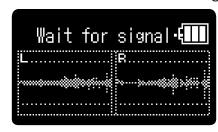
6. Press MENU.

This opens the Recording Standby Screen.

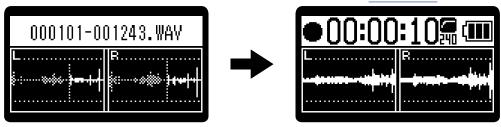


7. Press • when the Recording Standby Screen is open.

Automatic recording standby will start and the REC indicator will light red.



Recording will start automatically when the input level set in step 5 is exceeded. The Recording Screen will be shown after the name of the file being recorded is shown. (→ Recording)



NOTE

- This cannot be used with the self timer. When automatic recording is enabled, the self-timer will be disabled. (→ Setting the self-timer)
- When the Recording Standby Screen is open, pressing will start recording regardless of the input level.

Enabling the recording start tone

Half-second tone signals (recording start tones) can be output from the PHONE/LINE OUT jack when recording is started.

Since recording start tones are also written to recording files, when recording audio for video with the H1essential, sending its output signal to the camera input can make synchronizing audio and video easier.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____ / ___ to select "Rec Settings" and press ENTER to confirm.





4. Use _____ / ___ to select the recording start tone volume and press _____ to confirm.

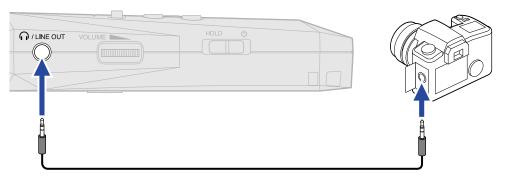


The following volumes can be selected.

Off, -40 dB, -20 dB

No recording start tone will be played if "Off" is selected.

5. Use a stereo mini jack cable to connect the input jack of the camera to the H1essential PHONE/LINE OUT jack.



NOTE

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

Setting the self-timer

After pressing (), recording will start automatically after the set time passes.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use ____ / ___ to select "Rec Settings" and press ENTER to confirm.



3. Use ▲ / ▼ to select "Self Timer" and press ENTER to confirm.



4. Use

✓ to select the time until recording starts and press

✓ to confirm.



The following times can be selected. Off, 3 sec, 5 sec, 10 sec

5. Press MENU.

This opens the Home Screen.



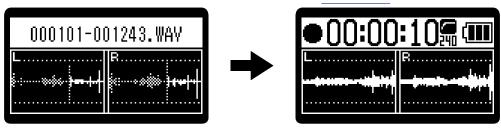


This starts a countdown.



1 Countdown (seconds)

Recording will start automatically after the time set in step 4 passes. The Recording Screen will be shown after the name of the file being recorded is shown. (→ Recording)



NOTE

- This cannot be used with the pre-recording function. When the self-timer is enabled, pre-recording will be disabled. (→ Capturing audio before recording starts (pre-recording))
- This cannot be used with the automatic recording function. When the self-timer is enabled, automatic
 recording will be disabled. (→ Recording automatically (Auto Rec))

HINT

- During the countdown, oan be pressed to start recording immediately.
- During the countdown, (can be pressed to cancel it.

Setting the recording delay timer

Recording can be started automatically after a set time passes.

1. Press when the Home Screen is open.

This opens the Menu Screen.

2. Use ____ / ___ to select "Rec Settings" and press ENTER to confirm.



3. Use _____ / ___ to select "Rec Delay Timer" and press ENTER to confirm.



4. Use ___ / __ to select the time until recording starts.



This can be set from 1 to 60 minutes (in one-minute increments).

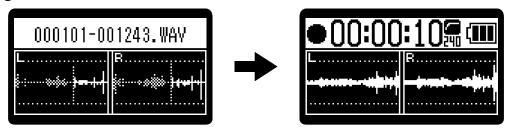
5. Use **v** to start the timer.

This starts the countdown, and the REC indicator will blink.



1 Countdown (minutes: seconds)

Recording will start when the countdown finishes. The Recording Screen will be shown after the name of the file being recorded is shown.



NOTE

When using the recording delay timer, automatic recording, pre-recording and the self-timer cannot be used. (→ Capturing audio before recording starts (pre-recording), Recording automatically (Auto Rec), Setting the self-timer)

HINT

- During the countdown, (can be pressed to start recording immediately.
- During the countdown, (can be pressed to cancel it.

Setting the recording file name format

The recording file name format can be set.

1. Press when the Home Screen is open.

This opens the Menu Screen.

2. Use / / vo select "Rec Settings" and press ENTER to confirm.



3. Use ______/ ______ to select "Rec File Name" and press ENTER to confirm.



4. Use _____ / ___ to select the file naming method and press _____ to confirm.



ltem	Explanation
ZOOM****	Files are named "ZOOM****.WAV" (**** is a consecutive number starting with 0001). Example: "ZOOM0001.WAV"
YYMMDD-HHMMSS	Files are named with a "year/month/day-hour/minute/second" format. Example: If recording started at 9:25:30 on January 15, 2024, the name would be "240115-092530.WAV".

NOTE

When set to "YYMMDD-HHMMSS", the "Date Format" setting will be used for the year/month/day. (\rightarrow <u>Setting</u> the date format)

Setting the recording time display

Whether the elapsed recording time or the remaining available recording time is shown during recording can be selected.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____/ ▼ to select "Rec Settings" and press ENTER to confirm.



3. Use _____/ ▼ to select "Rec Counter" and press ENTER to confirm.



4. Use _____ / ___ to select the time to be shown, and press _____ to confirm.



Item	Explanation
Elapsed Time	The current elapsed recording time will be shown.
Remaining Time	The remaining available recording time will be shown.

The Elapsed/Remaining Time will be shown at the top of the display when recording.



Writing metadata (iXML chunks) to recording files

Various related information (metadata) stored in iXML chunks can be written to recorded files. (→ Metadata contained in iXML chunks in WAV files)

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use / / vo select "Rec Settings" and press ENTER to confirm.





4. Use _____ / ___ to select a setting item, and press _____ to confirm.



Setting	Explanation
Write	Metadata (iXML chunks) will be added to recording files.
Off	Metadata (iXML chunks) will not be added to recording files.

NOTE

Some applications might not be compatible with files that have data embedded in them. If problems occur with files when using an application, turning off metadata writing might resolve them.

Checking the current date/time and the name of the next recorded file

The current date/time and the name of the next recorded file can be checked.

1. Press when the Home Screen is open.



While pressing

, the current date/time and name of the next file to be recorded will be shown.



- 1 Current date/time
- 2 Name of next recorded file

Release () to return to the Home Screen.

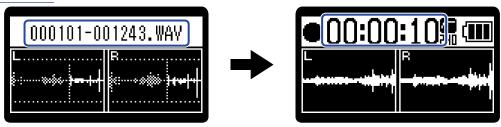
Recording



1. Press () when the Home Screen is open.

The REC indicator will light red, the name of the recording file will appear on the display and recording will start.

The elapsed recording time or the remaining recordable time is shown when recording. (\rightarrow <u>Setting the</u> recording time display)



NOTE

The file name will use the format set as explained in "Setting the recording file name format". For details about file names, see "Recording file names".

2. Press or to stop.

Slide $\overset{\text{HOLD}}{\bigcirc}$ toward HOLD to prevent misoperation when recording. (\rightarrow Preventing misoperation (HOLD function))

NOTE

If the file size exceeds 2 GB during recording, a new file will be created automatically and recording will continue without pause. No gap in sound will occur between the two files when this happens.

HINT

- Marks can be added while recording by pressing MARKER . (→ Adding marks during recording)
 A maximum of 99 marks can be added in a file.
- Files are automatically saved at regular intervals during recording. If the power is interrupted or another problem occurs during recording, an affected file can be restored to normal by playing it with the H1essential.
- Recording can be paused by pressing (). Press () again to resume recording. Pausing will automatically add a mark at that point.

Adding marks during recording

Marks can be added to files while recording.

Added marks are shown on the <u>Playback Screen</u>, and — can be used to move the playback position to a mark.

1. Press MARKER during recording.



This will add a mark at the position of the current elapsed recording time.



NOTE

- A maximum of 99 marks can be added to a single file.
- Use the Playback Screen to delete marks. (→ Deleting marks)

Moving the file being recorded to the Trash folder

The file being recorded can be moved to the trash. This function is convenient when, for example, a recording was not good enough.

1. Press during recording.



2. Use _____/ ____ to select "Cancel Recording" and press _____ to confirm.



This will stop recording and move the file being recorded to the trash. (\rightarrow H1essential folder and file structure)

Select "Back" and press 👿 to cancel the operation and continue recording.

NOTE

- Files moved to the trash are saved in the Trash folder created on the SD card, but their information
 cannot be checked and they cannot be played back by the H1essential. To check or play them, connect
 and use a computer, smartphone or tablet. (→ Transferring files to computers and other devices)
- The files in the trash can all be deleted at the same time. (→ Deleting files in the Trash folder)

Playing recordings

Playing recordings



1. Press when the Home Screen is open.

This opens the Playback Screen on the display and starts playback of the most recently recorded file.



Use VOLUME VOLUME

to adjust the headphone or speaker volume.

The file played can be selected from the File List Screen. (→ Selecting files for playback (File List Screen))

NOTE When "Volume Control" is set to "Fixed", VOLUME cannot be used to adjust the headphone volume. To VOLUME for volume adjustment, set "Volume Control" to "Knob". (→ Home Screen)

2. Press .

This stops playback and returns to the beginning of the file.

Press again to return to the Home Screen.

Selecting files for playback (File List Screen)

The File List Screen can be opened and playback files selected.



1. Press on the <u>Playback Screen</u>.
This opens the File List Screen.

HINT

- If a mark exists before the playback position, pressing (will move the playback position to that mark.
- The File List Screen can also be opened by pressing when near the beginning of a file.
- 2. Use _____/ ____ to select a file and press 🖟.



This opens the Playback Screen and starts playback of the selected file.

HINT

- (4) can also be pressed to select files.
- On the File List Screen, use <u>OPTION</u> to open the <u>Playback Options Screen</u> (some items will not be shown) or use <u>to delete files</u> to delete files (→ Moving the file being played to the Trash folder).

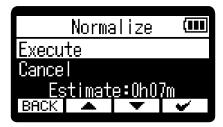
Automatically adjusting the volume during playback (normalizing)

By normalizing, the playback volume can be evened out regardless of the recording level. Normalization is a function that reads the maximum volume of the audio data and levels the volume without causing distortion.

- 1. Press **OFTION** on the <u>Playback Screen</u> for the file you want to normalize. This opens the <u>Playback Options Screen</u>.
- 2. Use _____ / ___ to select "Normalize" and press ENTER to confirm.



3. Use _____ / ▼ to select "Execute" and press ▼ to confirm.



When normalization finishes, "Done" will appear and the Playback Screen will reopen. Select "Cancel" and press to confirm and cancel the operation.

NOTE

- Normalized files will still be saved in 32-bit format and can be played as is by the H1essential.
- Normalized files will be saved as new files with "_NORM" added to the ends of their names.

Changing the file format and exporting files

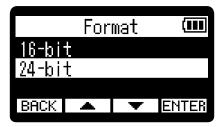
The H1essential can only record using 32-bit float format, but recorded files can be converted to other formats and exported.

This is convenient, for example, when loading files recorded on the H1essential to a computer, smartphone or tablet if the application being used does not support 32-bit float format.

In addition, exported tracks can be normalized to optimize the volumes of recorded files.

- 1. Press **OPTION** on the Playback Screen of the file you want to export. This opens the Playback Options Screen.
- 2. Use _____/ ____ to select "Export" and press ENTER to confirm.

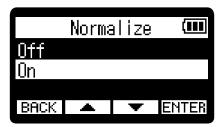




The following formats can be selected.

16-bit, 24-bit

4. Use **★** / **▼** to select the normalization setting and press **ENTER** to confirm.



If "On" is selected, the file will be normalized during export.

NOTE

Normalization is a function that reads the maximum volume of the audio data and levels the volume without causing distortion. The volume is adjusted to the maximum possible without causing the loudest sound (peak) in the data to distort.

5. Use _____ / ___ to select "Execute" and press _____ to confirm.



Select "Cancel" and press 👿 to confirm and cancel the operation.

To cancel during export, press **BACK**. Then, use **____** / **___** to select "Cancel Exporting" and use **ENTER** to confirm.

6. When "Done" appears after exporting finishes, press **BACK**. This reopens the Playback Screen.

NOTE

- Exported files saved in the Export folder are named in this format: FF_BB_NN.WAV.
 - FF: Name of original file that was exported
 - BB: Bit depth ("16" when 16-bit selected, "24" when 24-bit selected)
 - NN: Normalization setting ("NORM" when on or nothing when off)
- The H1essential cannot play files in the Export folder.

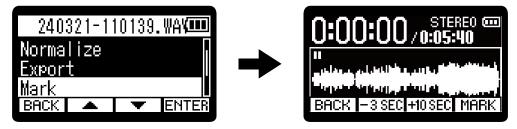
Adding/deleting marks in recorded files

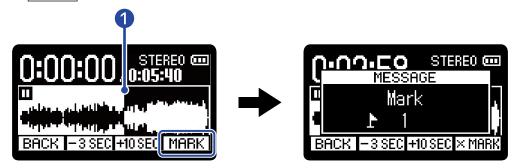
Marks can be added to recorded files.

Added marks are shown on the Playback Screen, and () can be used to move the playback position to a mark.

Adding marks

- 1. Press **OPTION** on the <u>Playback Screen</u> of the file you want to add marks to. This opens the <u>Playback Options Screen</u>.
- 2. Use ____ / ___ to select "Mark" and press ENTER to confirm. This opens the Mark Operation Screen.





1 Current playback position

A mark will be added at the current playback position.

4. Press BACK.

This reopens the Playback Options Screen.

NOTE

A maximum of 99 marks can be added to a single file.

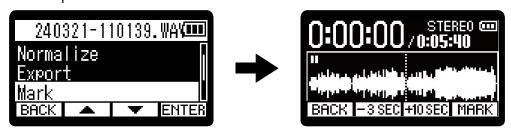
HINT

In step 3, MARK can be selected during playback to add marks while continuing to play.

Deleting marks

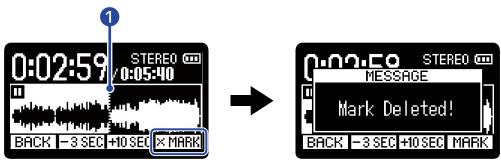
- 1. Press **OFTION** on the <u>Playback Screen</u> of the file you want to delete marks from. This opens the <u>Playback Options Screen</u>.
- 2. Use _____ / ___ to select "Mark" and press ENTER to confirm.

 This opens the Mark Operation Screen.



3. Use And to move the playback position to the mark you want to delete, and press **MARK** to confirm.

When the playback position has moved to a mark, MARK becomes MARK.



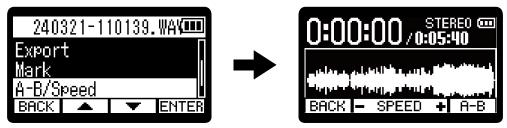
- Position of mark to be deleted
- 4. Press BACK

This reopens the Playback Options Screen.

Repeating playback of a set interval (A-B repeat)

Playback can be repeated between two set points.

- 1. Press **OFTION** on the <u>Playback Screen</u> of the file you want to set for repeat playback. This opens the Playback Options Screen.
- 2. Use ____ / ___ to select "A-B/Speed" and press ENTER to confirm.
 This opens the A-B Repeat / Playback Speed Screen.



3. Press to start playback or press and hold / to move to the desired starting position (A point) for repeat playback. Then, press A-B to confirm it.



- will appear at the set point.
- 4. Press to start playback or press and hold / to move to the desired ending position (B point) for repeat playback. Then, press A-B to confirm it.



will appear at the set point, and repeat playback between the A and B points will start.

5. Press **BACK** when finished setting. This reopens the Playback Options Screen.

NOTE

To cancel or change A-B repeat settings, press A-B to reset the settings.

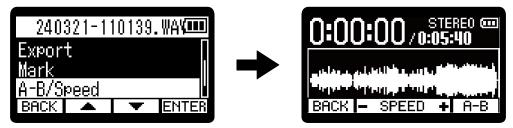
HINT

Since moving the A (playback start) and B (playback end) points during playback allows these positions to be confirmed in real time, they can be set while checking the playback sound.

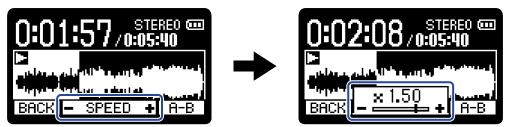
Changing the playback speed

The playback speed can be changed.

- 1. Press **OFTION** on the <u>Playback Screen</u> of the file for which you want to set the playback speed. This opens the <u>Playback Options Screen</u>.
- 2. Use ____ / ___ to select "A-B/Speed" and press ENTER to confirm.
 This opens the A-B Repeat / Playback Speed Screen.



3. Use \blacksquare / \blacksquare to set the playback speed.



The following speeds can be selected.

- \times 0.50 (50% speed), \times 0.75, \times 1.00 (normal), \times 1.50 (150% speed), \times 2.00 (200% speed)
- **4.** Press **BACK** when finished setting. This reopens the Playback Options Screen.

Checking file information

A variety of information about the playing file can be checked.

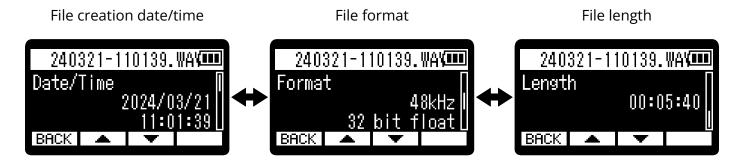
1. Press **OPTION** on the Playback Screen of the file for which you want to check information. This opens the Playback Options Screen.



2. Use ____ / __ to select "Information" and press ENTER to confirm.



3. Use ▲ / ▼ to check various information.



4. Press BACK.

This reopens the Playback Options Screen.

Moving the file being played to the Trash folder

The file being played can be moved to the Trash folder.

1. Press on the Playback Screen of the file you want to move to the trash.



2. Use _____ / ___ to select "Move to Trash" and press _____ to confirm.

This moves the file being played to the trash. (→ H1essential folder and file structure)



After the file is moved to the trash, "Done" will appear and the Playback Screen will reopen. Select "Cancel" and press to confirm and cancel the operation.

NOTE

- Files moved to the trash are saved in the Trash folder created on the SD card, but their information cannot be checked and they cannot be played back by the H1essential. To check or play them, connect and use a computer, smartphone or tablet. (→ Transferring files to computers and other devices)
- The files in the trash can all be deleted at the same time. (→ Deleting files in the Trash folder)

HINT

Files can also be moved to the trash by selecting "Move to Trash" on the Playback Options Screen.

Making settings for repeat playback (Repeat Setting)

Playback can be set so that after one file completes the next file will be played without stopping.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use ____ / ___ to select "Repeat Setting" and press ENTER to confirm.



3. Use ▲ / ▼ to select the repeat setting and press ✔ to confirm.



Setting	Explanation
Play One	Playback stops after one file completes playing.
Play All	After one file completes playing, the next file will start playback without pause. Files will play back in name order. Playback will stop after the most recent file completes.
Repeat One	After one file completes playing, the same file will play again repeatedly.
Repeat All	After one file completes playing, the next file will start playback without pause. Files will play back in name order. After the most recent file completes, playback will continue from the first file.

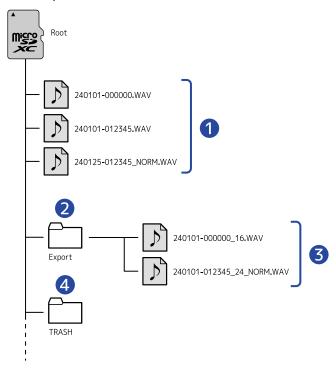
Managing files

Files created on the H1essential will be saved on the microSD card. Recording files on the microSD card can be checked and deleted.

H1essential folder and file structure

Folder and file structure

When recording with the H1essential, files are created on microSD cards in the following manner.



- Recording files
 - Files recorded by the H1essential will be saved on the microSD card.

 For details about recording file names, see "Recording file names".

 Stereo files will be created when the STEREO/MONO setting is "STEREO". Mono files will be created when this is set to "MONO". (→ Switching between stereo and mono)
- 2 Export folder This is created when files are exported. Files created by exporting are saved in the Export folder. (→ Changing the file format and exporting files)
- 3 Exported files

4 Trash folder

The Trash folder is created automatically when an SD card is loaded in the H1essential. Files that have been moved to the Trash folder are saved inside it. (→ Moving the file being recorded to the Trash folder, Moving the file being played to the Trash folder)

The files in the Trash folder can all be deleted at the same time. (→ Deleting files in the Trash folder)

Recording file names

The file name will assigned using the format set as explained in "Setting the recording file name format".

File name example

Explanation

When "Recording file name" is set to "ZOOM***"



Consecutive number

Files are named with consecutive numbers starting with 0001.



When "Recording file name" is set to "YYMMDD-HHMMSS"



The date of recording is included numerically.

The numbers follow the set order (Setting the date format).



2 Time

The hour, minute and second are included numerically.

NOTE

If the file size exceeds 2 GB, a new file will be created automatically and recording will continue without pause. New files created this way will be named using the numerical date and time of the moment of continuation.

Using as a USB mic

Signals input to the H1essential can be sent to a computer, smartphone or tablet, and playback signals from that device can be output from the H1essential.

Moreover, the H1essential can record even when it is being used as a USB mic.

Connecting to computers, smartphones and tablets

1. Press MENU when the Home Screen is open.

This opens the Menu Screen.

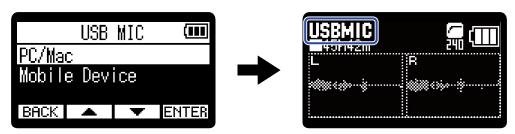
2. Use _____ / ___ to select "USB" and press ENTER to confirm.



3. Use _____/ ___ to select "USB MIC" and press ENTER to confirm.



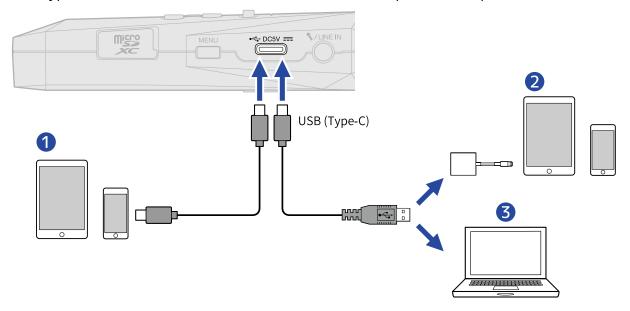
4. Use _____ / ___ to select the type of connected device and press ENTER to confirm. This activates the USB mic function. The Home Screen will be shown and the USB mic function will be in use.



Setting	Explanation
PC/Mac	Connect with a computer and operate on bus power.
Mobile Device	Connect with a smartphone or tablet and operate on battery power.

NOTE

- When "PC/Mac" is selected, power is supplied through the USB cable from the computer. Depending on the USB bus power supply capacity of the computer, operation using bus power might not be possible. If this is the case, select "Mobile Device" to operate using batteries.
- When "Mobile Device" is selected, power will not be supplied from the other device. Instead, the H1essential will operate using the batteries in it.
- When used as a USB mic, it functions at 48kHz/16-bit fixed resolution.
- Files cannot be played when the USB mic function is in use.
- **5.** Use a USB (Type-C) cable to connect the H1essential with a computer, smartphone or tablet.



- 1 Smartphone/tablet (USB Type-C)
- 2 Smartphone/tablet (Lightning)
- 3 Computer (Windows/Mac)

NOTE

- Use a USB cable that supports data transfer.
- A Lightning to USB 3 Camera Adapter is necessary to connect to an iOS/iPadOS device with a Lightning connector.
- **6.** Launch an application on the computer, smartphone or tablet, and select "H1essential" as the "Audio" or "Input/Output" device.

NOTE

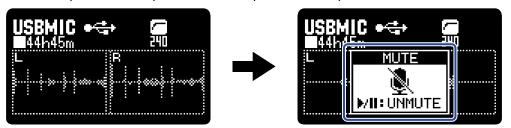
See the application operation manuals for information about their operation.

Muting the USB mic

When the USB mic function is being used, the mic sound can be temporarily muted so audio is not sent to the computer, smartphone or tablet.

1. Press when the Home Screen is open and the USB mic function is in use.

The MUTE window will open and output to the computer, smartphone or tablet will be muted.



2. Press when muted.

This ends muting and returns to the previous screen.

NOTE

This mutes the input sound, so recorded sound and monitoring sound output from the PHONE/LINE OUT jack will be muted in the same way.

Disconnecting from computers, smartphones and tablets

1. Press when the Home Screen is open and the USB mic function is in use. This opens the Menu Screen.

2. Use ____ / ___ to select "Exit USB MIC" and press ENTER to confirm.



Making USB mic settings

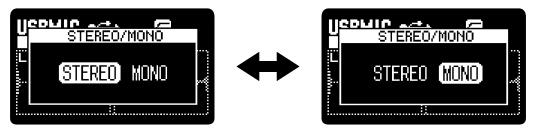
Settings can be made when using the H1essential as a USB mic for the monitoring sound and signals sent to the computer, smartphone or tablet.

Switching between stereo and mono

The sound captured by the H1essential can be mixed to mono for monitoring and the audio sent to the computer, smartphone or tablet. This function is convenient for web streaming and other situations when you do not want to send stereo to the computer, smartphone or tablet.

1. Press when the Home Screen is open and connected with the USB mic function.

Pressing this switches between STEREO and MONO.



NOTE

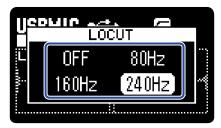
The recorded audio and the sound output from the PHONE/LINE OUT jack is also switched.

Reducing noise (Lo Cut)

When using the USB mic function, low frequencies from the built-in XY mic can be cut to reduce the sound of wind and pop noises, for example.

1. Press on the Home Screen (when connected with the USB mic function) repeatedly to select the cutoff frequency.

The selected frequency is shown on the Home Screen.



LO CUT can be set to OFF, 80 Hz, 160 Hz or 240 Hz.

Enabling direct monitoring

This directly outputs the sound being input to the H1essential from it before sending the sound to the computer, smartphone or tablet. This enables monitoring without latency (direct monitoring function).

- 1. Press MENU when the Home Screen is open and the USB mic function is in use. This opens the Menu Screen.
- 2. Use / / vo select "USB MIC Settings" and press ENTER to confirm.



3. Use _____/ ____ to select "Direct Monitor" and press ENTER to confirm.



4. Use ____ / ___ to select "On" and press ____ to confirm.



Adjusting the USB send volume

If the input sound from the H1essential is quiet, for example, the USB output level can be adjusted when sent to a computer, smartphone or tablet.

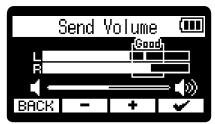
- 1. Press when the Home Screen is open and the USB mic function is in use. This opens the Menu Screen.
- 2. Use _____/ ___ to select "USB MIC Settings" and press ENTER to confirm.



3. Use ______/ ______ to select "Send Volume" and press <code>ENTER</code> to confirm.



4. Use ___ / __ to adjust the USB output level and press ___ to confirm.



NOTE

- Adjust the slider so that loud sounds stay inside the "Good" frame when they are input.
- This setting does not affect the recorded audio or the audio levels output from the PHONE/LINE OUT jack.

Adjusting volume received by USB

If the playback sound from the computer is too loud, for example, the received volume setting can be changed to adjust the volume.

- 1. Press when the Home Screen is open and the USB mic function is in use. This opens the Menu Screen.
- 2. Use / to select "USB MIC Settings" and press ENTER to confirm.





4. Use **−** / **+** to adjust the USB input level and press **•** to confirm.



Transferring files to computers and other devices

By connecting the H1essential with a computer, smartphone or tablet, files on the microSD card can be checked and moved.

Connecting to computers, smartphones and tablets

- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use ____ / ___ to select "USB" and press ENTER to confirm.



3. Use _____ / ▼ to select "File Transfer" and press ENTER to confirm.

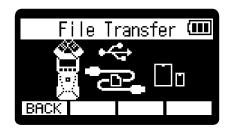


4. Use ____ / ___ to select the type of connected device and press ENTER to confirm.



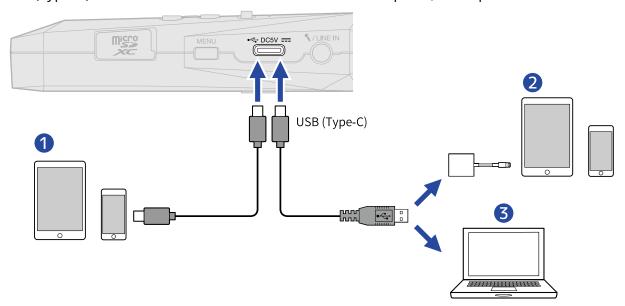
Setting	Explanation
PC/Mac	Connect to a computer.
Mobile Device	Connect to a smartphone or tablet.

This opens the USB File Transfer Screen.



NOTE

- When "PC/Mac" is selected, power is supplied through the USB cable from the computer. Depending on the USB bus power supply capacity of the computer, operation using bus power might not be possible. If this is the case, select "Mobile Device" to operate using batteries.
- When "Mobile Device" is selected, power will not be supplied from the other device. Instead, the H1essential will operate using the batteries in it.
- **5.** Use a USB (Type-C) cable to connect the H1essential with a computer, smartphone or tablet.



- 1 Smartphone/tablet (USB Type-C)
- 2 Smartphone/tablet (Lightning)
- 3 Computer (Windows/Mac)

NOTE

- Use a USB cable that supports data transfer.
- A Lightning to USB 3 Camera Adapter is necessary to connect to an iOS/iPadOS device with a Lightning connector.
- **6.** Use the computer, smartphone or tablet to work with the files saved on the microSD card.

Disconnecting from computers, smartphones and tablets

- **1.** Conduct disconnection procedures on the computer, smartphone or tablet.
 - · Windows:

Select the H1essential from "Safely Remove Hardware".

macOS:

Drag the H1essential icon to the Trash and drop it.

Smartphone/tablet:
 See the operation manual for the device.

2. Press BACK.

This opens a confirmation screen.

3. Use _____ / ___ to select "Exit File Transfer" and press _____ to confirm.



The Home Screen will reopen.

Overdubbing

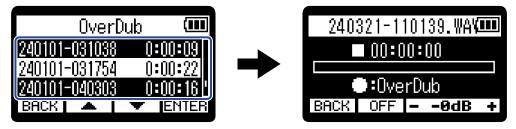
A file can be recorded over as it is playing back and saved as a new file. This is convenient when, for example, recording a performance one part at a time.

- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use ____ / ___ to select "OverDub" and press ENTER to confirm.



The overdub file selection screen will open.

3. Use _____ / ___ to select the file to overdub and press ENTER to confirm. This opens the Overdubbing Screen.



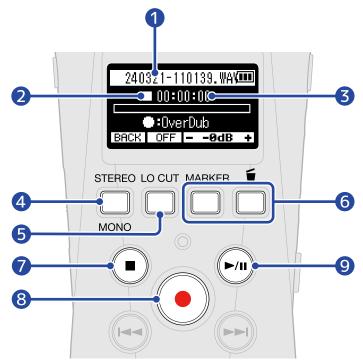
HINT

By pressing on the overdub file selection screen, the selected file can be played to check it before overdubbing.

4. Press

This starts overdubbing.

Overdubbing operations



- Name of file being overdubbed
- 2 Status icon

The overdubbing status is shown by an icon.

- Stopped
- Overdubbing
- **T** Paused
- Playing back
- 3 Overdubbing/elapsed playback time
- 4 BACK Return to the overdubbing file selection screen.
- 5 OFF, 80Hz, 160Hz, 240Hz (low-frequency cut)
- Pressing this cycles through the low-frequency cut settings. OFF, 80 Hz, 160 Hz or 240 Hz can be selected.
- 6 -0dB + The playback volume can be adjusted in a range from -40 to 0 dB.
- 7 This stops overdubbing.

This will save a new file, using the current date and time for the file name, which will be shown at the top of the display.

Files that have been overdubbed can be overdubbed again. (A new file will be saved every time overdubbing is conducted.)





This starts overdubbing.





This stops and starts file playback.

NOTE

- When the Overdubbing Screen is open, the playback and input sounds can be monitored at the same time using headphones connected to the PHONE/LINE IN jack. (Sound will not be output from the speaker.)
- VOLUME I to adjust the combined volume of the playback and input sounds. Use
- Files recorded with a 96kHz sample rate cannot be overdubbed. (→ Setting the sample rate)
- Sample rate (→ Setting the sample rate) and stereo/mono (Switching between stereo and mono) settings are the same for overdubbing files.
- When overdubbing, recording longer than the original file as possible.
- When overdubbing, recording cannot exceed 2 GB.
- The following recording functions are disabled.
 - Capturing audio before recording starts (pre-recording)
 - Recording automatically (Auto Rec)
 - Enabling the recording start tone
 - Setting the self-timer
 - Setting the recording delay timer
 - Writing metadata (iXML chunks) to recording files

HINT

- When overdubbing, an be pressed to move the new overdubbed file to the Trash folder. (→ Moving the file being recorded to the Trash folder)
- When overdubbing, MRRK can be pressed to add a mark. (→ Adding marks during recording)

Managing microSD cards

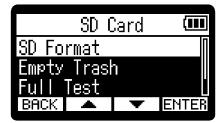
Formatting microSD cards

To maximize the performance of a microSD card, use the H1essential to format it.

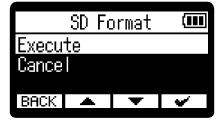
- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use ____ / ___ to select "SD Card" and press ENTER to confirm.



3. Use ▲ / ▼ to select "SD Format" and press ENTER to confirm.



4. Use _____ / ___ to select "Execute" and press _____ to confirm.



This formats the microSD card.

NOTE

- The microSD card formatting screen can also be opened by pressing () while turning the power on.
- Always format microSD cards in order to maximize their performance after purchasing them new or using them with a different device.
- Be aware that all data on the microSD card will be deleted when it is formatted.

Testing microSD cards

The writing speed of microSD cards can be tested to check if performance is good enough to save the data recorded by the H1essential.

A Quick Test can be done in a short amount of time, while a Full Test examines the entire microSD card.

Conducting a quick test

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use ____ / ___ to select "SD Card" and press ENTER to confirm.



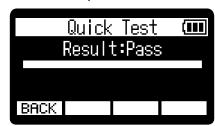
3. Use ______/ ____ to select "Quick Test" and press ENTER to confirm.



4. Use _____ / ___ to select "Execute" and press _____ to confirm. The card performance test will start.



The result of the test will be shown when it completes.



NOTE

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

HINT

During a test, **BACK** can be pressed to stop it.

Conducting a full test

1. Press when the Home Screen is open.

This opens the Menu Screen.

2. Use _____ / ___ to select "SD Card" and press ENTER to confirm.

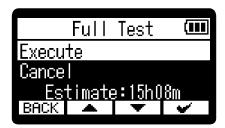


3. Use ______/ ▼___ to select "Full Test" and press **ENTER** to confirm.



The amount of time required for the full test will be shown.

4. Use _____ / ___ to select "Execute" and press _____ to confirm. The card performance test will start.



The result of the test will be shown when it completes. If Access Rate Max. reaches 100%, the card will fail (NG).



NOTE

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

HINT

You can press **PAUSE** to pause and **RESTART** to resume a test.

During a test, **BACK** can be pressed to stop it.

Deleting files in the Trash folder

Files moved to the trash can be deleted to empty the trash and increase open space on the SD card.

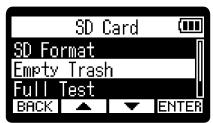
1. Press when the Home Screen is open.

This opens the Menu Screen.

2. Use _____ / ___ to select "SD Card" and press ENTER to confirm.



3. Use _____ / ___ to select "Empty Trash" and press ENTER.



4. Use _____ / ___ to select "Execute" and press _____ to confirm.



This deletes all files in the trash.

NOTE

This operation cannot be undone. Be certain beforehand.

Making various settings

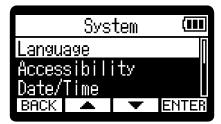
Setting the language shown

The language shown on the H1essential screens can be changed.

- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use ____ / ___ to select "System" and press ENTER to confirm.



3. Use _____/ ▼ to select "Language" and press ENTER to confirm.



4. Use ______/ _____ to select the language you want shown, and press ______ to confirm.



HINT

The first time you turn the power on after purchase or restoring default settings, this screen opens automatically after setting the guide sound.

Setting the date and time

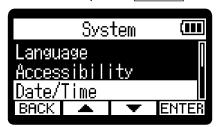
Use this to set the date used for file names and the date and time added as data to recording files.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____/ ___ to select "System" and press ENTER to confirm.



3. Use _____ / ___ to select "Date/Time" and press ENTER to confirm.



4. Use ____ / ___ to select "Set Date/Time" and press ENTER to confirm.



5. Use

✓ / ► to select the desired setting item, and press ENTER to confirm.



6. Use _____ / ___ to select a value and press _____ to confirm.



- **7.** Repeat steps 5–6 to set the date and time.
- **8.** After setting all the items, use $\boxed{\blacktriangleleft}$ / $\boxed{\blacktriangleright}$ to select $\boxed{\blacksquare}$ and press $\boxed{\checkmark}$.



HINT

The first time you turn the power on after purchase or restoring default settings, this screen opens automatically after setting the date format.

Setting the date format

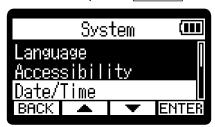
The date format can be changed. This is used for the date added to file names and as data to recording files.

1. Press when the Home Screen is open. This opens the Menu Screen.

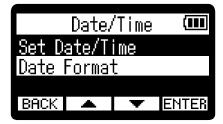
2. Use _____/ ___ to select "System" and press ENTER to confirm.



3. Use ✓ / ▼ to select "Date/Time" and press ENTER to confirm.

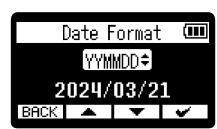


4. Use ____ / ___ to select "Date Format" and press ENTER to confirm.



5. Use _____ / ___ to select the date format and press _____ to confirm.

A specific example of the set date format will be shown at the bottom of the screen using the current date setting.



Setting	Explanation
YYMMDD	The date is shown in year, month, day order.

Setting	Explanation
MMDDYY	The date is shown in month, day, year order.
DDMMYY	The date is shown in day, month, year order.

HINT

The first time you turn the power on after purchase or restoring default settings, this screen opens automatically after setting the language shown.

Setting the display brightness

The brightness of the display can be adjusted if it is difficult to see because it is too dim or too intense.

1. Press when the Home Screen is open.
This opens the Menu Screen.

2. Use _____ / ___ to select "System" and press ENTER to confirm.



3. Use _____/ ___ to select "Display" and press ENTER to confirm.



4. Use ____ / ___ to select "Brightness" and press ENTER.



5. Use _____ / ___ to select the brightness and press _____ .



Setting	Explanation
Dark	The display backlight will always be dark.
Medium	The display brightness will be normal.
Bright	The display will be even brighter.

Setting display power saving

In order to conserve energy, the display backlight can be set to dim if no operation is conducted for a specific amount of time.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____ / ___ to select "System" and press ENTER to confirm.



3. Use _____/ ____ to select "Display" and press ENTER to confirm.



4. Use ____ / ___ to select "Power Saving" and press **ENTER** to confirm.



5. Use _____/ ___ to select "Power Save Time" and press ENTER to confirm.



6. Use ▲ / ▼ to select the power saving time and press ▼ to confirm.



Setting	Explanation
30 sec, 1 min, 3 min, 5 min	The display backlight will dim after the set time has elapsed without any operation.
Off	The display backlight always stays bright.

NOTE

The display can also be dimmed while recording if the time set in step 6 passes. (\rightarrow Dimming the display while recording)

Dimming the display while recording

The display can be dimmed while recording if the "Power Save Time" set in "Setting display power saving" is enabled.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____ / ___ to select "System" and press ENTER to confirm.



3. Use _____/ ___ to select "Display" and press ENTER to confirm.



4. Use ____ / ___ to select "Power Saving" and press **ENTER** to confirm.



5. Use _____ / ___ to select "Turn Off Rec Screen" and press ENTER to confirm.



6. Use _____ / ___ to select "On" and press _____ to confirm.



	Setting	Explanation
Off		The display will not dim while recording.
On		The display will dim if no operation is conducted for the set amount of time while recording.

Setting the type of batteries used

Set the type of batteries used by the H1essential so that the amount of remaining battery charge can be shown accurately.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____ / ___ to select "System" and press ENTER to confirm.



3. Use / to select "Power" and press ENTER to confirm.



4. Use ____ / ___ to select "Battery Type" and press ENTER to confirm.



5. Use _____ / ___ to select the battery type and press _____ to confirm.



Setting	Explanation
Alkaline	Alkaline batteries
Ni-MH	Nickel-metal hydride batteries

Setting		Explanation
Lithium	Lithium batteries	

HINT

The first time you turn the power on after purchase or restoring default settings, the battery type setting appears automatically after setting the date and time.

Setting the time until the power turns off automatically

The H1essential can be set so that its power will automatically turn off if it is not used for a set amount of time.

To keep the power on at all times, turn off the automatic power saving setting.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____/ ___ to select "System" and press ENTER to confirm.



3. Use _____ / ___ to select "Power" and press ENTER to confirm.



4. Use _____ / ___ to select "Auto Power Off and press ENTER to confirm.



5. Use _____ / ___ to select the time until the power turns off and press _____ .



Setting	Explanation
Off	The power will not turn off automatically.

Setting	Explanation
10 min, 60 min, 10 hour	The power will automatically turn off if no operation occurs for the set time.

NOTE

The power will not turn off automatically under the following conditions regardless of the Auto Power Off setting.

- During recording or playback
- When the H1essential is being used as a USB mic
- When the H1essential file transfer function is in use
- During card tests
- During execution of firmware updates

Using the guide sound accessibility feature

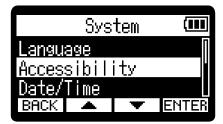
Setting the guide sound (Accessibility)

With this function, the names of selected setting items can be read aloud and a beeping sound can be used to notify the occurrence of error messages, recording starting/stopping and volume adjustment, for example.

- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use / To select "System" and press ENTER to confirm.



3. Use _____ / ___ to select "Accessibility" and press ENTER to confirm.



4. Use _____ / ___ to select "Guide Sound" and press **ENTER** to confirm.



5. Use ▲ / ▼ to select a setting item, and press ✔ to confirm.



Setting	Explanation
ABC + Beep ("ABC" shows the installed language.)	Setting items will be read aloud in the installed language. A beeping sound will be used to notify the occurrence of error messages, recording starting/stopping and volume adjustment, for example. English is installed at the time of purchase, but other languages can be installed and used for reading as desired. (→ Installing guide sounds)
Beep Only	A beeping sound will be used to notify when error messages occur, recording starts/stops and the volume changes, for example. Nothing will be read aloud.
Off	This turns off the guide sound.

NOTE

- The volume of the reading voice and beep sounds can also be adjusted. (→ <u>Setting the guide sound</u> volume)
- The language and version used for the guide sound can be checked on the Version Screen. (→ Checking guide sound information)

HINT

The first time you turn the power on after purchase, this screen opens automatically.

Setting the guide sound volume

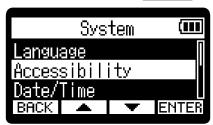
The volume of the reading voice and beep sounds can be adjusted.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use _____/ ____ to select "System" and press ENTER to confirm.



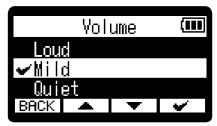
3. Use _____/ ___ to select "Accessibility" and press ENTER to confirm.



4. Use / to select "Volume" and press ENTER to confirm.



5. Use _____/ ___ to select the volume and press _____ to confirm.



The volume can be set to Quiet, Mild or Loud.

NOTE

The volume determined here is also affected before output by adjustments made using



Consider volume adjustments using



when making this setting.

Checking guide sound information

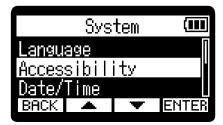
The language and version used for the accessibility guide sounds can be checked.

1. Press when the Home Screen is open.
This opens the Menu Screen.

2. Use / / To select "System" and press ENTER to confirm.

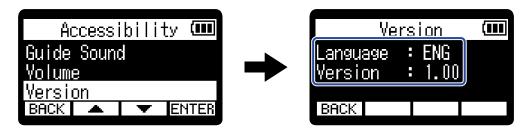


3. Use _____ / ___ to select "Accessibility" and press ENTER to confirm.



4. Use ____ / ___ to select "Version" and press ENTER to confirm.

This opens the Version Screen where the language and version used for the accessibility guide sounds can be checked.



Installing guide sounds

The guide sound language is English at the time of purchase.

Guide sound installation can be used to change the language and update the feature.

Download the most recent accessibility installation file necessary to install the guide sound from the ZOOM website (zoomcorp.com).

Follow the instructions in the "H1essential Accessibility Installation Guide" on the H1essential download page.

Restoring the factory default state

The H1essential can be restored to its factory default state.

1. Press when the Home Screen is open. This opens the Menu Screen.

2. Use ____ / ___ to select "System" and press ENTER to confirm.



3. Use _____/ ___ to select "Factory Reset" and press ENTER to confirm.



4. Use _____ / ___ to select "Execute" and press _____ to confirm.



This will restore the H1essential to its factory default state and turn the power off.

NOTE

Initializing settings will overwrite all settings with their factory defaults. Be certain before using this function.

Managing the firmware

Checking the firmware versions

The firmware versions used by the H1essential can be checked.

- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use ____ / ___ to select "System" and press ENTER to confirm.



3. Use ____ / ___ to select "Firmware" and press ENTER to confirm.



This shows the firmware versions.



Updating the firmware

The H1essential firmware can be updated to the latest versions.

Files for the latest firmware updates can be downloaded from the ZOOM website (zoomcorp.com).

Follow the instructions in the "H1essential Firmware Update Guide" on the H1essential download page.

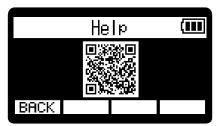
Checking the latest information for the H1essential

A 2D code for help related to the product can be shown on the H1essential display.

- 1. Press when the Home Screen is open. This opens the Menu Screen.
- 2. Use _____ / ___ to select "Help" and press ENTER to confirm.



3. Use a smartphone or tablet, for example, to scan the 2D code shown on the Help Screen.



zoomcorp.com/help/h1essential

Appendix

Troubleshooting

If you think that the H1essential is operating strangely, check the following items first.

Recording/playback trouble

There is no sound or it is very quiet

- Check the orientation of the built-in XY mic.
- Confirm that the headphone volume and line output level are not too low. (→ Monitoring input sounds, Adjusting the fixed level)

Cannot hear sound from connected equipment/input or the volume is very low

- Check the headphone volume.
- If a CD player or other device is connected to the input jack, raise the output level of that device.
- Check the input signal monitoring settings. (→ Monitoring input sounds)

Monitored sound is distorted

• Use VOLUME to adjust the volume.

Recording is not possible

- Confirm that the REC indicator is lit red. (→ Recording)
- Confirm that the microSD card has open space. The available recording time can be checked on screen when recording is paused. (→ Home Screen)
- Confirm that a microSD card is loaded properly in the card slot. (→ Inserting microSD cards)

"MIC INPUT OVERLOAD!" appears

- The input sound is too loud. Increase the distance between the mic and the sound source.
- Wind can also cause loud noises to be input. We recommend using the Lo Cut setting to reduce noise if air is blown directly at the mic, for example, when recording outdoors or when the mic is near the mouth of a speaker. (→ Reducing noise (Lo Cut))

Output volume cannot be adjusted

• Check the "Volume Control" output setting. To use to adjust the output volume, set it to "Knob". When set to "Fixed", use "Fixed Level" to adjust the volume. (→ Making output settings)

Other trouble

The recorder is not recognized by a computer, smartphone or tablet even though it is connected through the USB port

- Use a USB cable that supports data transfer.
- The operation mode must be set on the H1essential to allow the computer, smartphone or tablet to recognize it. (→ Using as a USB mic, Transferring files to computers and other devices)

Battery operation time is short

Making the following settings could increase the battery operation time.

- Set the type of batteries used correctly. (→ Setting the type of batteries used)
- Reduce the display brightness. (→ Setting the display brightness)
- Set the display to dim when not operated for a specific amount of time. (→ Setting display power saving)
- Reduce the sample rate used to record files. (→ Setting the sample rate)
- Disconnect unnecessary cables from the PHONE/LINE OUT jack.
- Due to their characteristics, using nickel metal hydride batteries (especially high-capacity ones) or lithium batteries should enable longer use than alkaline batteries when power consumption is high.

An accessibility update is recommended

Use the latest accessibility installation file to update. (→ Installing guide sounds)

H1essential metadata list

Metadata contained in BEXT chunks in WAV files

Tag	Explanation	Remarks	
zSCENE=	Scene name	Menu > System > Date/Time	
zTAPE=			
zCIRCLED=			
zTRK1=	Track 1 name	Track names are written as follows.	
zTRK2=	Track 2 name	zTRK1 = TrMicL, zTRK2 = TrMicR	
zNOTE=			

Metadata contained in iXML chunks in WAV files

\bigcirc = YES \times = NO

iXML master tag	iXML sub tag	Written	Read	Remarks
<project></project>		×	×	
<scene></scene>		0	×	Menu > System > Date/Time
<take></take>		0	×	
<tape></tape>		×	×	
<circled></circled>		×	×	
<wild track=""></wild>		×	×	
<false start=""></false>		×	×	
<no good=""></no>		×	×	
<file uid=""></file>		0	×	Menu > System > Date/Time
<ubits></ubits>		×	×	
<note></note>		0	×	
<bext></bext>		×	×	
<user></user>		×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<speed></speed>				
<speed></speed>	<note></note>	×	×	
<speed></speed>	<master_speed></master_speed>	×	×	
<speed></speed>	<current_speed></current_speed>	×	×	
<speed></speed>	<timecode_rate></timecode_rate>	×	×	
<speed></speed>	<timecode_flag></timecode_flag>	×	×	
<speed></speed>	<file_sample_rate></file_sample_rate>	×	×	
<speed></speed>	<audio_bit_depth></audio_bit_depth>	×	×	
<speed></speed>	<digitizer_sample_rate></digitizer_sample_rate>	×	×	
<speed></speed>	<timestamp_samples_since_midnight_hi></timestamp_samples_since_midnight_hi>	×	×	
<speed></speed>	<timestamp_samples_since_midnight_lo></timestamp_samples_since_midnight_lo>	×	×	
<speed></speed>	<timestamp_sample_rate></timestamp_sample_rate>	×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<sync_point_list></sync_point_list>				
<sync_point></sync_point>	<sync_point_type></sync_point_type>	×	×	
<sync_point></sync_point>	<sync_point_function></sync_point_function>	×	×	
<sync_point></sync_point>	<sync_point_comment></sync_point_comment>	×	×	
<sync_point></sync_point>	<sync_point_low></sync_point_low>	×	×	
<sync_point></sync_point>	<sync_point_high></sync_point_high>	×	×	
<sync_point></sync_point>	<sync_point_event_duration></sync_point_event_duration>	×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<history></history>				
<history></history>	<original_filename></original_filename>	0	×	
<history></history>	<parent_filename></parent_filename>	×	×	
<history></history>	<parent_uid></parent_uid>	×	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<file_set></file_set>				
<file_set></file_set>	<total_files></total_files>	0	×	
<file_set></file_set>	<family_uid></family_uid>	0	×	
<file_set></file_set>	<family_name></family_name>	×	×	
<file_set></file_set>	<file_set_start_time_hi></file_set_start_time_hi>	×	×	
<file_set></file_set>	<file_set_start_time_lo></file_set_start_time_lo>	×	×	
<file_set></file_set>	<file_set_index></file_set_index>	0	×	

iXML master tag	iXML sub tag	Written	Read	Remarks
<track_list></track_list>				
<track_list></track_list>	<track_count></track_count>	0	×	
<track/>	<channel_index></channel_index>	0	×	
<track/>	<interleave_index></interleave_index>	0	×	
<track/>	<name></name>	0	×	
<track/>	<function></function>	×	×	

Specifications

Inputs	Built-in mic	90° XY stereo format			
		Directionality	Unidirectional		
		Sensitivity	−37 dB/1 Pa 1 kHz		
		Maximum sound pressure input	120 dB SPL		
	MIC/LINE IN jack	Connector	Stereo mini jack		
		Input impedance	2 kΩ		
		Plugin Power	2.5 V		
Output	PHONE/LINE OUT jack	Connector	Stereo mini jack		
		Maximum output level	20 mW + 20 mW (when 32 Ω load)		
		Output impedance	10 Ω or less		
	Built-in speaker	Туре	20 mm × 30 mm elliptical dynamic speaker		
		Effective maximum output	250 mW		
Recorder		Recording format	WAV 44.1/48/96 kHz, 32-bit float Stereo/mono BWF and iXML formats supported		
		Recording media	4–32GB cards compatible with the microSDHC specification 64GB–1TB cards compatible with the microSDXC specification		
Display			128×64 OLED		
USB	Connector		USB Type-C • Use a USB cable that supports data transfer. USB bus power is supported		
	USB Mic		USB1.1 Full Speed 48 kHz/16-bit 2 in / 2 out		
	File transfer		USB 2.0 High Speed		
Power			2 AAA batteries (alkaline, lithium, or rechargeable NiMH) AC adapter (ZOOM AD-17): DC 5V/1A • USB bus power is supported.		

	-	
Estimated continuous operation times using batteries • These values are approximate. • Continuous battery operation times were determined using in-house testing methods. They will vary greatly according to use conditions.	Stereo recording, 48 kHz/32-bit float, microSDHC, no headphones, 1-minute power saving time, display dimming when recording on	Alkaline batteries: about 10 hours NiMH batteries (800 mAh): about 9 hours Lithium batteries: about 18 hours
Power consumption		5 W maximum
Dimensions		53.9 mm (W) × 136.6 mm (D) × 29.0 mm (H)
Weight (including batteries)		92 g

Note: 0 dBu = 0.775 Vrms



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