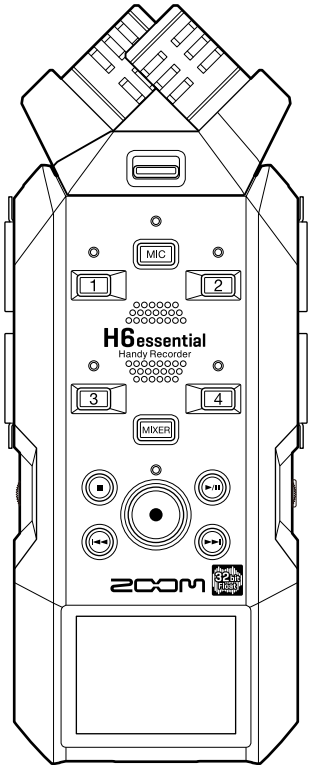
H6essential

Handy Recorder



Version 3.0 Supplementary Manual

You must read the Usage and Safety Precautions before use.

Functions added since Version 1.1

■ Functions added in Version 3.0

• Input gain setting function added
• AI Noise Reduction function added to analyze and reduce environmental sounds and other noise
• Functions added to enable recording and playback of MP3 files
• Functions added to export files in MP3 format
• Mix file recording setting added
• Support for the ZOOM Handy Control & Sync controller application added

■ Functions added in Version 2.0

• Support added for SSH-6e and EXH-6e mic capsules

Support has been added for the SSH-6e and EXH-6e mic capsules, which are sold separately.

• Pause recording function added

A function has been added that enables recording to be paused by pressing the (PLAY/PAUSE) button.

■ Function added in Version 1.1

• Function added to turn the guide sound on/off with a shortcut

A function has been added that enables the guide sound to be turned on/off immediately by pressing and holding the ENTER (ENTER) button.

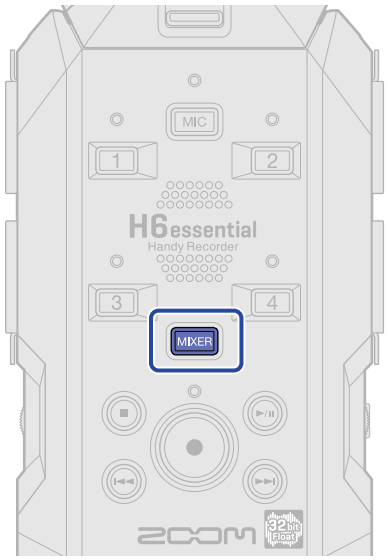
Contents

Functions added in Version 3.0

Setting input gain

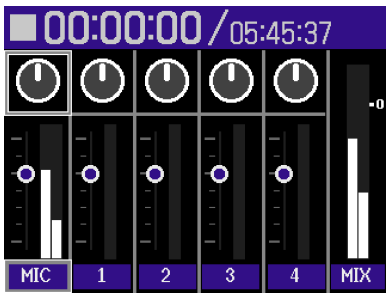
Setting input gain for each track on the Mixer Screen

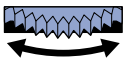
1. Press the MIXER (MIXER) button when the Home Screen is open.



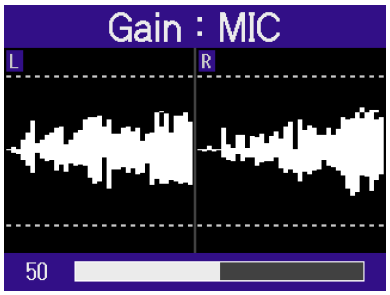
This opens the Mixer Screen.

2. Use the (selection) dial to select the track for gain adjustment and press the ENTER (ENTER) button.



3. Use the  (selection) dial to adjust the gain and press the 

(ENTER) button.

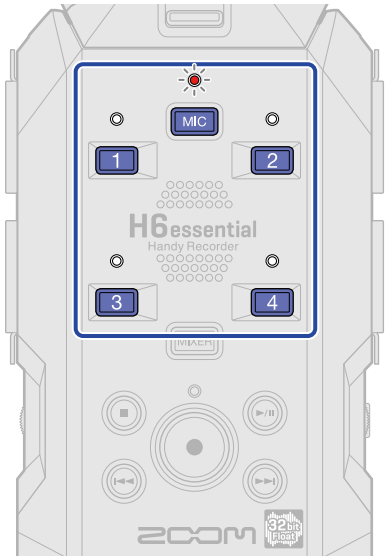


NOTE
When “Format” is set to “MP3”, adjust the input gain so that the waveform fits within the dashed lines to prevent clipping in recording files.

4. Repeat steps 2–3 to adjust the gain of each input.

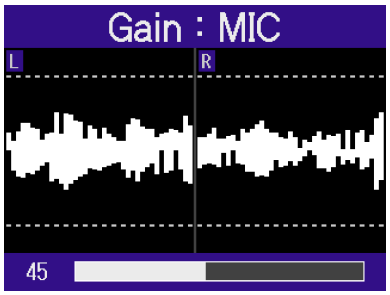
Setting input gain using a shortcut

1. When the Home Screen is open, press and hold the button of the track for input gain adjustment.



- MIC : Mic capsule
- 1 – 4 : Inputs 1–4

2. Use the (selection) dial to adjust the gain and press the ENTER (ENTER) button.



This confirms the gain setting and reopens the Home Screen.

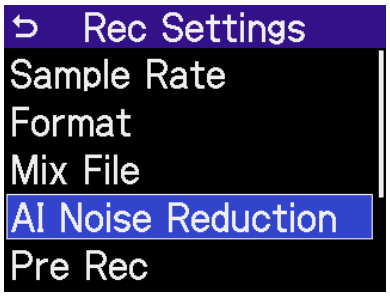
Using AI Noise Reduction

This function can analyze and reduce environmental sounds and other noise.

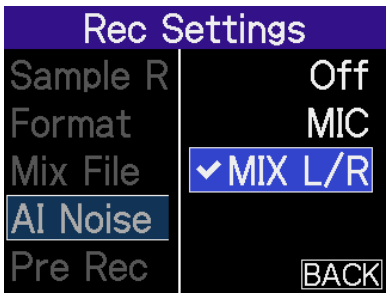
Using the Menu to set AI Noise Reduction

1. On the Home Screen, use the (selection) dial to select (REC) and press the ENTER (ENTER) button.
This opens the Rec Settings Screen.

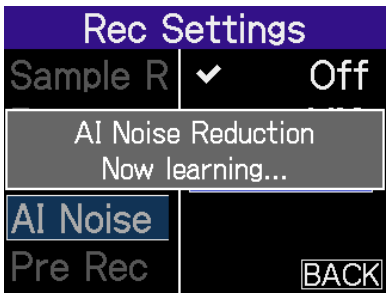
2. Use the (selection) dial to select “AI Noise Reduction” and press the ENTER (ENTER) button to confirm.



3. Use the (selection) dial to select the track for AI Noise Reduction activation and press the ENTER (ENTER) button.



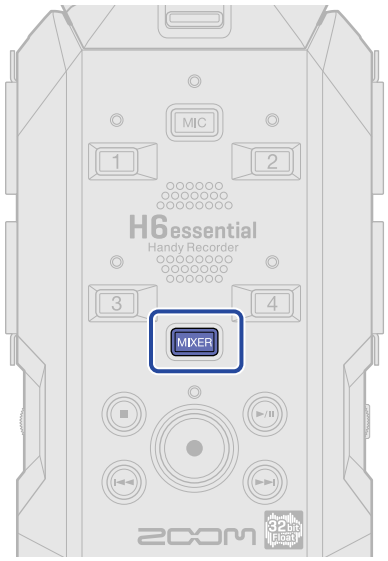
Turning this “ON” will start noise analysis. During analysis (for three seconds) input only environmental sounds and other noise.
Turning this “OFF” will reset the analysis results.



Turning AI Noise Reduction on/off using a shortcut

This function allows AI Noise Reduction to be turned on/off anytime to suit the use situation.

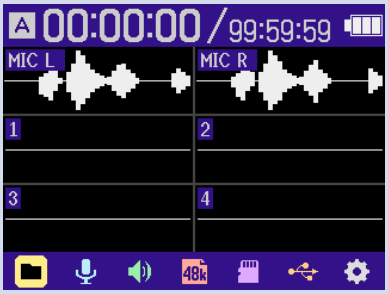
1. When the HOME screen is open, press and hold the MIXER (MIXER) button.



Turning this “ON” will start noise analysis. During analysis (for three seconds) input only environmental sounds and other noise.
Turning this “OFF” will reset the analysis results.

NOTE

- Use the Menu Screen to select the tracks for which AI noise reduction is enabled. (→ Using AI Noise Reduction)
- AI Noise Reduction will always be off at startup.
- When AI Noise Reduction is on, “A” will appear on the Home Screen status icon.

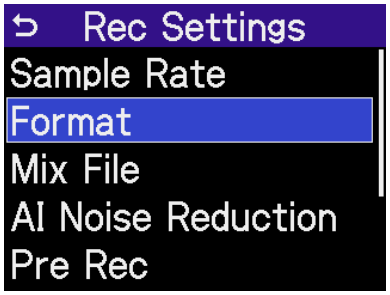


Recording with MP3 format

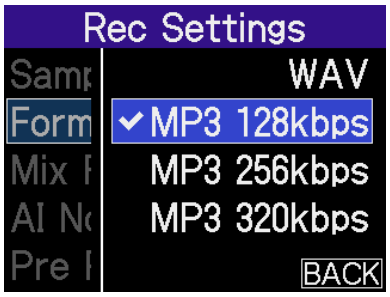
The recording data format can be set to MP3.

1. On the Home Screen, use the (selection) dial to select (REC) and press the ENTER (ENTER) button.
This opens the Rec Settings Screen.

2. Use the (selection) dial to select “Format” and press the ENTER (ENTER) button to confirm.



3. Use the (selection) dial to select the desired setting item and press the ENTER (ENTER) button to confirm.



The following formats can be selected.
MP3 128kbps, MP3 256kbps, MP3 320kbps

NOTE

- The sample rate cannot be set to 96 kHz when MP3 is selected.
- Recording with MP3 format is not possible when the sample rate is set to 96 kHz.
- A-B Repeat Playback is supported with MP3 files, but the setting range cannot be saved.

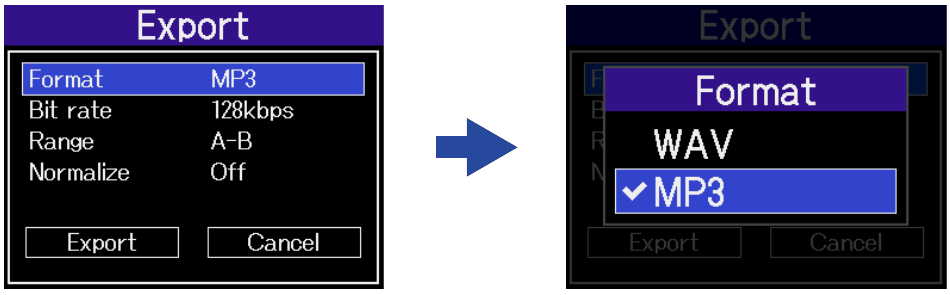
Exporting files in MP3 format

Recorded WAV files can be converted to MP3 and exported.
In addition, recorded files can be normalized to optimize their levels.

1. On the Playback Screen, use the (selection) dial to select (EXPORT) and press the ENTER (ENTER) button.
This opens the Export Screen.

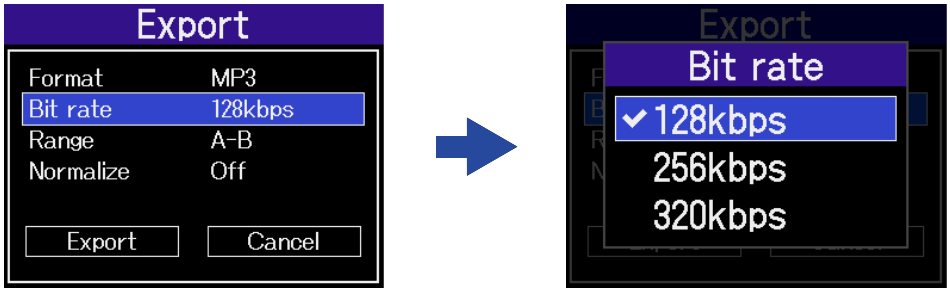
2. Select “MP3” for the format.

Use the (selection) dial to select the format and press the ENTER (ENTER) button. Then, use the (selection) dial to select “MP3” and press the ENTER (ENTER) button.



3. Select the bit rate.

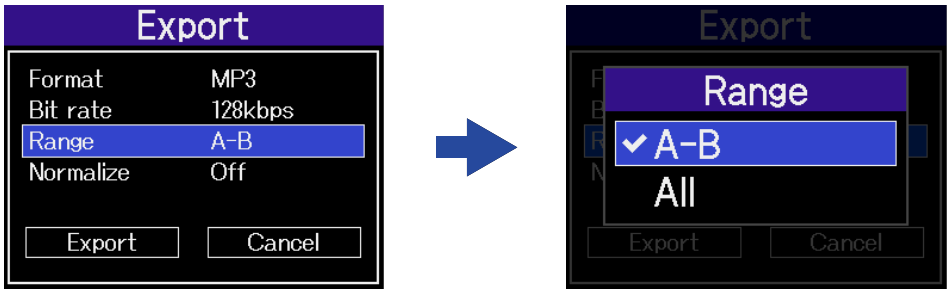
Use the (selection) dial to select “Bit rate” and press the ENTER (ENTER) button. Then, use the (selection) dial to select the format and press the ENTER (ENTER) button.



The following formats can be selected.
MP3: 128 kbps, 256 kbps, 320 kbps

4. Select whether or not to export using a specified range.

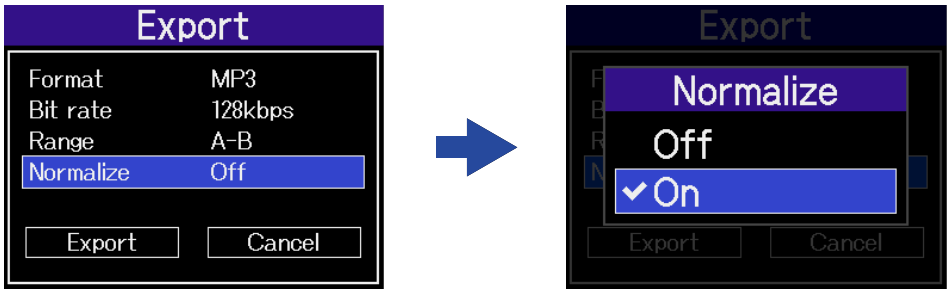
Use the (selection) dial to select “Range” and press the ENTER (ENTER) button. Then, use the (selection) dial to select the setting and press the ENTER (ENTER) button.



Setting value	Explanation
A-B	This exports the range between the two points set as explained in “Repeat playback of a set interval (A-B repeat)”.
All	This exports the entire track.

5. Select whether or not to normalize.

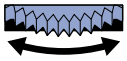
Use the (selection) dial to select “Normalize” and press the ENTER (ENTER) button. Then, use the (selection) dial to select “On” or “Off” and press the ENTER (ENTER) button.



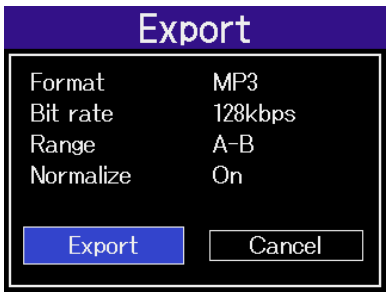
If “On” is selected, the file will be normalized during export.

NOTE

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

When done making all settings, use the  (selection) dial to select “Export” and press the 

(ENTER) button.



NOTE
MP3 files cannot be exported (as WAV or MP3).

Setting whether to record mix files

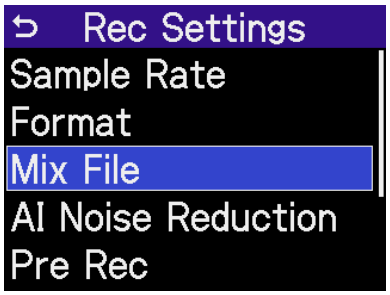
In addition to recording each track separately, a stereo mix file of those tracks can also be recorded. The recording of stereo mix files can be disabled to save SD card space.

NOTE

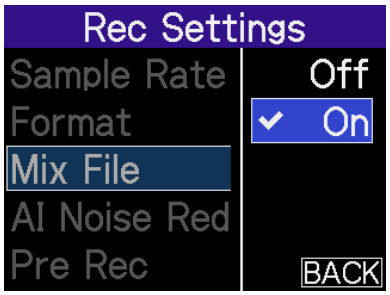
- Even when mix file recording is on, mix files will not be recorded in the following cases.
  - When the sampling rate is 96 kHz
  - When AI Noise Reduction is set to Off or MIC and only one file would otherwise be generated (for example, when only one track or a stereo-linked pair of tracks is being recorded)
- Use the export function to create mixed 96kHz stereo files. (→ Changing formats and exporting files)

1. On the Home Screen, use the (selection) dial to select (REC) and press the ENTER (ENTER) button.
This opens the Rec Settings Screen.

2. Use the (selection) dial to select “Mix File” and press the ENTER (ENTER) button.

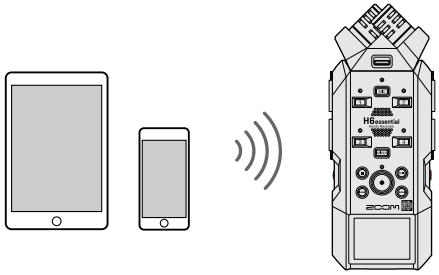


3. Use the (selection) dial to select “On” or “Off” and press the ENTER (ENTER) button.



Operating the H6essential from a smartphone/tablet (ZOOM Handy Control & Sync)

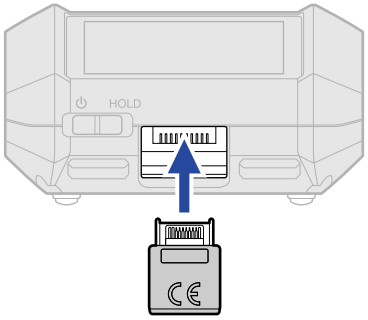
The H6essential can be operated wirelessly from a smartphone or tablet by connecting a BTA-1 or another dedicated wireless adapter and using the ZOOM Handy Control & Sync app designed to control it.
ZOOM Handy Control & Sync can be connected to multiple recorders and used to simultaneously start and stop recording, synchronize timecode and set the date and time.



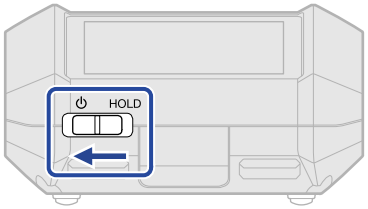
NOTE

- The ZOOM Handy Control & Sync app must be installed on the smartphone or tablet beforehand. The ZOOM Handy Control & Sync app can be downloaded from the App Store, for example. Refer to the manual for the ZOOM Handy Control & Sync app for details about app settings and operation procedures.
- The H6essential cannot be controlled wirelessly from a smartphone or tablet during audio interface operation (→ Using as an audio interface).
- An H6essential cannot have both ZOOM Handy Control & Sync and an UltraSync BLUE connected at the same time.

1. With the H6essential power off, remove the REMOTE connector cover on its front. Then, connect a BTA-1 or another dedicated wireless adapter.

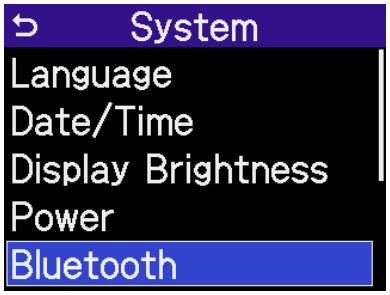


2. Slide the HOLD (POWER/HOLD) switch toward ⏻ (in the direction of the INPUT 1 and 3 jacks) until the power turns on and the display becomes active.

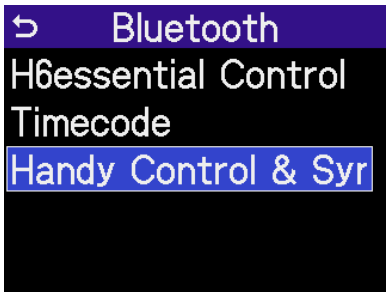


3. On the Home Screen, use the (selection) dial to select (SYSTEM) and press the ENTER (ENTER) button.
This opens the System Settings Screen.

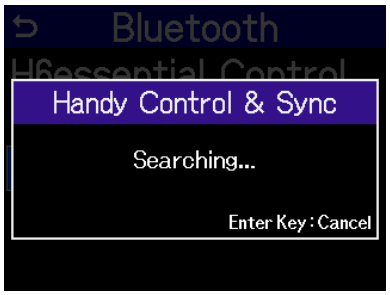
4. Use the (selection) dial to select “Bluetooth” and press the ENTER (ENTER) button.



5. Use the (selection) dial to select “Handy Control & Sync” and press the ENTER (ENTER) button.



Searching for the device to connect will begin and “Searching...” will appear on the display.



HINT

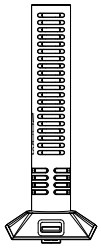
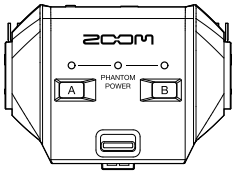
Searching can be canceled by pressing the ENTER (ENTER) button.

Disconnecting from smartphones and tablets

Disconnection is possible by quitting the app on the smartphone or tablet.
Removing the BTA-1 from the H6essential will also disconnect it from ZOOM Handy Control & Sync.

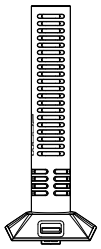
Functions added in Version 2.0

The mic capsule included with the H6essential can be swapped with a different mic capsule (sold separately) according to recording needs.
The display and operation when using an optional mic capsule are fundamentally the same as when using the included mic capsule. Settings specific to each mic capsule, however, can be changed.
The following optional mic capsules are compatible with the H6essential.

Mic capsule		Explanation
	SSH-6e Shotgun Mic Capsule	Mid-side stereo shotgun mic that supports 32-bit float recording
	EXH-6e External Input	2-channel XLR/TRS input capsule that supports 32-bit float recording

Using optional mic capsules

Using an SSH-6e

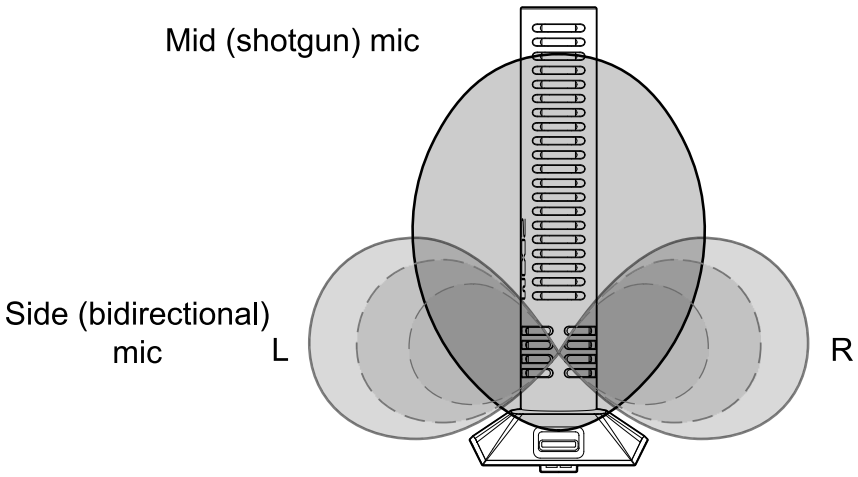


The SSH-6e is a mid-side stereo shotgun mic capsule. Along with a super-directional shotgun mic for capturing sound in the center (mid), it has a bidirectional mic for capturing sound from the left and right (side). The stereo width can be changed freely by adjusting the side level.

NOTE
For details about the SSH-6e, see its manual.
Download the SSH-6e manual from the ZOOM website (zoomcorp.com/help/ssh-6e).

Setting the SSH-6e mode

The operation mode of the SSH-6e can be set.
By setting the mode, a wide range of recording styles can be supported, from super-directional mono to stereo, which would normally require using an additional mic.

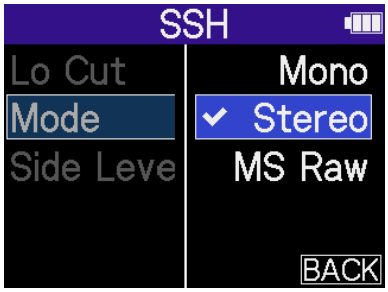


1. On the Home Screen, use the (selection) dial to select (INPUT) and press the ENTER (ENTER) button.
This opens the Input Settings Screen.

2. Use the (selection) dial to select “SSH” and press the ENTER (ENTER) button.

3. Use the (selection) dial to select “Mode” and press the ENTER (ENTER) button.

4. Use the (selection) dial to select the mode to use and press the ENTER (ENTER) button.



Setting value	Explanation
Mono	This turns off the side mic, enabling use as a mono shotgun mic. This is useful for situations when recording only specific sounds is desired.
Stereo	This uses the mid and side mics together as a stereo shotgun mic that keeps stereo width while having directional focus. This is useful for situations when recording sounds from the surrounding environment is also desired.
MS Raw	The mid mic signal will be recorded to the L channel and the side mic signal will be recorded to the R channel of the stereo file. This function is useful for changing the side level during post-production after recording.

Setting the SSH-6e side level

When using the SSH-6e as a stereo shotgun mic, the side mic level can be set before recording, enabling the stereo width to be adjusted.

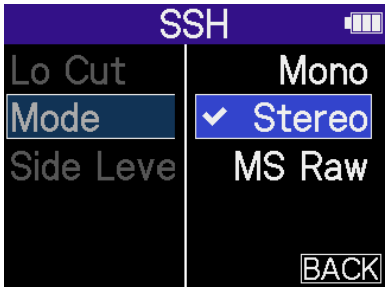
> **NOTE**
> Side level can only be adjusted when the SSH-6e mode is set to “Stereo”.

1. On the Home Screen, use the (selection) dial to select (INPUT) and press the ENTER (ENTER) button.
This opens the Input Settings Screen.

2. Use the (selection) dial to select “SSH” and press the ENTER (ENTER) button.

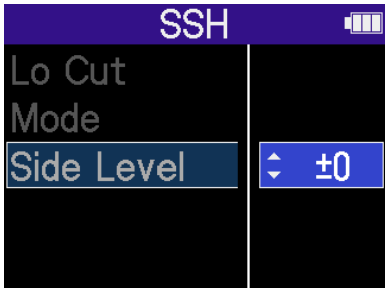
3. Use the (selection) dial to select “Mode” and press the ENTER (ENTER) button.

4. Use the (selection) dial to select “Stereo” and press the ENTER (ENTER) button.



5. Use the (selection) dial to select “Side Level” and press the ENTER (ENTER) button.

6. Use the (selection) dial to select the side level and press the ENTER (ENTER) button.



The setting range is –24 to +6. The higher the number is the wider the sound becomes to the left and right.

Reducing noise when using an SSH-6e (Lo Cut)

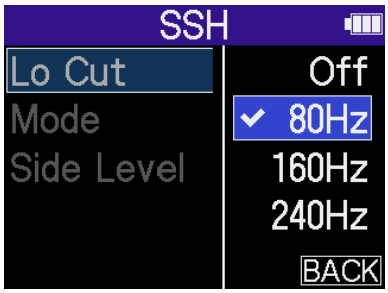
Low frequencies can be cut to reduce the sound of wind and vocal pop noises, for example.

1. On the Home Screen, use the (selection) dial to select (INPUT) and press the ENTER (ENTER) button.
This opens the Input Settings Screen.

2. Use the (selection) dial to select “SSH” and press the ENTER (ENTER) button.

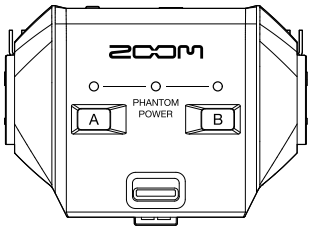
3. Use the (selection) dial to select “Lo Cut” and press the ENTER (ENTER) button.

4. Use the (selection) dial to select the cut-off frequency and press the ENTER (ENTER) button.



Lo Cut can be set to Off, 80 Hz, 160 Hz or 240 Hz.

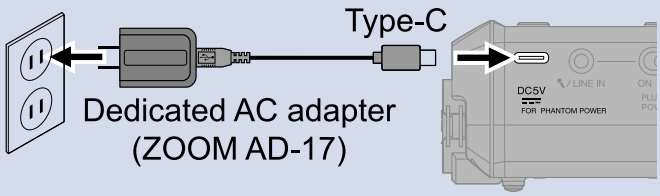
Using an EXH-6e



The EXH-6e XLR/TRS combo capsule adds 2 channels of external input. Signals can be input from dynamic mics, line level instruments, mixers and audio players, for example. Phantom power supply is supported, so condenser mics can also be used. In addition, a stereo mini MIC/LINE input jack is built in and supports plug-in power.

NOTE

- When connecting condenser mics and other devices that require phantom power, use an external power supply.

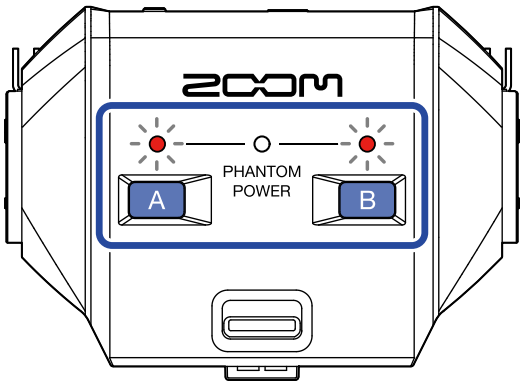


- When connecting a mic that requires plug-in power to the MIC/LINE jack, set the PLUG-IN POWER ON/OFF switch to ON.
- For additional details about the EXH-6e, see its manual.
  Download the EXH-6e manual from the ZOOM website (zoomcorp.com/help/exh-6e).

Enabling the EXH-6e inputs

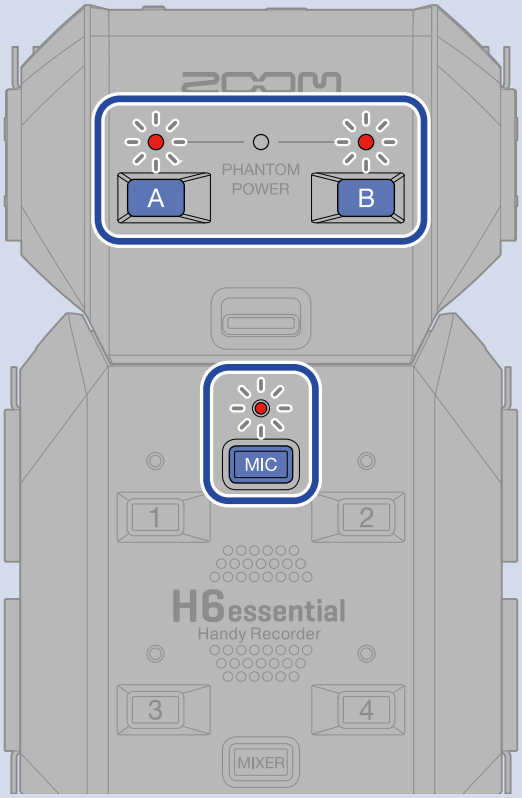
INPUT A and INPUT B of the EXH-6e need to be enabled for use.

1. Press the INPUT A/B button.
   This will enable that input jack and light the INPUT A/B status indicator.



NOTE

To record sound input from an EXH-6e, the mic capsule track must be enabled on the H6essential itself. Confirm that the mic capsule track indicator on the H6essential is lit.

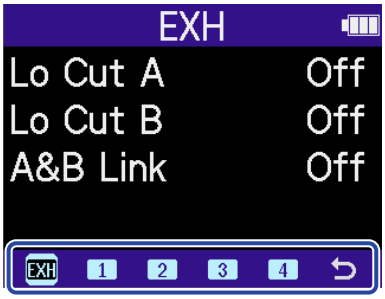


Setting EXH-6e stereo linking

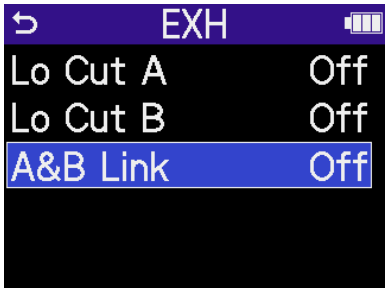
By stereo-linking the EXH-6e inputs, their signals can be handled as stereo audio.

1. On the Home Screen, use the (selection) dial to select (INPUT) and press the ENTER (ENTER) button.
This opens the Input Settings Screen.

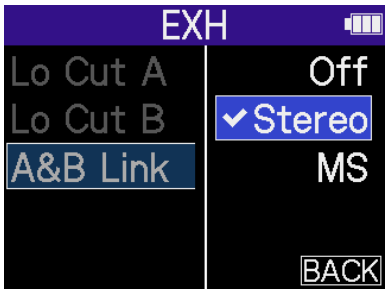
2. Use the (selection) dial to select “EXH” and press the ENTER (ENTER) button.



3. Use the (selection) dial to select “A&B Link” and press the ENTER (ENTER) button.



4. Use the (selection) dial to select the desired item to set and press the ENTER (ENTER) button.



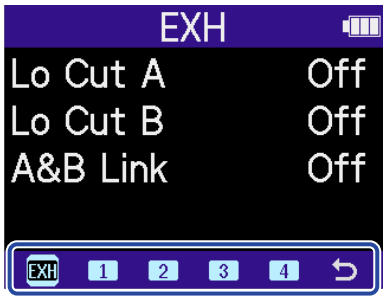
Setting value	Explanation
Off	Input signals will be handled as mono audio.
Stereo	The two EXH-6e input signals will be handled as stereo audio. INPUT A will become the L channel and INPUT B will become the R channel.
MS	The two EXH-6e input signals will be handled as audio captured in mid-side format. INPUT A will be used for the mid signal and INPUT B will be used for the side signal.

Setting the EXH-6e side level

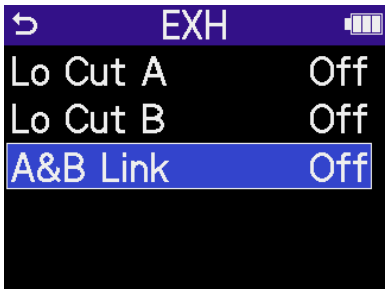
With the EXH-6e, if the input signal is set to “MS”, the side level can be set before recording, allowing the stereo width of the input sound to be adjusted.

1. On the Home Screen, use the (selection) dial to select (INPUT) and press the ENTER (ENTER) button.
   This opens the Input Settings Screen.

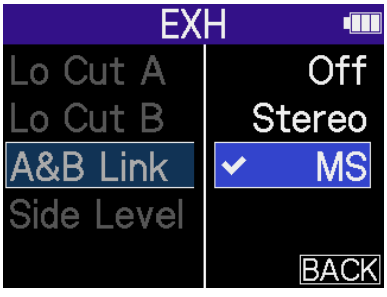
2. Use the (selection) dial to select “EXH” and press the ENTER (ENTER) button.



3. Use the (selection) dial to select “A&B Link” and press the ENTER (ENTER) button.

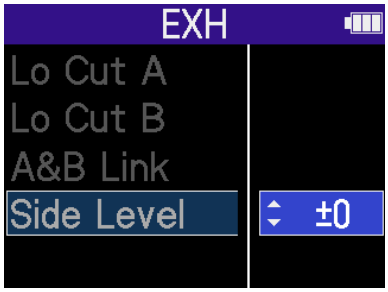


4. Use the (selection) dial to select “MS” and press the ENTER (ENTER) button.



5. Use the (selection) dial to select “Side Level” and press the ENTER (ENTER) button.

6. Use the (selection) dial to select the side level and press the ENTER (ENTER) button.



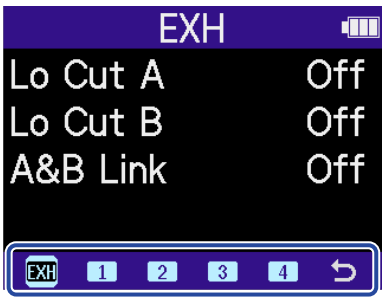
Setting value	Explanation
−24 – +6	The higher the number is the wider the sound becomes to the left and right.
Mute	The side mic will be muted.
Raw	The mid signal will be recorded to the L channel and the side signal will be recorded to the R channel of the stereo file. This setting is useful for changing the side level during post-production after recording.

Reducing noise when using an EXH-6e (Lo Cut)

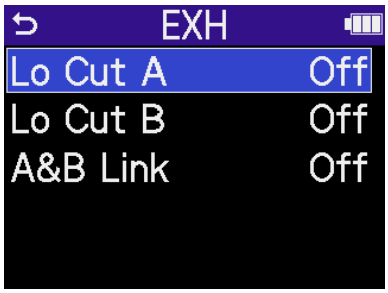
Low frequencies can be cut to reduce the sound of wind and vocal pop noises, for example.

1. On the Home Screen, use the (selection) dial to select (INPUT) and press the ENTER (ENTER) button.
   This opens the Input Settings Screen.

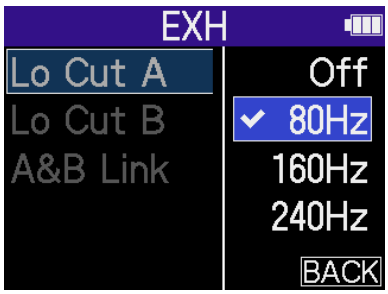
2. Use the (selection) dial to select “EXH” and press the ENTER (ENTER) button.



3. Use the (selection) dial to select “Lo Cut A” or “Lo Cut B” and press the ENTER (ENTER) button.



4. Use the (selection) dial to select the cut-off frequency and press the ENTER (ENTER) button.

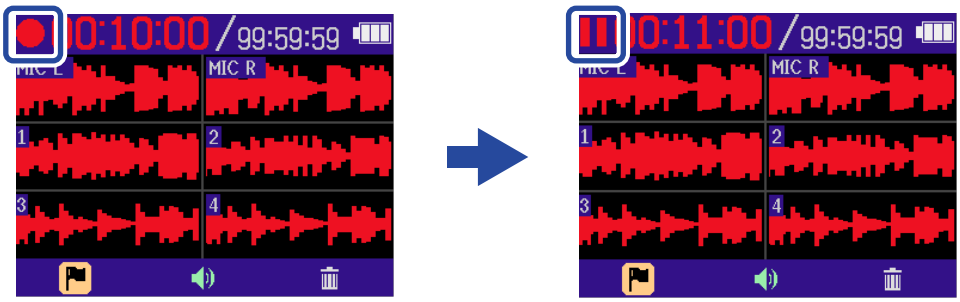


   Lo Cut can be set to Off, 80 Hz, 160 Hz or 240 Hz.

Pausing recording

By pausing recording and not recording unwanted intervals, microSD card capacity can be conserved.

1. Press the (PLAY/PAUSE) button when recording.
   This pauses recording.



   Press the (PLAY/PAUSE) button again to resume recording.

NOTE
Resuming recording will automatically add a mark at that point.

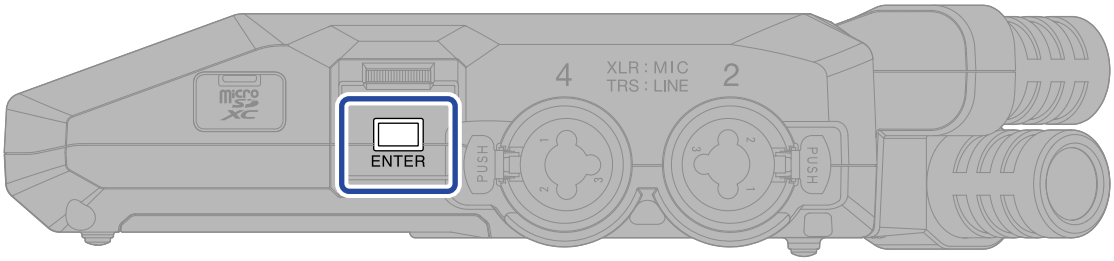
Function added in Version 1.1

This function allows guide sounds to be turned on/off anytime to suit the use situation.

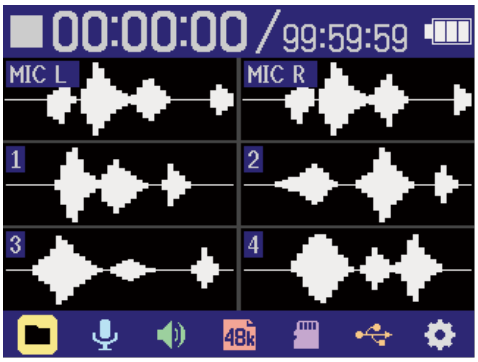
Turning guide sounds on/off with a shortcut

Turning the guide sound on/off

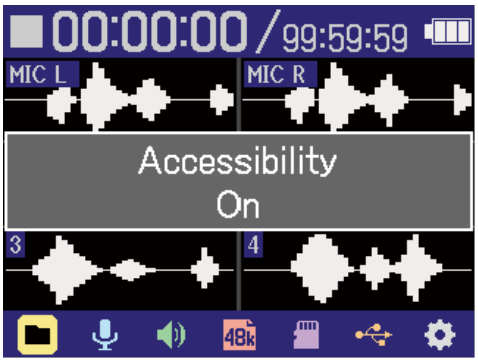
1. When the HOME screen is open, press and hold the ENTER (ENTER) button.



This turns on/off guide sounds.



Home Screen



A notification about the switch will be shown (and announced with the guide sound).

Notes about this manual

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