L6max

LiveTrak

Operation Manual

You must read the Usage and Safety Precautions before use.

Notes about this Operation Manual

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

- Microsoft and Windows are trademarks of the Microsoft group of companies.
- Mac, macOS, iPad and Lightning are trademarks of Apple Inc.
- iPhone is a trademark of Aiphone Co., Ltd. and is used under license.
- The microSDXC logo is a trademark of SD-3C LLC.

- USB Type-C is a trademark of the USB Implementers Forum.
- Recording from copyrighted sources, including CDs, records, tapes, live performances, video works and broadcasts, without permission of the copyright holder for any purpose other than personal use is prohibited by law. ZOOM CORPORATION will not assume any responsibility related to infringements of copyrights.

Contents

L6max overview

Realizing high audio quality while mixing

With dual A/D converter circuits and support for 32-bit float format, the L6max can maintain the highest audio quality while mixing.

> **NOTE**
> On the L6max, INPUT 1–4 jacks have dual A/D converter circuits.

Inputs

Dual A/D converter circuits allow input from the loudest to the quietest sounds without requiring gain adjustments.

Mixing

Input sounds are processed using 32-bit float format, so the audio quality at input is maintained while mixing.

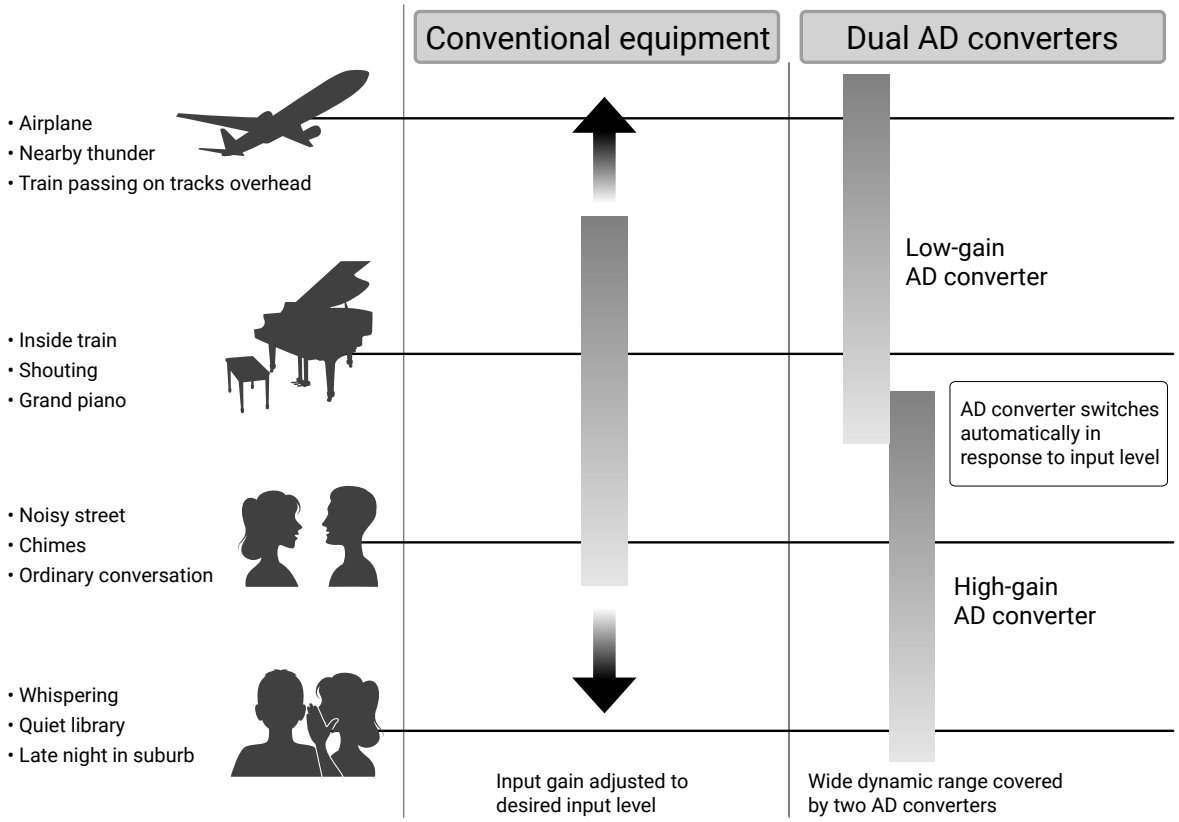
Dual A/D converter circuit overview

For each input circuit, the L6max has two A/D converters with different input gains. This design enables mixing with high quality without the need to adjust input gain, which is normally indispensable.

> **NOTE**
> On the L6max, INPUT 1–4 jacks have dual A/D converter circuits.

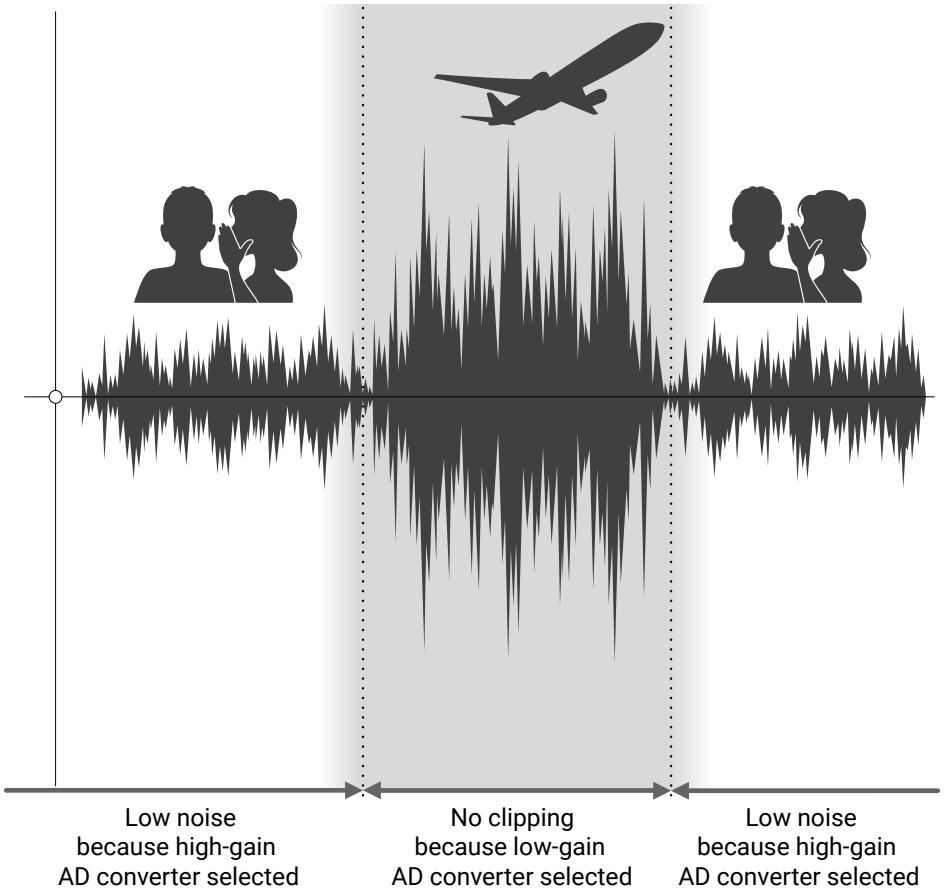
Providing amazing dynamic range

By combining two A/D converters, a wide dynamic range not possible with a single A/D converter has been realized.



Switching between two A/D converters

The L6max constantly monitors data from the two A/D converters and automatically selects the one that provides the best input results.



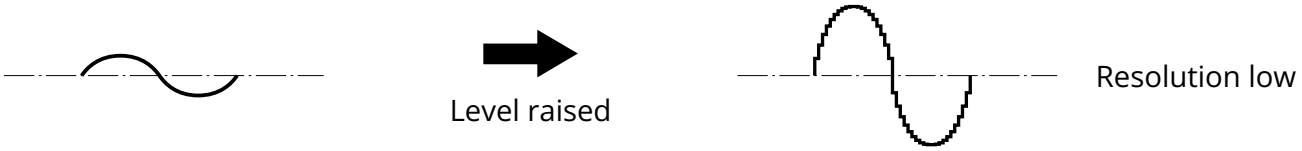
32-bit float WAV file overview

The L6max can record input audio and mixed audio. This recorded audio is saved in 32-bit float WAV file format. 32-bit float WAV files have the following advantages over conventional 16/24-bit WAV files. These advantages allow the recording audio quality to be preserved even when editing in a DAW or other software after recording.

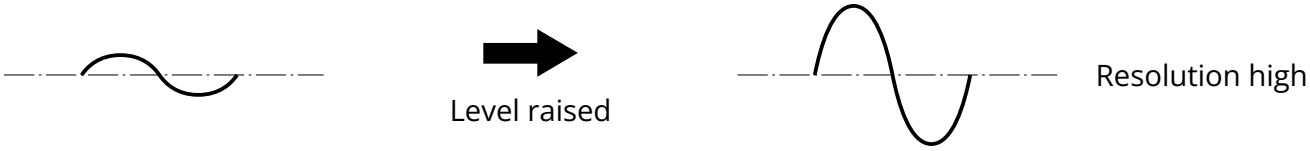
Resolution advantage

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.

■ 16/24-bit WAV



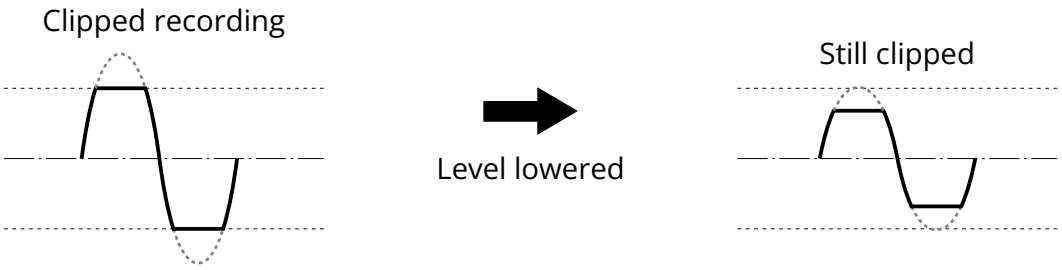
■ 32-bit float WAV



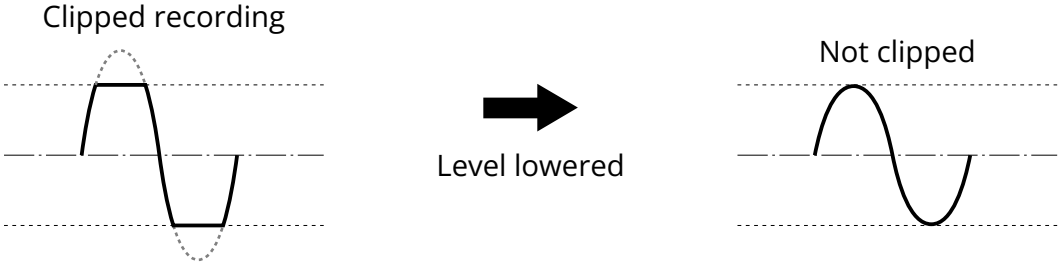
Clipping advantage

If a waveform sounds clipped when output from the L6max 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

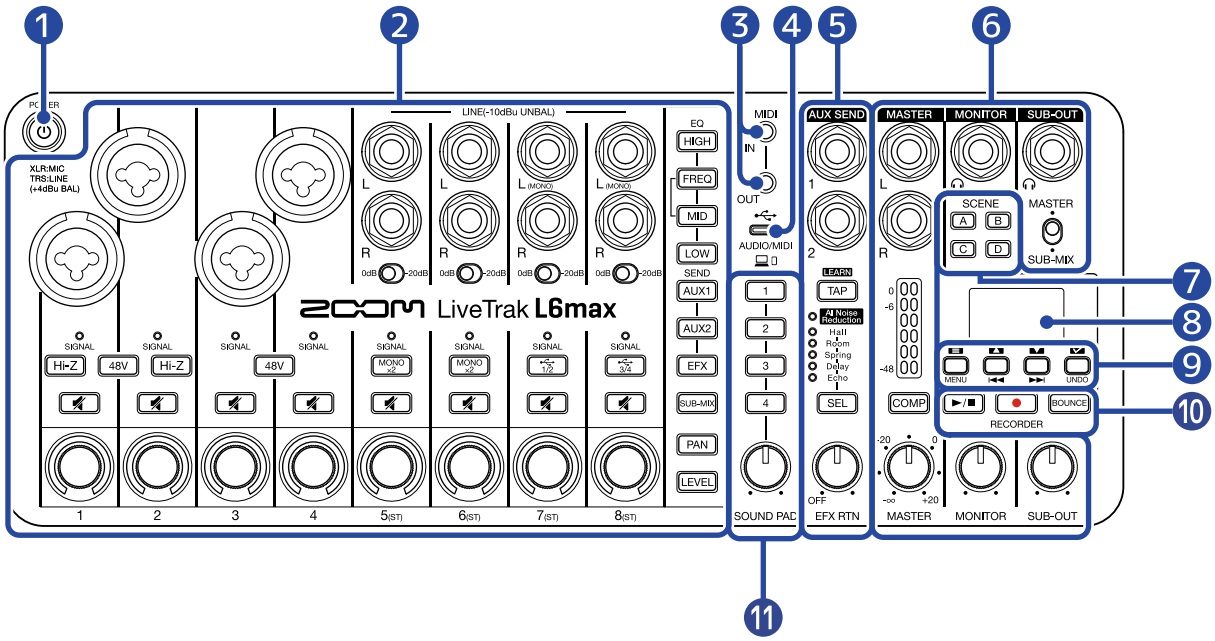


■ 32-bit float WAV



Functions of parts

Top



1 POWER button

This turns the power on/off.

2 Channel operation section (→ Channel operation section)

Connect mics, synthesizers, effects and other equipment here. Conduct operations for each channel, including making input settings and adjusting tone, panning, levels and send amounts.

3 MIDI IN/OUT connection jacks

Use 3.5mm TRS cables to connect MIDI devices.

To connect MIDI devices with 5-pin DIN connectors, use 5-pin DIN-TRS MIDI (Type-A) conversion cables.

4 USB port (Type-C)

Connected to a computer, smartphone or tablet, the following uses are possible.

- Use an app to make detailed settings for the hardware as well as sound pad settings (computer only)
- Use the file transfer function (computer only)
- Use the L6max as an audio interface
- Control the L6max using MIDI functions

Operation on USB bus power is supported.

5 Send effect section (→ Send effect section)

Select the internal effect and adjust its level here.

External effects (2) can also be connected.

6 Output section (→ Output section)

Connect powered monitors or a PA system as well as headphones, and adjust the MASTER MONITOR and SUB-OUT outputs.
The compressor can be used on the MASTER outputs to increase the sound pressure while preventing clipping.

7 Scene selection buttons

Use these to save and recall L6max settings. (→ Saving settings (scenes))

8 Display

This shows various types of information.

9 Function buttons

- 

BACK/MENU button (operation button 1)

  Press this when the Home Screen is open to open the Menu Screen.
  Press this when the Menu Screen is open to return to the previous screen or Home Screen.

- 
UP / search backward button (operation button 2)

  Press this when playing or stopped to move to the beginning of the project or to the previous project. Press and hold this to search backward.
  Press this when the Menu Screen is open to select the top item.

- 
DOWN / search forward button (operation button 3)

  Press this when playing or stopped to move to the next project. Press and hold this to search forward.
  Press this when the Menu Screen is open to select the bottom item.

- 

Confirm / UNDO button (operation button 4)

  Press when overdubbing (in BOUNCE mode) to open a screen where the state just before bouncing can be restored.
  Press this when the Menu Screen is open to confirm or execute the selected item.

10 Recorder section

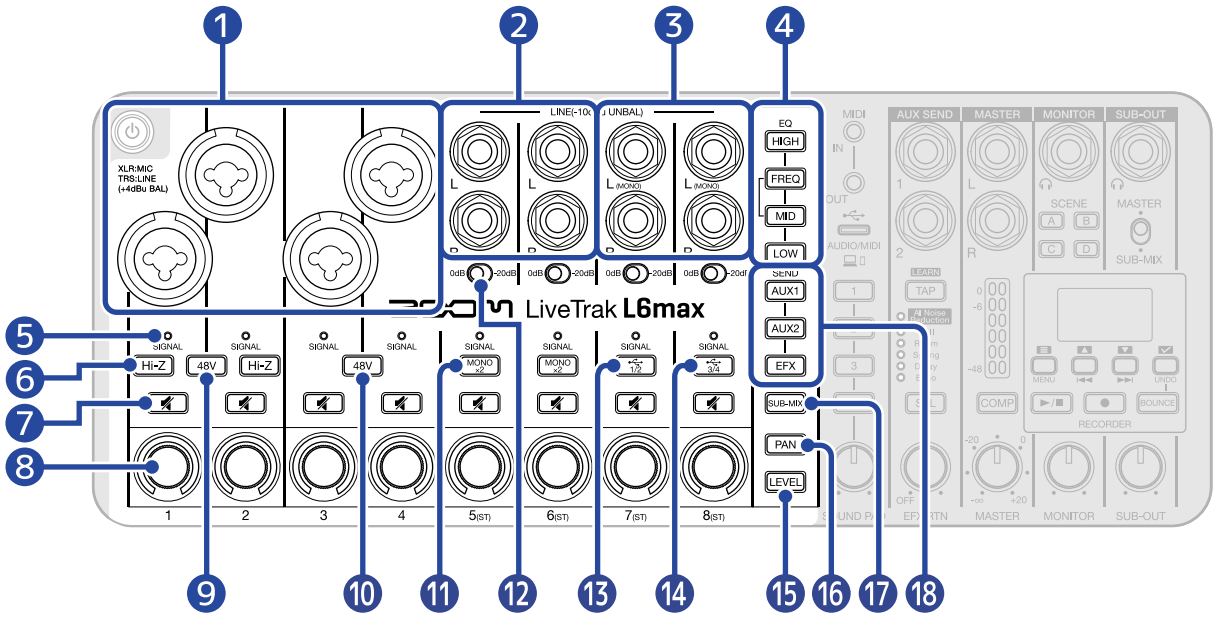
Press the ● (record) button to start recording. The ● (record) button lights during recording.
Press the ►/■ (play/stop) button to play recorded files. The ►/■ (play/stop) button lights during playback. During playback, press the ►/■ (play/stop) button to stop it.
Press the BOUNCE (BOUNCE) button to combine (bounce) 8 already recorded tracks into a bounce track and empty tracks 1–8.

11 Sound pad section

Audio files assigned to the 1 – 4 (1 – 4) pads can be played back by pressing them.
Use the 

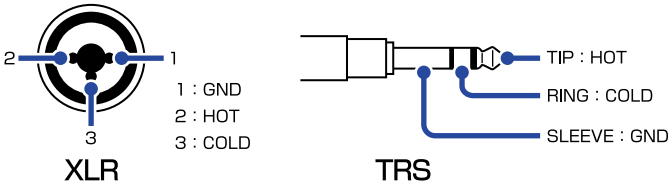
(SOUND PAD) knob to adjust the sound pad level.

■ Channel operation section



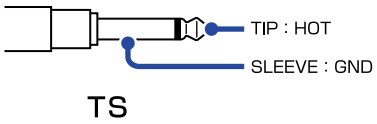
1 INPUT 1–4 jacks (mono channels)

Connect mics and instruments, for example, to input them on channels 1–4. These can be used with XLR and TRS plugs.



2 INPUT 5 (L/R) and INPUT 6 (L/R) jacks (stereo channels)

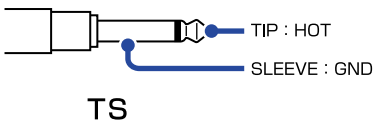
Connect synthesizers and effects, for example, to input them in stereo on channels 5 and 6. These can be used with TS plugs.



Press a [MONO x2] (MONO) button to light it, enabling connection of 2 mono devices instead of 1 stereo device.

3 INPUT 7 (L (MONO)/R) and INPUT 8 (L (MONO)/R) jacks (stereo channels)

Connect synthesizers and effects, for example, to input them in stereo on channels 7 and 8. These can be used with TS plugs.



When connecting mono devices, connect them to the L (MONO) jacks.

When using the L6max as an audio interface, press the [1/2] (USB 1/2) button or [3/4] (USB 3/4) button to light it, enabling input of stereo audio from a computer, smartphone or tablet on that channel.

4 Equalizer buttons

Press a button to select one for adjustment, lighting it, and then use the channel  encoders to adjust their tones.

- HIGH (HIGH) button: This adjusts high frequencies.
- FREQ (FREQ) button: This changes the central frequency of the adjusted mid frequencies. (100 Hz – 8 kHz)
- MID (MID) button: This adjusts middle frequencies.
- LOW (LOW) button: This adjusts low frequencies.

5 Signal indicators (channels 1–8)

These show input signal states.

SIGNAL : Audio being input / SIGNAL : Clipping

6 High impedance buttons (channels 1–2)

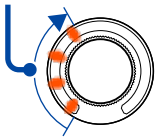
These switch their input impedances. Press these to light them when connecting guitars and basses.

7 Mute buttons (channels 1–8)

Press one of these to light it and mute that channel.

8 Channel encoders (channels 1–8)

Use these to adjust the level, tone and panning of each channel along with their effect send levels. Adjusted levels are shown by indicators around the encoders.



9 Phantom power button (channels 1–2)

Press this, to light it and provide +48 V phantom power to the INPUT 1 and 2 (XLR) jacks.

10 Phantom power button (channels 3–4)

Press this to light it and provide +48 V phantom power to the INPUT 3 and 4 (XLR) jacks.

11 MONO buttons (channels 5–6)

Press these to enable input of 2 mono signals on those channels.
Level, tone and panning settings as well as effect send levels are shared by both mono inputs.

12 PAD switches (channels 5–8)

The attenuations of input signals from connected equipment can be switched between 0 dB and –20 dB.

13 USB 1/2 button (channel 7)

When using the L6max as an audio interface, press this, lighting it, to input audio from computer or smartphone channels 1–2 to L6max channel 7.
When lit, audio cannot be input through the INPUT 7 (L (MONO)/R) jacks.

⓮ USB 3/4 button (channel 8)

When using the L6max as an audio interface, press this, lighting it, to input audio from computer or smartphone channels 3–4 to L6max channel 8.
When lit, audio cannot be input through the INPUT 8 (L (MONO)/R) jacks.

⓯ LEVEL button

Press this, lighting it, and then use the channel  encoders to adjust their levels.

⓰ PAN button

Press this, lighting it, and then use the channel  encoders to adjust their stereo positions.

⓱ SUB-MIX button

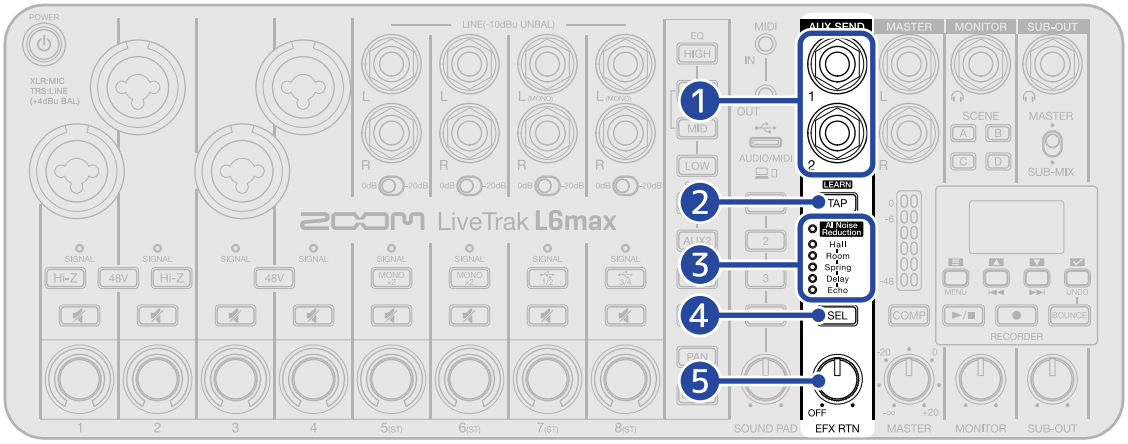
Press this, lighting it, and then use the channel  encoders to adjust their SUB-MIX levels.

⓲ Effect send buttons

Press a button to select one for effect send level adjustment, lighting it, and then use the channel  encoders to adjust the effect amounts.

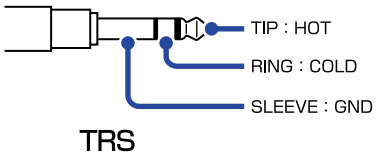
- AUX1 (AUX1) button: Use this to adjust the levels sent to the effect connected to the AUX SEND 1 jack.
- AUX2 (AUX2) button: Use this to adjust the levels sent to the effect connected to the AUX SEND 2 jack.
- EFX (EFX) button: Use this to adjust the levels sent to the internal effect.

■ Send effect section



1 AUX SEND 1/2 jacks

Connect external effects to these. These can be used with TRS plugs.



2 TAP button

When the “Delay” or “Echo” internal effect is selected, tapping this sets the delay time to the tapped tempo.

The LEARN / TAP (TAP) button blinks at the set delay time tempo.

When the “AI Noise Reduction” internal effect is selected, pressing this starts analysis of the environmental noise. (→ Using AI Noise Reduction)

3 Internal effect indicators

The indicator lights for the selected internal effect.

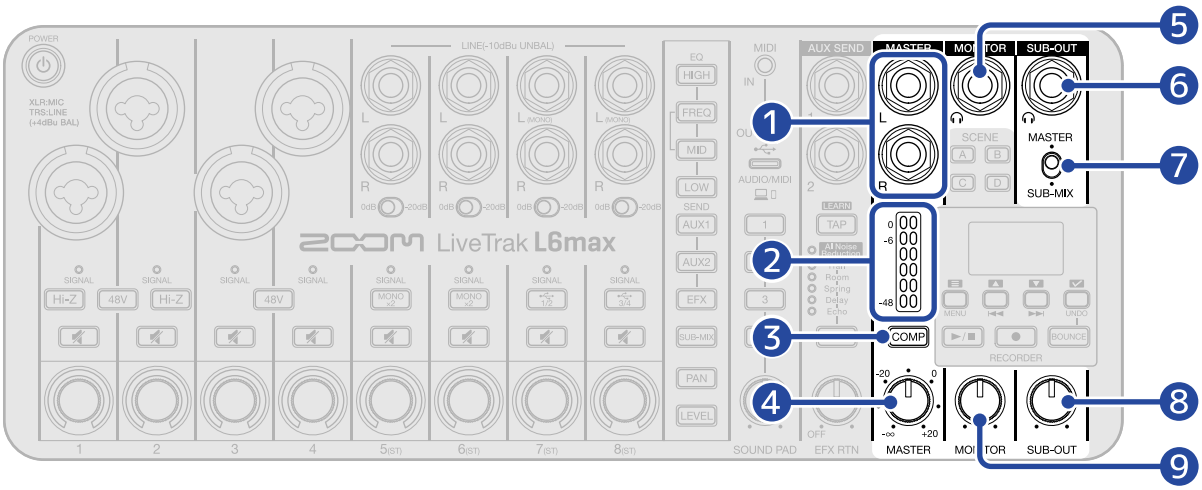
4 SEL button

Use this to select the internal effect. Pressing this cycles through the internal effects.

5 EFX RTN knob

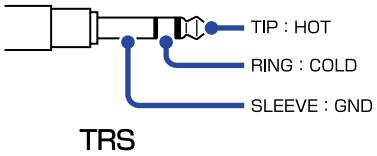
This adjusts the internal effect level. When “AI Noise Reduction” is selected, this cannot be adjusted.

■ Output section



1 MASTER L/R output jacks

Connect these to a PA system or powered monitors, for example, to output the stereo sound mixed on the L6max. These can be used with TRS plugs.



2 Master level meters

These show the levels output from the MASTER L/R output jacks in a range from −48 dB to 0 dB.

3 COMP button

Press this to light it, increasing the sound pressure of the audio output from the MASTER L/R output jacks while preventing clipping.

4 MASTER knob

This adjusts the audio levels output from the MASTER L/R output jacks in a range from −∞ to +20 dB.

5 MONITOR output jack

Connect headphones here to monitor the stereo sound mixed on the L6max.

6 SUB OUT jack

Connect headphones here to monitor the stereo sound mixed on the L6max.

7 SUB-OUT output switch

This switches the audio output from the SUB-OUT jack. (→ Selecting the audio output from the SUB-OUT jack)

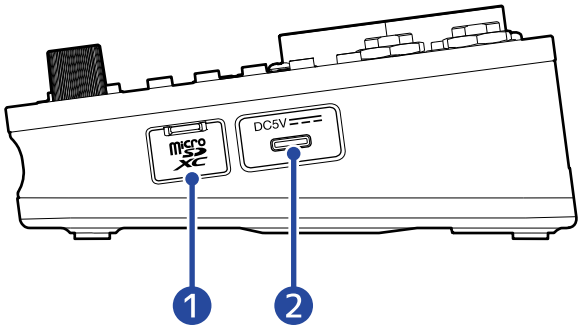
8 SUB-OUT knob

Use this to adjust the volume of the audio output from the SUB-OUT jack.

9 MONITOR knob

Use this to adjust the volume of the audio output from the MONITOR output jack.

Right side



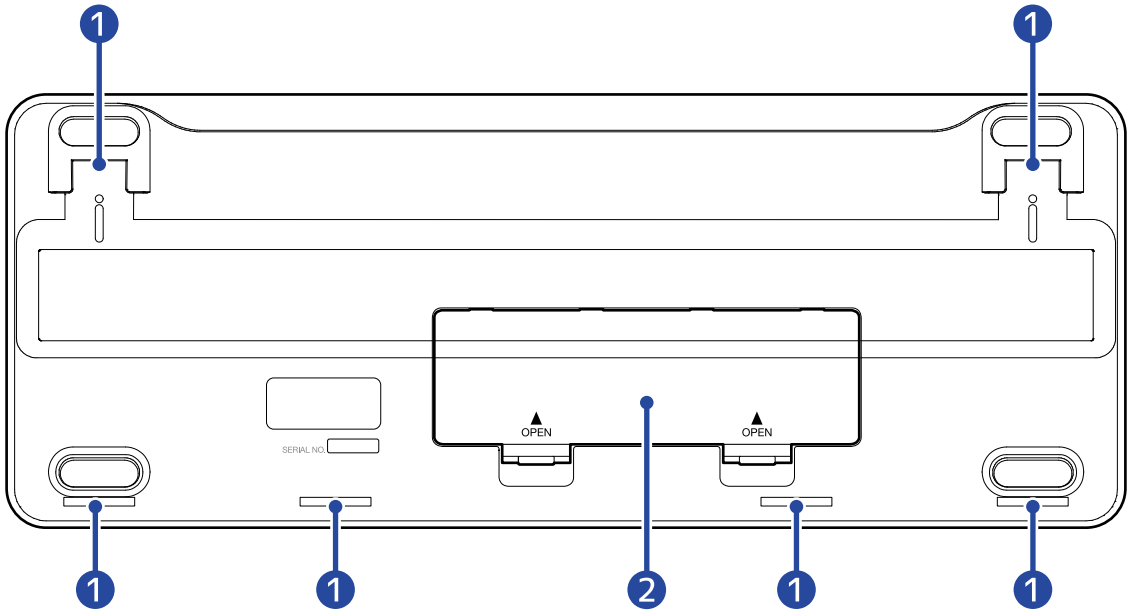
1 microSD card slot

Insert a microSD card here.

2 USB power port (Type-C)

Power can be supplied to the L6max by connecting a specified AC adapter (AD-17) or a 5V portable battery.

Bottom



1 **Openings for connecting a Eurorack adapter (ERL-6)**

The L6max can be installed in a Eurorack case by using an ERL-6 Eurorack adapter (sold separately).

2 **Battery cover**

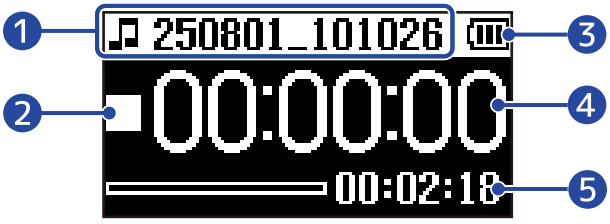
Open this when installing or removing AA batteries. (→ Installing batteries)

Overview of screens that appear

In this section, we explain the screens shown on the display of the L6max.

Home Screen

This screen appears on the display when the L6max power is turned on.



1 Project Name

This shows the name of the selected project.

2 Status icon

The status is shown by an icon.

- ■: Stopped
- ▶: Playing
- ●: Recording

3 Remaining battery indicator

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

4 Elapsed time

This shows the elapsed time since the start of recording or playback.

5 Maximum project time (when playing/stopped) / remaining recordable time (when recording)

This shows the maximum project time when playing or stopped and the remaining recordable time when recording.

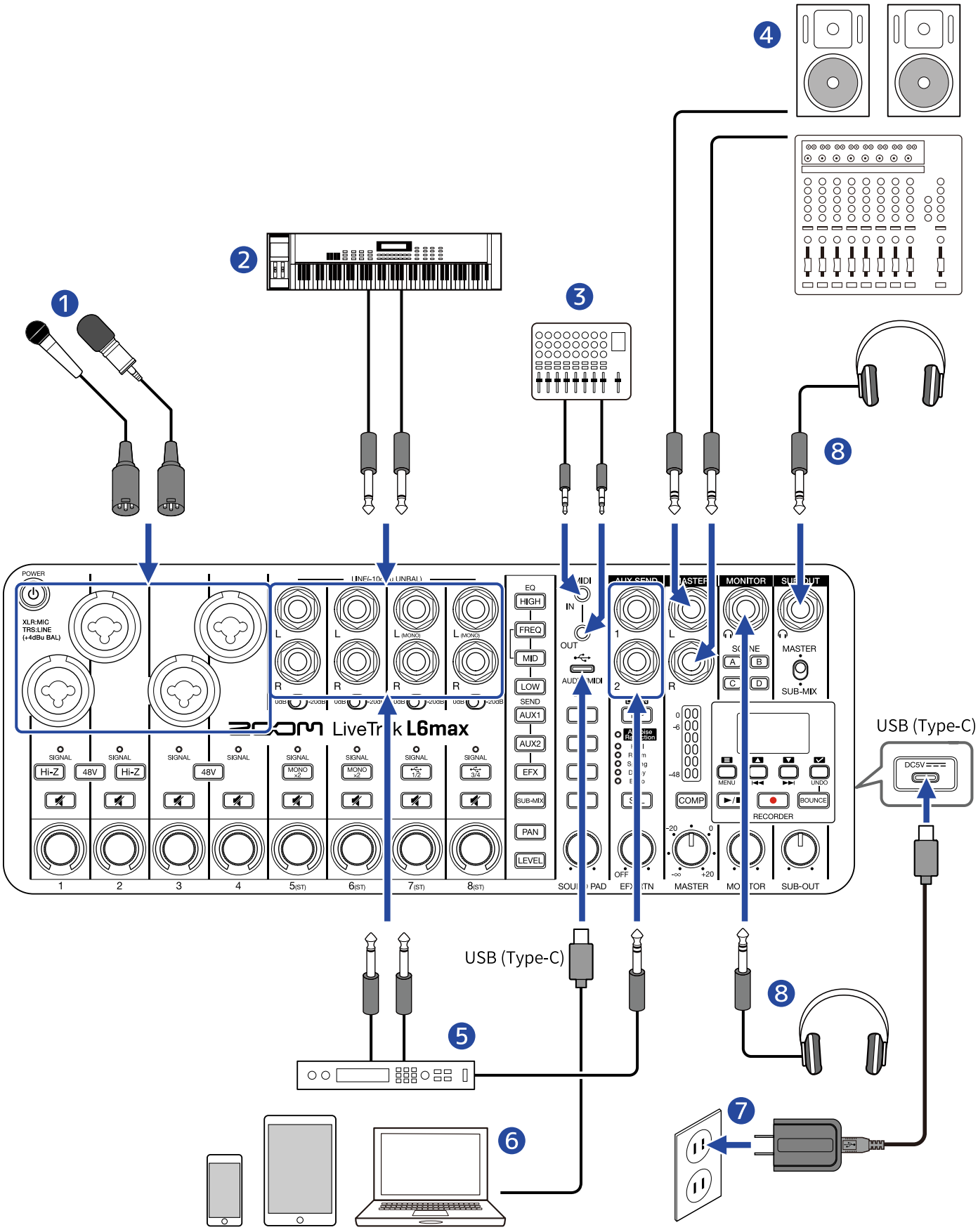
Menu Screen

Use this screen to select folders, manage SD cards, use USB functions, and make settings for the sound pads and the hardware.

When the Home Screen is open, press MENU (Operation button 1) to open this.

1. Menu title
2. Menu items
   This shows setting items and setting values, for example.
3. Scrollbar
   This will appear when a list has more items than will fit on the display.

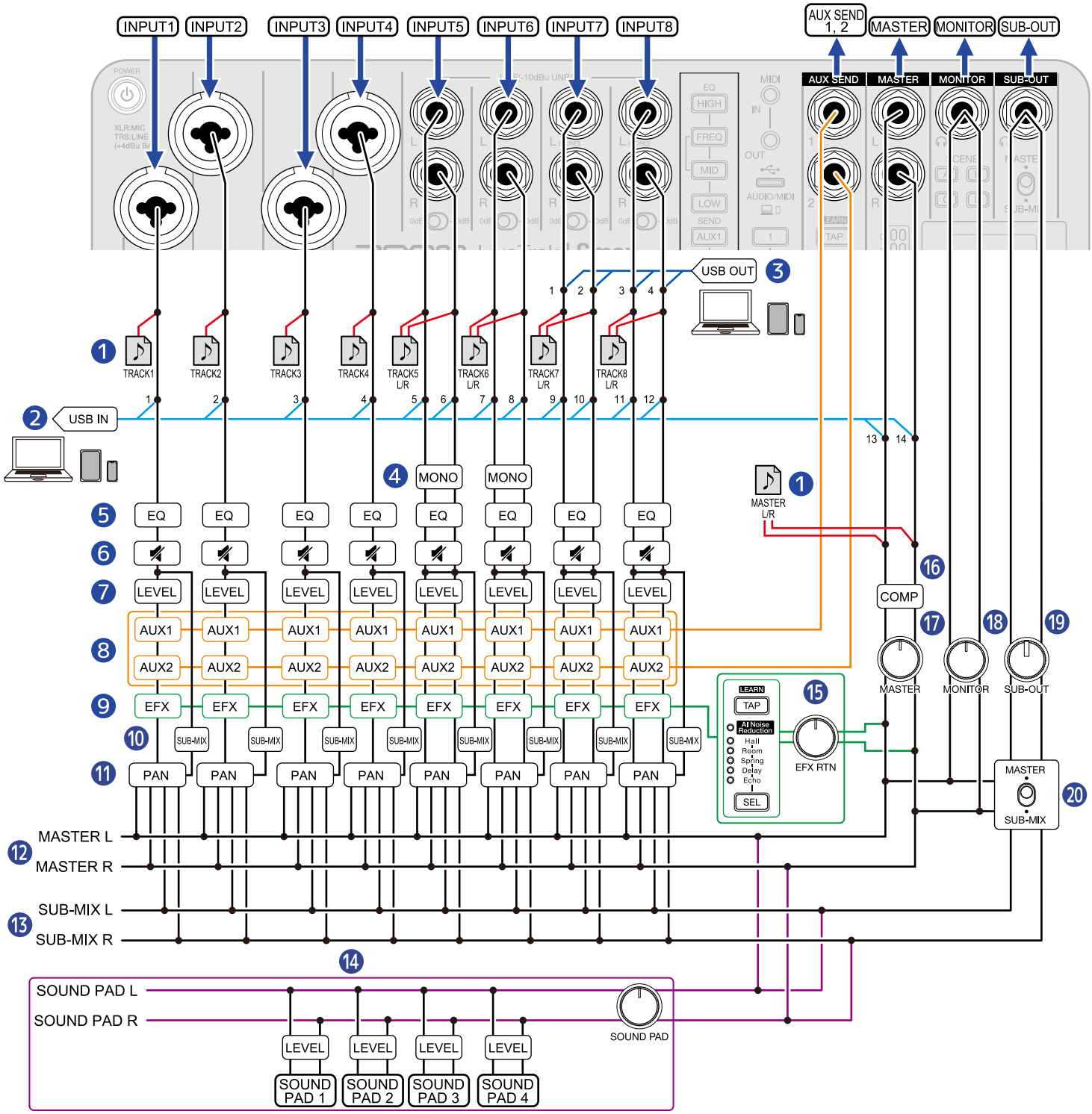
Connection example



1 Mics for lead and backing vocals and drums, for example (→ Connecting mics)

2. Synthesizers and other instruments (→ Connecting synthesizers and effects)
3. MIDI devices, including keyboards and controllers (→ Connecting MIDI devices)
4. Powered monitors and PA systems, for example (→ Connecting headphones, powered monitors and mixers)
5. External effects (→ Connecting external effects)
6. Computer, smartphone or tablet (→ Connecting computers, smartphones and tablets)
7. AC adapter (→ Connecting an AC adapter)
8. Headphones (→ Connecting headphones, powered monitors and mixers)

Signal flow



1 Recording files (red)

Channel inputs 1–8 and the master outputs are recorded on the microSD card.

The files played back on the L6max depend on the Recorder Mode setting at the time of recording. When using the default “Multi Track” setting, each track will be played back, so EQ and level adjustments can be made again. When using “Master Only”, MASTER L/R recording files will be played.

The master volume and compressor on/off state affect MASTER L/R recording files so be aware when adjusting the master volume and compressor on/off state. (→ Selecting the type of files recorded)

2 USB input (light blue)
When in use as an audio interface, these sounds are input to the computer, smartphone or tablet.

3 USB output (blue)
When in use as an audio interface, these sounds are output from the computer, smartphone or tablet.

4 MONO button
The handling of the L and R signals of channels 5 and 6 can be switched between stereo and mono.

5 Equalizer
The tones of channels 1–8 can be adjusted.

6 Muting
Channels 1–8 can be muted.

7 Levels
The levels of channels 1–8 can be adjusted.

8 AUX 1/2 output (orange)
Signals can be output from the AUX SEND 1 and 2 jacks. The level sent from each channel can be adjusted.
The AUX 1 and 2 output positions can be switched to before LEVEL adjustment. (→ Selecting the signal send positions for AUX SEND 1 and 2)

9 Effect (green)
Signals can be sent to the internal effect (except AI Noise Reduction). The level sent from each channel can also be adjusted.

10 SUB-MIX
The levels of signals from channels 1–8 output from the SUB-OUT jack can be adjusted.

11 Panning
The stereo positions of channels 1–8 can be adjusted.

12 MASTER L/R (black)
Signals are output to the MASTER jacks.

13 SUB-MIX L/R (black)
This is output from the SUB OUT jack.

14 SOUND PAD L/R and SOUND PAD levels (SOUND PAD 1–4 levels and overall SOUND PAD level) (purple)
Sound pad signals are output. The SOUND PAD 1–4 levels (→ Setting sound pad levels) as well as the overall SOUND PAD level can be adjusted.

15 Built-in effect / effect level
An effect can be selected from 6 types. The level of the internal effect (except AI Noise Reduction) can also be adjusted.

⑯ Compressor

This can increase the sound pressure of the mixed audio while preventing clipping.

⑰ MASTER volume

The MASTER volume can be adjusted.

⑱ MONITOR volume

The MONITOR volume can be adjusted.

⑲ SUB-OUT volume

The SUB-OUT volume can be adjusted.

⑳ SUB-OUT switch (MASTER/SUB-MIX)

This switches the signal output from the SUB-OUT jack to MASTER or SUB-MIX.

Preparing for use

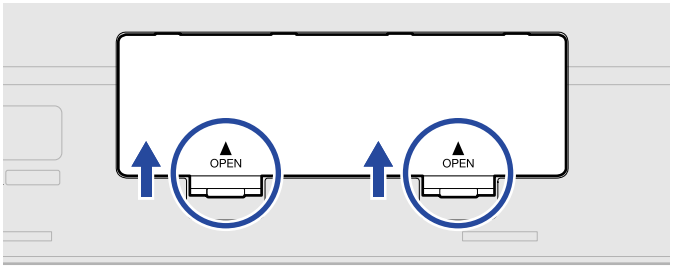
Supplying power

The L6max can operate using batteries or a power supply connected to the USB port (AC adapter, USB bus power or portable battery).
Power sources will be used in the following order of priority: USB port on right side, USB port on top, batteries.

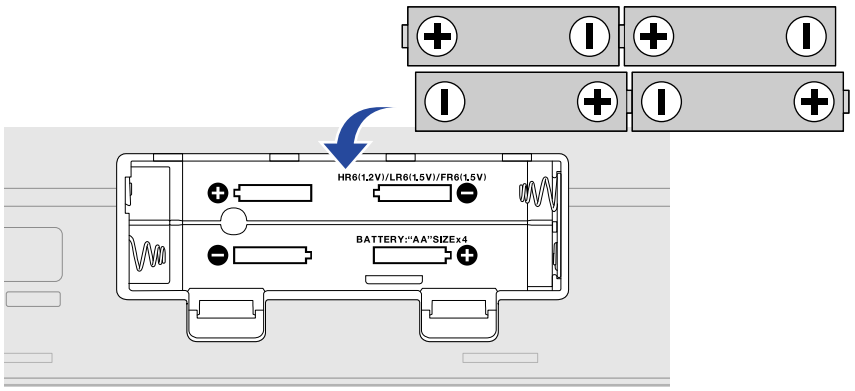
Installing batteries

To power the L6max with batteries, use 4 AA batteries.

1. With the power off, lift the 2 tabs to open the battery cover.



2. Install 4 AA batteries.



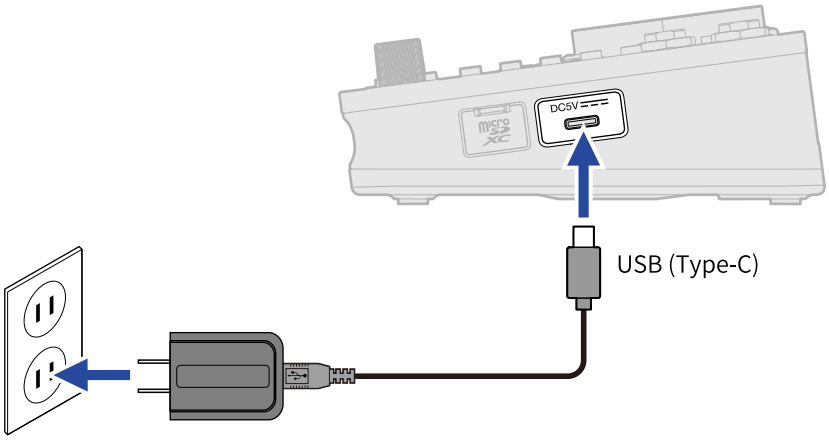
3. Replace the battery cover.

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 remaining battery charge can be checked on the display. (→ Top)

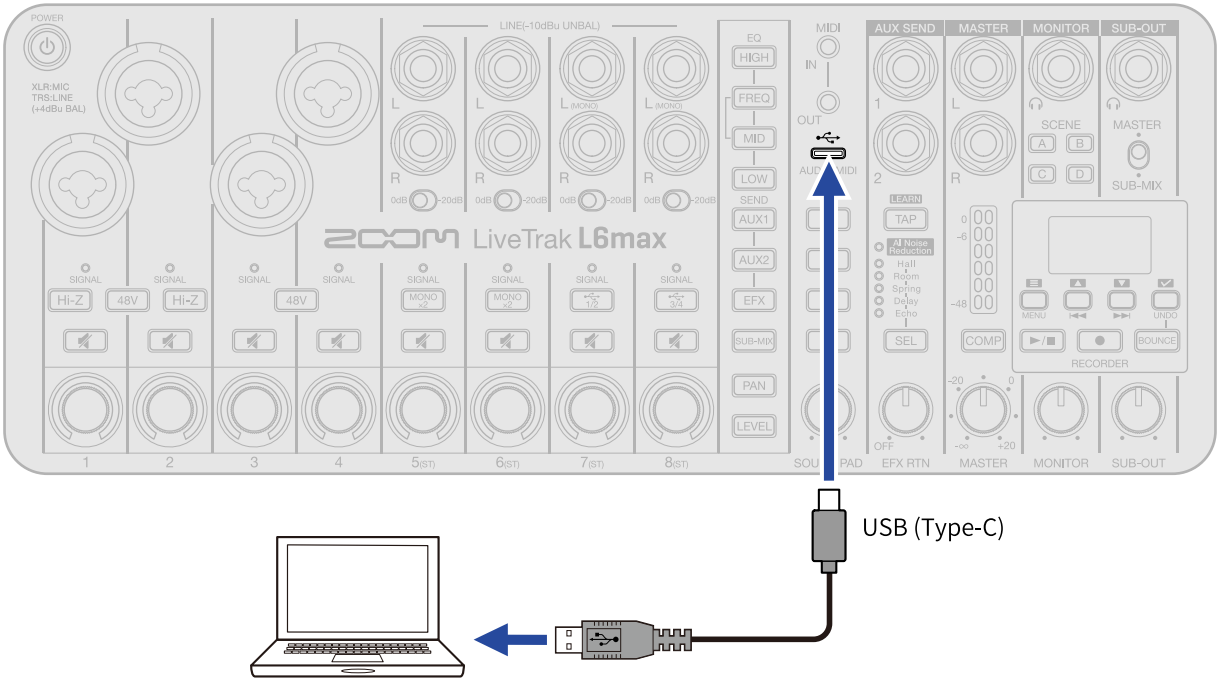
Connecting an AC adapter

Connect the cable of the specified AC adapter (AD-17) to the USB (Type-C) port on the right side of the unit, and connect the AC adapter to an outlet.



Using other power sources

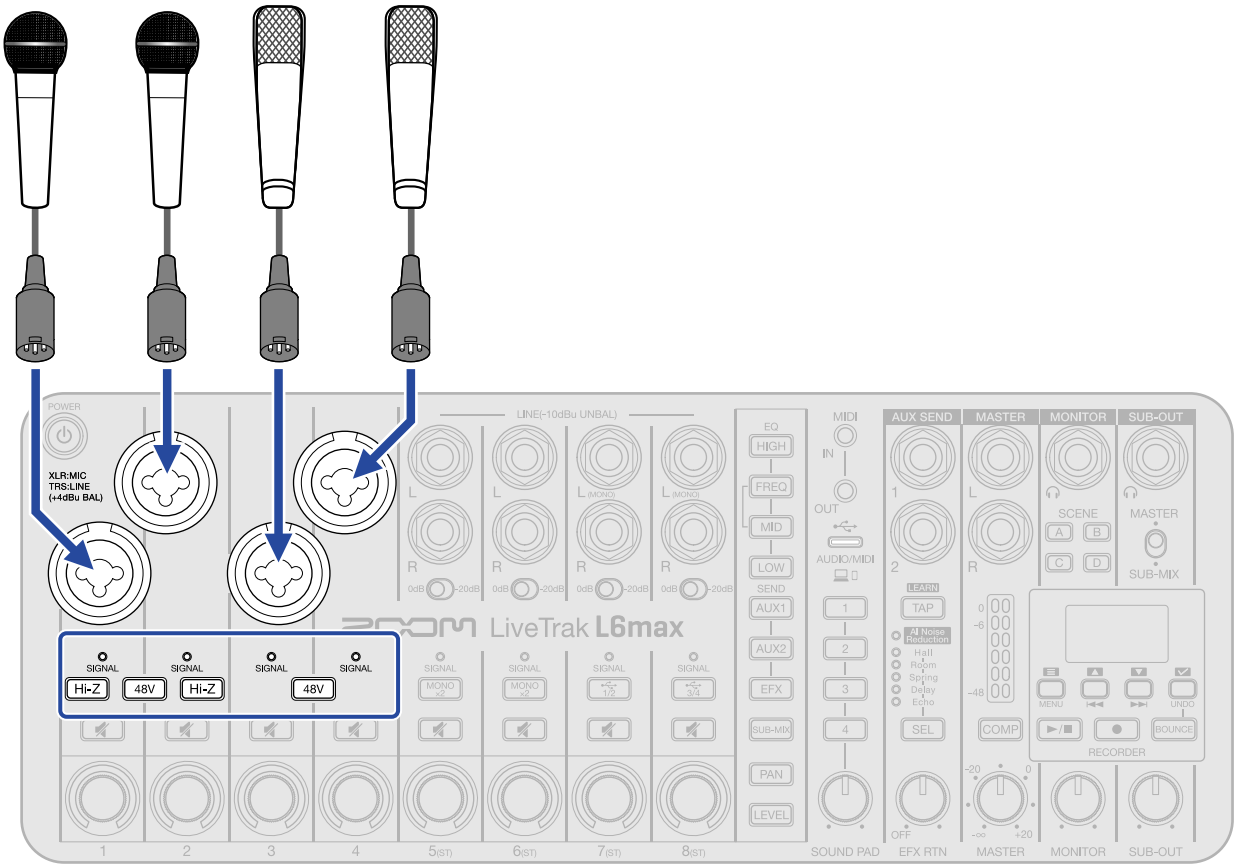
The L6max can be operated using USB bus power by connecting a computer to the USB (Type-C) port on the top of the unit. A 5V mobile battery (commercially-available) can also be used to provide power.



Making connections

Connecting mics

Connect dynamic and condenser mics with XLR plugs to the INPUT 1–4 jacks.



Phantom power (+48 V) can be supplied to condenser mics. To supply phantom power, press the 48V (phantom power) button so that it lights.

When connecting a guitar or bass to the input 1 or 2 jack, press its Hi-Z (high impedance) button so that it lights.

NOTE

- If the SIGNAL (SIGNAL) indicator lights red, move the mic farther from the sound source or make other adjustments so that the SIGNAL (SIGNAL) indicator stops lighting red.
- When connecting devices that are not compatible with phantom power, do not turn on the phantom setting. Doing so could damage the device.
- To make handling levels of input signals easier with the L6max, input levels are set according to the types of plugs connected to the input jacks. Use mic level devices when connecting with XLR plugs.

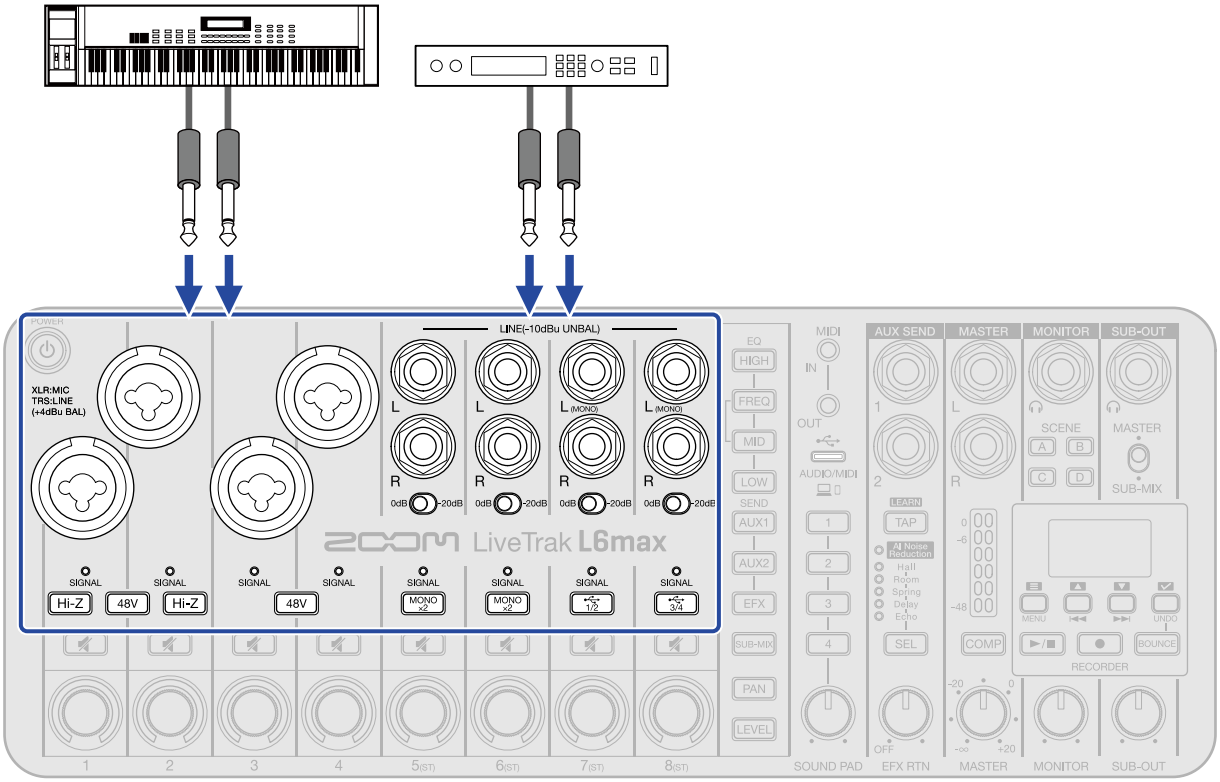
HINT

Phantom power is a function that supplies power to devices that require an external power supply, including condenser mics.

+48 V is standard.

Connecting synthesizers and effects

Synthesizers, effects and other line-level devices can be connected to INPUT 1–8 jacks.
1–4 are mono inputs and 5–8 are stereo inputs.



■ Connecting to INPUT 1–4 jacks

- Use TRS plugs to connect devices to inputs.
- Phantom power (+48 V) can be supplied. To supply phantom power, press the 48V (phantom power) button so that it lights.
- When connecting a guitar or bass to the input 1 or 2 jack, press its Hi-Z (high impedance) button so that it lights.
- To make handling levels of input signals easier, input levels are set according to the types of plugs connected to the INPUT 1–4 jacks. Use line level devices when connecting with TRS plugs.

■ Connecting to INPUT 5/6 (L/R) jacks

- Connect stereo devices to paired L/R input jacks. These can be used with TS plugs.
- The PAD switches can be used to change the attenuations of input signals from connected equipment to 0 dB or –20 dB.
- Two mono devices each can also be connected to INPUT 5 and 6. When doing this, press the MONO ×2 (MONO ×2) button.

■ Connecting to INPUT 7/8 (L (MONO)/R)

- Connect stereo devices to paired L/R input jacks. These can be used with TS plugs.

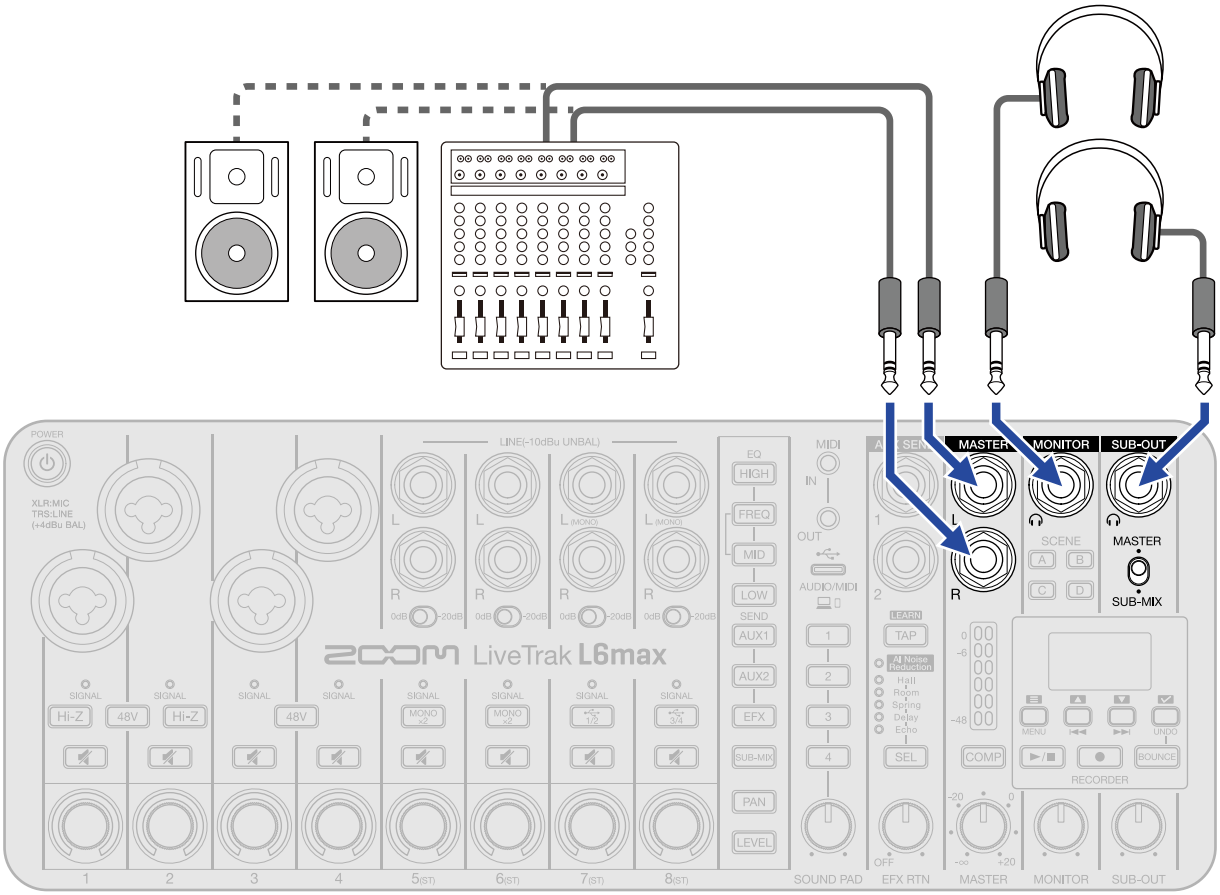
- The PAD switches can be used to change the attenuations of input signals from connected equipment to 0 dB or –20 dB.
- Connect mono devices to the L (MONO) jacks.
- Stereo audio can also be input from a computer, smartphone or tablet. Press the (USB 1/2) button to input using INPUT 7, and press the (USB 3/4) button to input using INPUT 8. (→ Using as an audio interface)

NOTE

- Direct input of passive guitars and basses is not supported. Connect these instruments through another mixer or effects device.
- If a SIGNAL (SIGNAL) indicator lights red, lower the level of the device connected to that channel or make other adjustments so that the SIGNAL (SIGNAL) indicator stops lighting red.

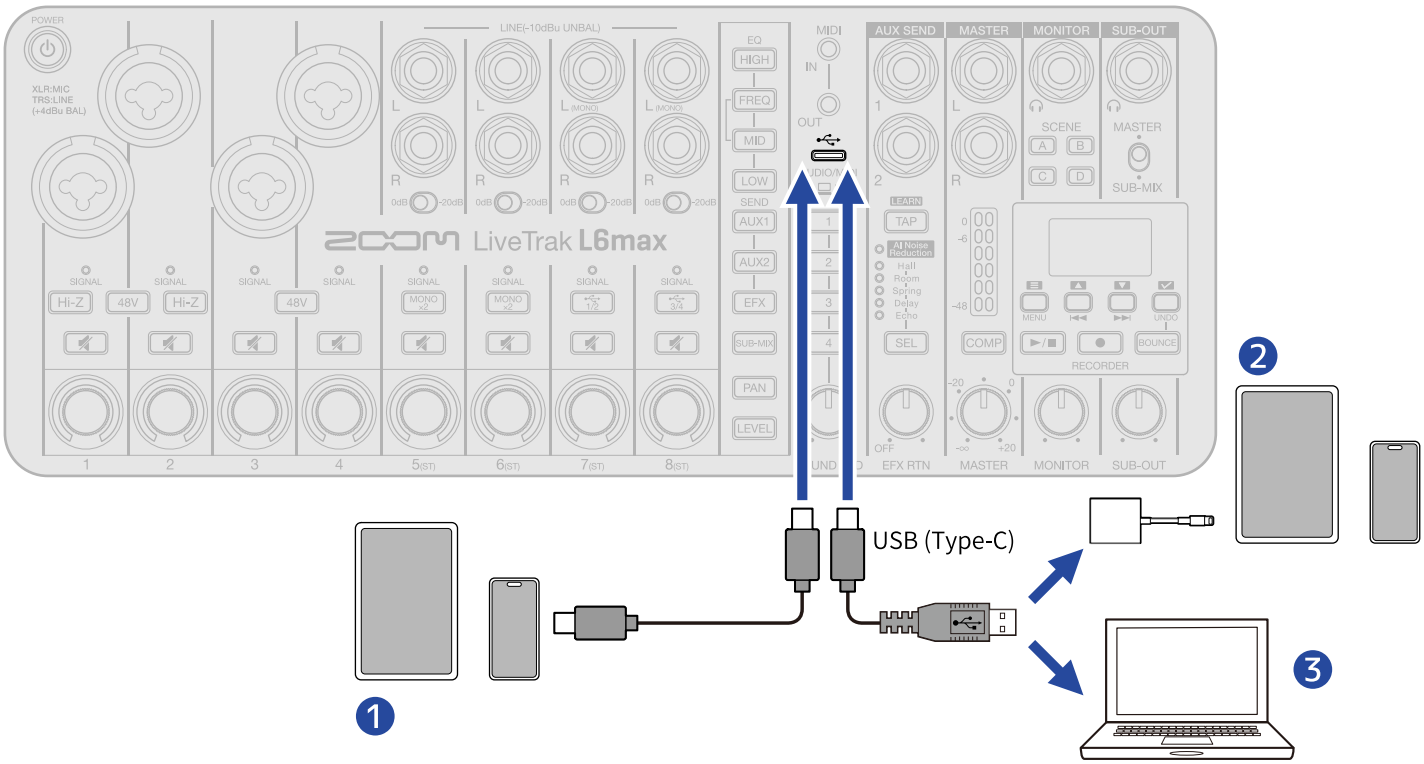
Connecting headphones, powered monitors and mixers

Stereo audio that is a mix of every channel can be output to powered monitors or a PA system connected to the MASTER output jacks.
Headphones can also be connected to the MONITOR and SUB-OUT jacks.



Connecting computers, smartphones and tablets

Computers, smartphones and tablets can be connected to the USB port on the top of the L6max.



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

NOTE

- Use a USB cable that supports data transfer.
- Use a Lightning to USB 3 Camera Adapter to connect to an iOS/iPadOS device with a Lightning connector.
- When using this with a smartphone or tablet, connect an AC adapter to provide power. (→ Connecting an AC adapter)

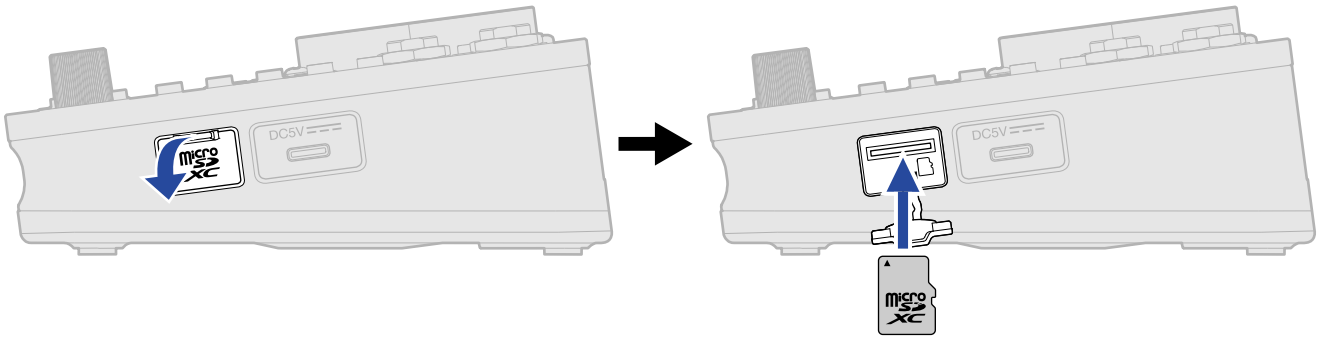
By connecting the L6max to a computer, smartphone or tablet, the following uses are possible.

- Install the ZOOM L6 Editor on a computer and use it to make sound pad settings and other detailed settings. (→ Using the app)
- L6max input sounds can be sent to a computer, smartphone or tablet and playback signals from that device can be output from the L6max. (→ Using as an audio interface)
- Files on the microSD card in the L6max can be checked and moved using a computer. (→ Transferring files to computers)
- MIDI signals can be exchanged with DAWs and other software on computers, smartphones and tablets and used to control the L6max. (→ Using MIDI devices)

Inserting microSD cards

By inserting a microSD card, the sound input on each channel as well as a stereo mix can be recorded. In addition, audio files to be used by the sound pads can be saved on the microSD card and assigned to them.

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



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 do so with the correct orientation and facing.
- When removing a microSD card, be careful not to let it fly out.
- Recording and playback, including sound pad playback, are not possible when a microSD card is not loaded.
- Always use the L6max to format microSD cards in order to maximize their performance after purchasing them new or using them with a different device. (→ Formatting microSD cards)
- The following recording media formats are supported.
  - microSDHC memory cards
  - microSDXC memory cards

  See the ZOOM website (zoomcorp.com/help/l6max) for information about microSD cards that have been confirmed to work with this unit.

Use examples

■ Using as a synth mixer

Used to mix multiple synthesizers, it can be manipulated in live performances and recording.

■ Live streaming of podcasts

Using mics, sound can be streamed in real time. (→ Using as an audio interface)
While streaming audio in real time, the L6max can simultaneously record.

Using in the field

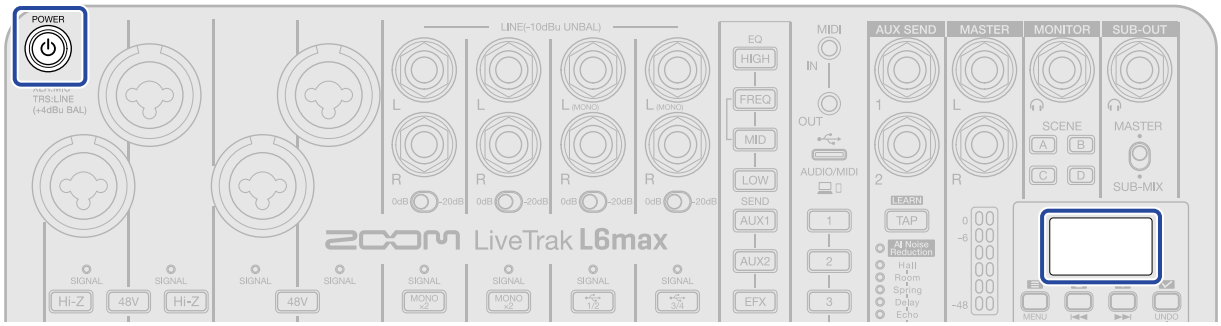
Powered by regular batteries or a portable battery, the L6max can be used to capture audio in the field. The captured audio can be recorded on a microSD card and transferred to a computer for editing and distribution.

Turning the power on/off

Turning on the power

1. Press the (POWER) button until the display lights.

   This turns on the power for the L6max.



NOTE

The power will automatically turn off if the L6max is unused for 10 hours. To keep the power on at all times, set Auto Power Off to “Never”. (→ Turning the power off automatically (Auto Power Off))

■ Turning off the power

1. Press the (POWER) button until the display becomes unlit.

   This turns off the power for the L6max.

NOTE

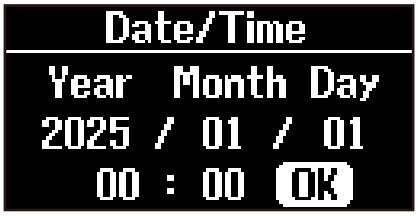
L6max settings are always saved automatically. The state when the power was turned off will be restored the next time the power is turned on.

Setting date/time and battery type (making initial L6max settings before use)

Set the date/time and battery type when a screen to set them is shown the first time the power is turned on after purchase or after the L6max has been reset to factory defaults.
The date and time will be added to the name of the folder where recording files are saved. Moreover, the type of batteries used in the L6max must be selected correctly to enable accurate display of remaining battery charge.

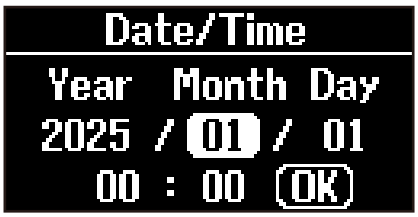
1. Press the (POWER) button until the display lights.
   This opens the Date/Time Setting Screen.

2. Use (operation button 2) and (operation button 3) to select the desired setting item, and press UNDO (operation button 4) to confirm selection.



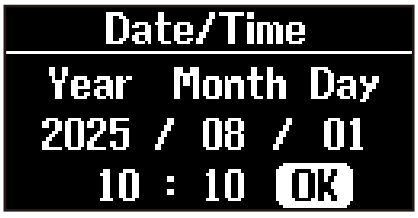
   The characters appear highlighted.

3. Use (operation button 2) and (operation button 3) to change the value, and press UNDO (operation button 4) to confirm it.



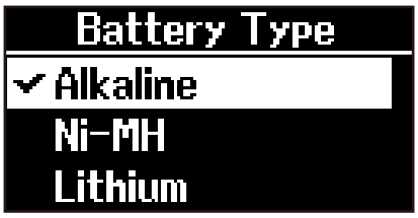
4. Repeat steps 2–3 to set the date and time.

5. After setting all items, use (operation button 2) and (operation button 3) to select the OK (OK) button on screen, and press UNDO (operation button 4) to confirm.



This confirms the date and time.
Next, set the type of battery being used.

6. Use (operation button 2) and (operation button 3) to select the type of battery used, and press (operation button 4) to confirm it.



- “Alkaline”: alkaline batteries
- “NiMH”: nickel-metal hydride batteries
- “Lithium”: lithium batteries

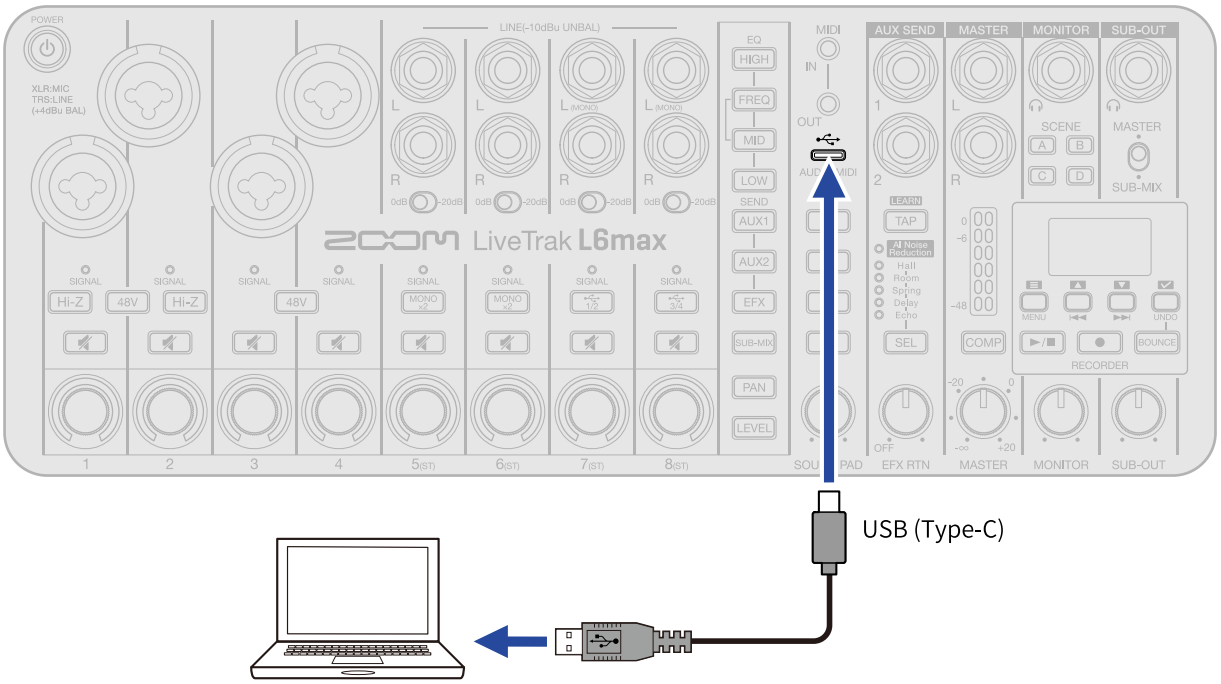
This sets the type of batteries used. This opens the Home Screen.

NOTE
If power is not supplied by an AC adapter or batteries for a long time, and the power supply for date and time retention becomes depleted, data stored in the unit will be reset.
If the Date/Time Setting Screen opens when the power is turned on, make the settings again, or connect the L6max with a computer using a USB cable (Type-C) and launch L6 Editor to acquire the date and time.
(→ Setting the date and time using the app)

Using the app

Install the ZOOM L6 Editor app on a computer and use it to make detailed settings.

1. Use a USB cable (Type-C) to connect the USB port on the top of the L6max to the computer.

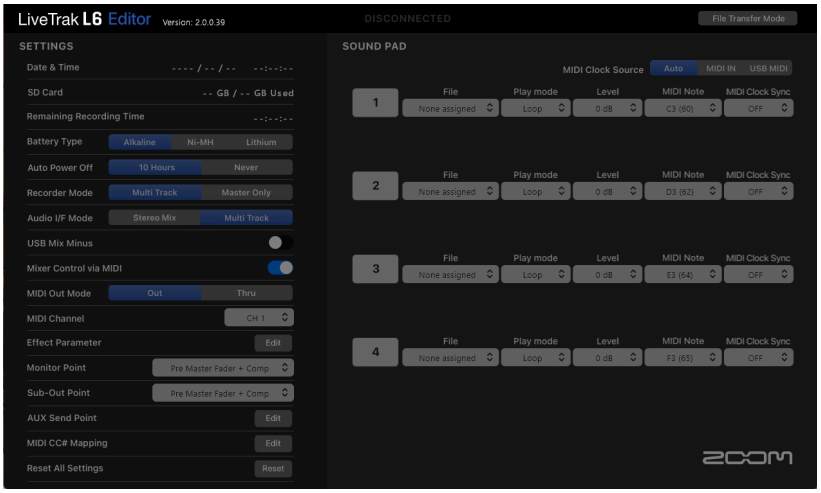


2. Download “ZOOM L6 Editor” from zoomcorp.com/help/l6max to the computer.

3. Launch the installer and follow the instructions to install ZOOM L6 Editor.

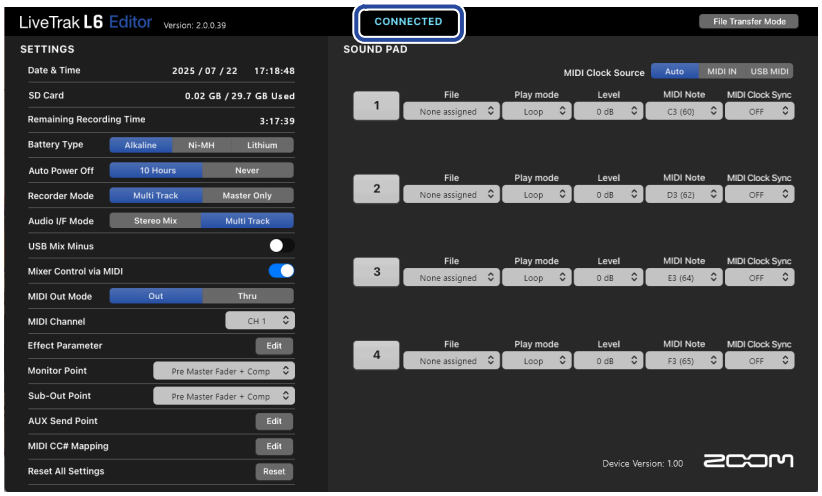
> **NOTE**
> See the app “Installation Guide” for detailed installation procedures.

4. Launch ZOOM L6 Editor.



5. Turn on the L6max power. (→ Turning on the power)

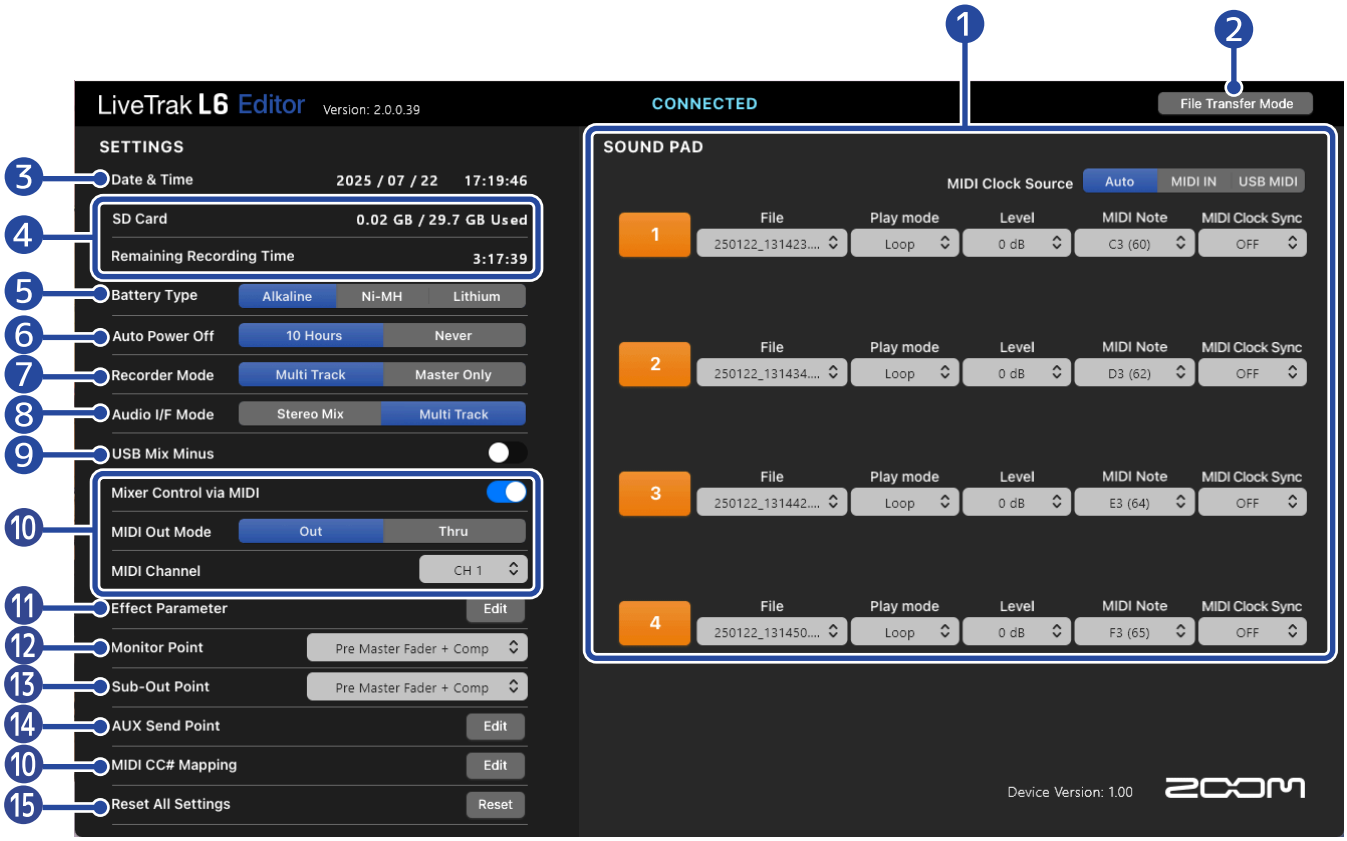
“CONNECTED” will appear at the top of ZOOM L6 Editor when the L6max is connected, enabling use of the app to set it.



NOTE

- If a DAW or another application that uses MIDI ports is launched before ZOOM L6 Editor, the MIDI ports needed by ZOOM L6 Editor could be used, preventing proper connection.
  If this happens, launch ZOOM L6 Editor before the other app, or set that app not to use the MIDIIN3 and MIDIOUT3 (ZOOM L6max) ports. (→ USB MIDI port overview)
- The L6max can be connected to ZOOM L6 Editor version 2.0.0 and higher. Update it if an older version is being used.

App screen overview



1 SOUND PAD settings (→ Using sound pads)
Assign audio files to sound pads and make settings for them, including play mode and level.

2 File transfer mode (→ Transferring files to computers)
Files can be transferred when the L6max is connected to a computer.

3 Date & Time (→ Setting the date and time)
This shows the date and time set for the L6max. (When ZOOM L6 Editor is launched, the date and time for the L6max is acquired from the computer and set automatically.)

4 microSD card data (→ Checking the microSD card state)
This shows the capacity and open space of the microSD card along with the available recording time.

5 Battery type (→ Setting the type of batteries used)
Select the type of batteries used in the L6max.

6 Auto Power Off (→ Turning the power off automatically (Auto Power Off))
The power can be set to turn off automatically if it is not used for the specified amount of time.

7 Recorder mode (→ Selecting the type of files recorded)
Select the channels to be recorded.

8 Audio interface setting
This sets the mode of the L6max when used as an audio interface.

⑨ USB Mix Minus (→ Setting the USB Mix Minus function)
This turns on/off the USB Mix Minus function.

⑩ MIDI settings (→ Using MIDI devices)
Make settings related to MIDI.

⑪ Internal effect parameter settings (→ Adjusting internal effect parameters)
Internal effect parameters can be adjusted.

⑫ Monitor Point
The signal sent to MONITOR can be selected. (→ Selecting the signal sent to MONITOR (Monitor Point))

⑬ Sub-Out Point
The signal sent to SUB-OUT can be selected. (→ Selecting the signal sent to SUB-OUT (Sub-Out Point))

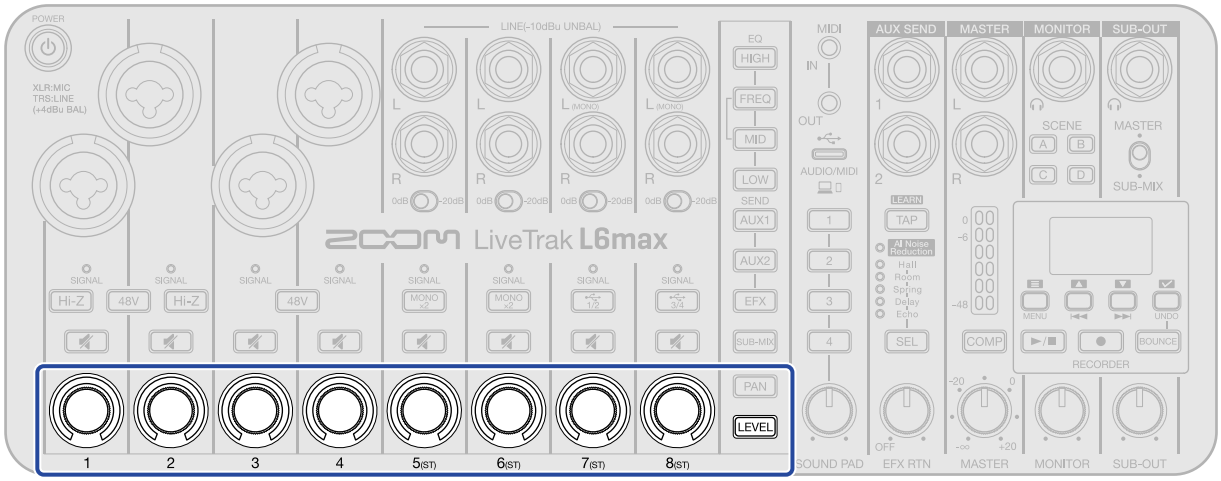
⑭ Selection of signals sent to AUX SEND 1/2 jacks (→ Selecting the signal send positions for AUX SEND 1 and 2)
The signal sent from each channel to the AUX SEND 1/2 jacks can be set to before or after level adjustment.

⑮ Resetting (→ Restoring factory default settings)
The L6max settings can be restored to their factory defaults.

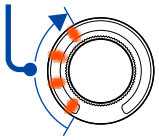
Mixing

Adjusting channel levels

1. Press the LEVEL (LEVEL) button, lighting it, and then use the (encoders) to adjust the levels of the desired channels.



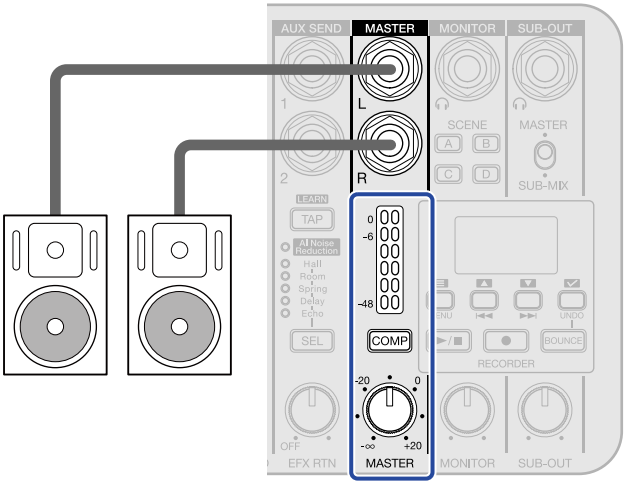
Adjusted values can be confirmed with the indicators.



Adjusting the overall and monitoring levels

Sound mixed on the L6max can be output to powered monitors or a PA system connected to the MASTER output jacks. It can also be monitored using headphones connected to the MONITOR output and SUB-OUT jacks.

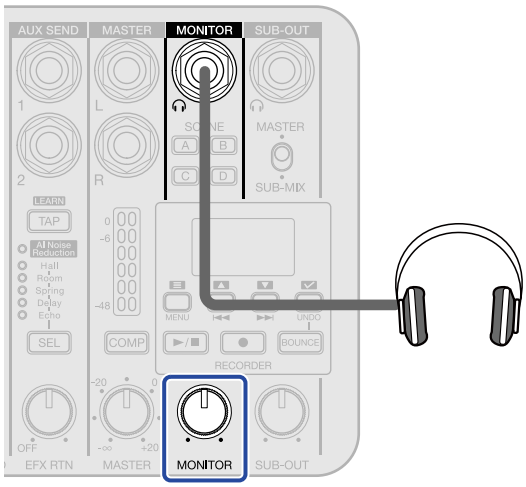
Adjusting the level of the MASTER output jacks



- Use the 

(MASTER) knob to adjust the audio level output from the MASTER output jacks in a range from −∞ to +20 dB. Use the level meters to confirm the levels output from the MASTER output jacks. Adjust it so that they do not light red.
- Press COMP (COMP) button to light it, increasing the sound pressure on the audio output from the MASTER output jacks while preventing clipping.

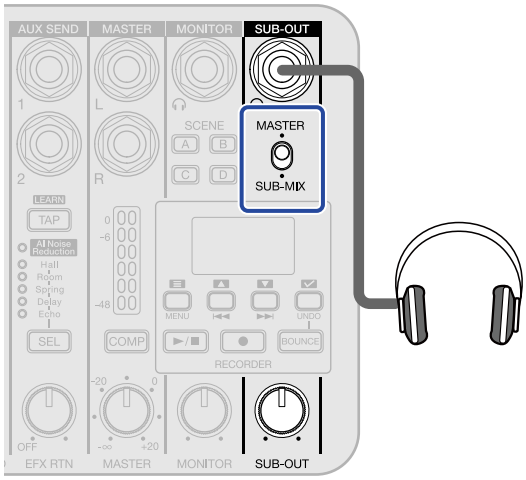
Adjusting the level of the MONITOR output jack



- Use the 

(MONITOR) knob to adjust the level of the audio output from the MONITOR output jack.

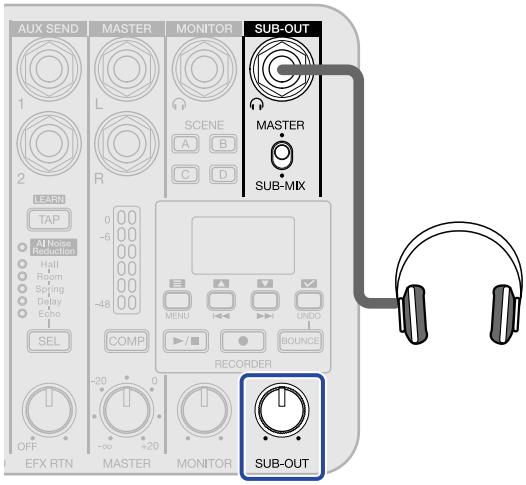
Selecting the audio output from the SUB-OUT jack



- Use the MASTER / SUB-MIX (SUB-OUT) switch to select the desired audio for output.

Setting value	Explanation
MASTER	The same audio as output from the MASTER is output.
SUB-MIX	The audio set using the SUB-MIX button is output.

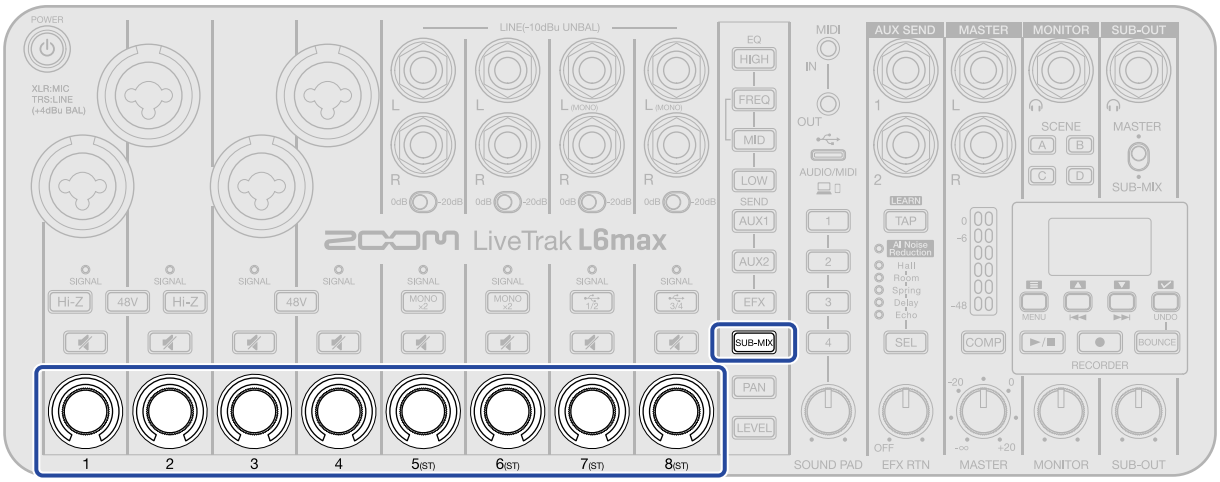
Adjusting the SUB-OUT jack level



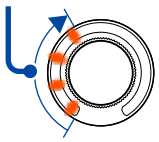
- Use the SUB-OUT knob to adjust the level of the audio output from the SUB-OUT jack.

Adjusting SUB-MIX levels

1. Press the SUB-MIX (SUB-MIX) button, lighting it, and then use the (encoders) to adjust the levels of the desired channels.

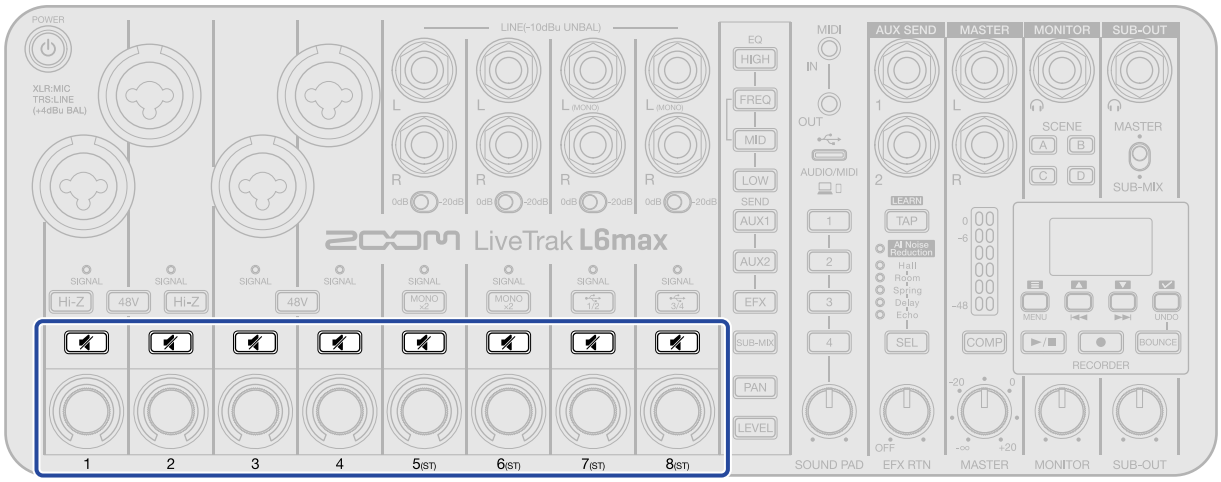


Adjusted values can be confirmed with the indicators.



Muting channels

1. Press the (mute) button of the channel to be silenced to light it.

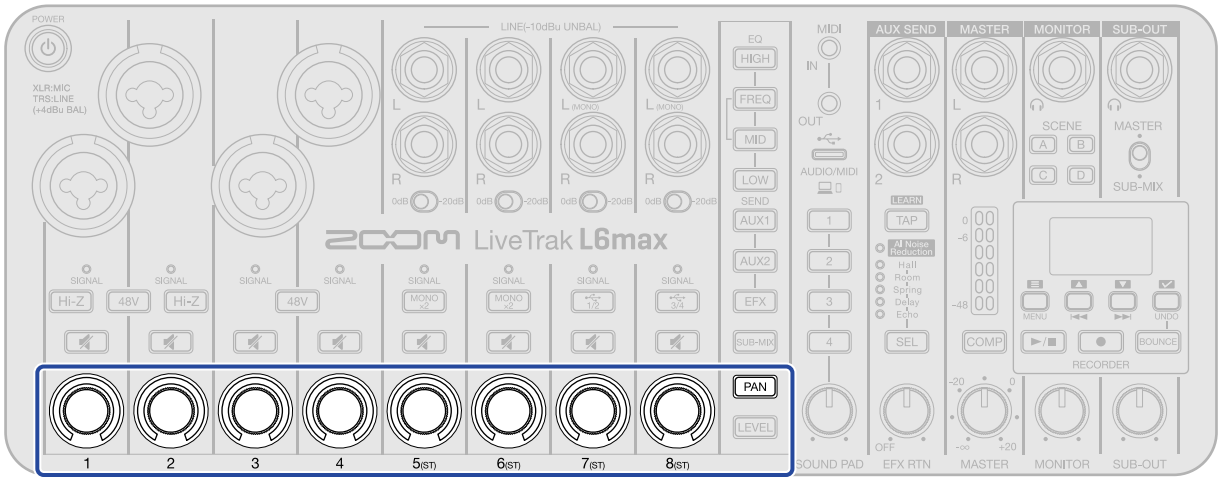


This mutes sound from the selected channel. Multiple channels can be muted.

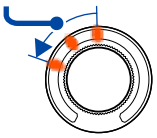
Press a lit (mute) button to unmute that channel.

Adjusting panning for each channel

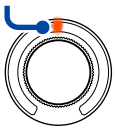
1. Press the PAN (PAN) button, lighting it, and then use the (encoders) to adjust the left-right positions of the desired channels.



Adjusted values can be confirmed with the indicators.



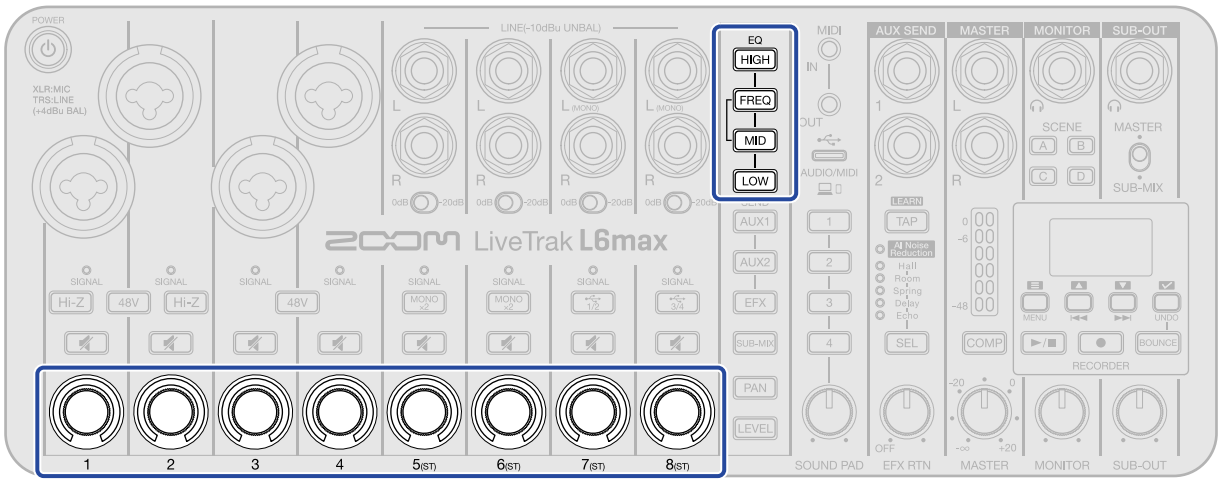
When set to the center, the middle indicator lights.



Adjusting channel tone (EQ)

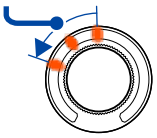
Frequency bands can be boosted/cut to adjust the tones of each channel.

1. Press the button for the desired parameter (HIGH (HIGH), FREQ (FREQ), MID (MID) or LOW (LOW)) to light it, and then use the encoder for the desired channel to boost/cut it.

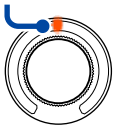


Turn the (encoder) right to boost it or left to cut it.

Adjusted values can be confirmed with the indicators.



When the middle indicator lights (the center value), the parameter is neither boosted nor cut.



- HIGH (HIGH) button: Boost/cut high frequencies.
- FREQ (FREQ) button: Adjust the middle frequency of the mid-band (100 Hz – 8 kHz) that is boost/cut.
- MID (MID) button: Boost/cut middle frequencies.
- LOW (LOW) button: Boost/cut low frequencies.

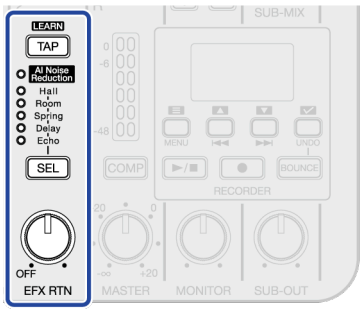
Using effects

The internal effects of the L6max can be used on every channel. In addition, two external effects can be connected and applied to sounds.

Using internal effects

The internal effect level can be adjusted.

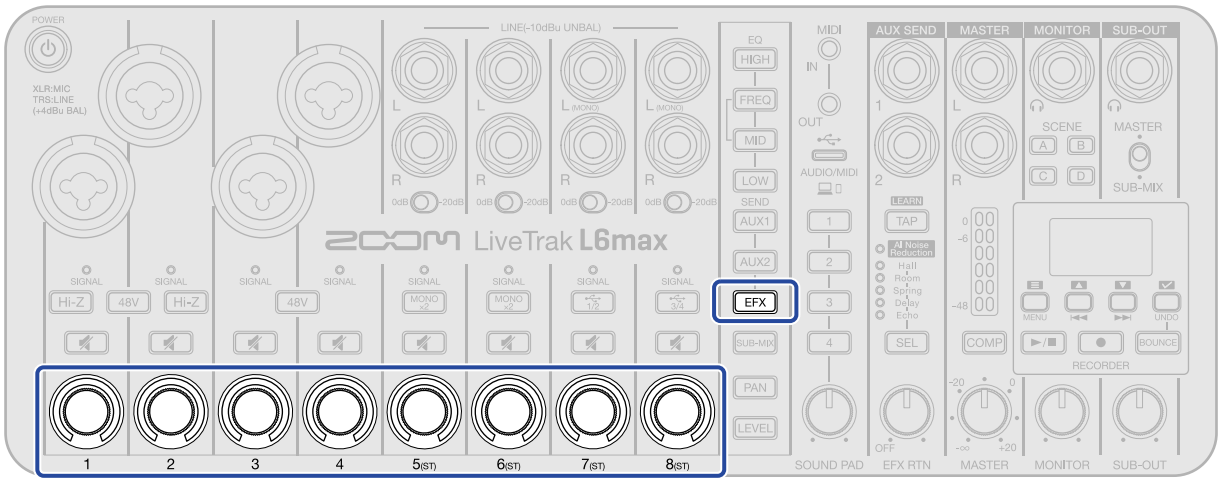
1. Press the SEL (SEL) button repeatedly to select an internal effect.
The indicator lights for the selected internal effect.



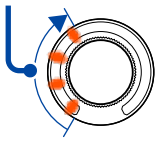
- AI Noise Reduction (→ Using AI Noise Reduction)
- Hall: Hall reverb (dense reverb)
- Room: Room reverb (simulates the echoes of a chamber)
- Spring: Spring reverb (sound modeled on a '63 Fender Reverb)
- Delay: Digital delay (supports long delay times up to 2000 ms)
- Echo: Tape echo (simulates the effect of a tape echo)

- When the “Delay” or “Echo” internal effect is selected, by tapping the LEARN TAP (TAP) button, the delay time can be set to the tapped tempo (tap tempo function).
  The LEARN TAP (TAP) button blinks at the set delay time tempo.
  The tempo also follows MIDI CLOCK. (→ Connecting MIDI devices)
- Use the OFF EFX RTN (EFX RTN) knob to adjust the level of the internal effect.
- The parameters of the internal effects can also be adjusted. (→ Adjusting internal effect parameters)

2. Press the EFX (EFX) button, lighting it, and then use the (encoders) to adjust the amounts sent to the effect from the desired channels.



How much the effect is applied can be adjusted by the send amount.
Adjusted values can be checked with the indicators.



HINT

A send signal can be muted by pressing the (mute) button for the channel while pressing the EFX (EFX) button, lighting that (mute) button.

When the send is muted, the (mute) button will light while the EFX (EFX) button is pressed.

To cancel muting, while the EFX (EFX) button is pressed, press a lit (mute) button to make it unlit.

Turning an (encoder) to adjust the send amount will also cancel muting.

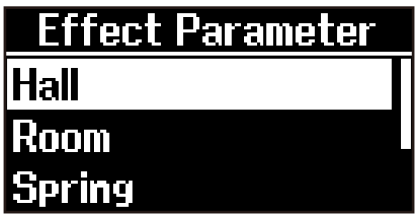
Adjusting internal effect parameters

1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select “Mixer”, and press UNDO (operation button 4) to confirm.

3. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select “Effect Parameter”, and press UNDO (operation button 4) to confirm.

4. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select the desired parameter, and press UNDO (operation button 4) to confirm selection.



5. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select the desired effect type, and press UNDO (operation button 4) to confirm selection.

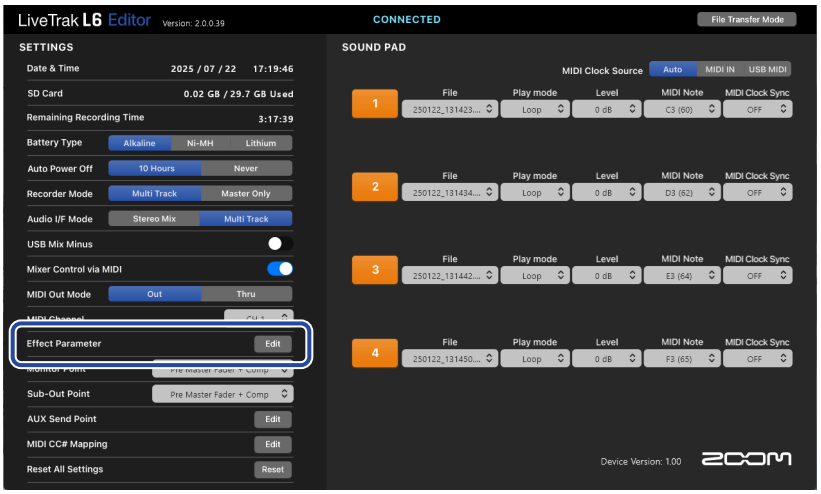
6. Use (operation button 2) and (operation button 3) to select the parameter value, and press (operation button 4) to confirm it.

1. Hall (hall reverb)
   - DECAY sets the reverb duration.
   - TONE adjusts the tone.
2. Room (room reverb)
   - DECAY sets the reverb duration.
   - TONE adjusts the tone.
3. Spring (spring reverb)
   - DWELL adjusts the level input to the reverb.
   - TONE adjusts the tone.
4. Delay (digital delay)
   - TIME sets the delay time.
   - FEEDBACK adjusts the amount of feedback.
   - The tempo also follows MIDI CLOCK. (→ Connecting MIDI devices)
5. Echo (tape echo)
   - TIME sets the delay time.
   - REPEAT adjusts the number of repetitions.
   - The tempo also follows MIDI CLOCK. (→ Connecting MIDI devices)

Adjusting internal effect parameters using the app

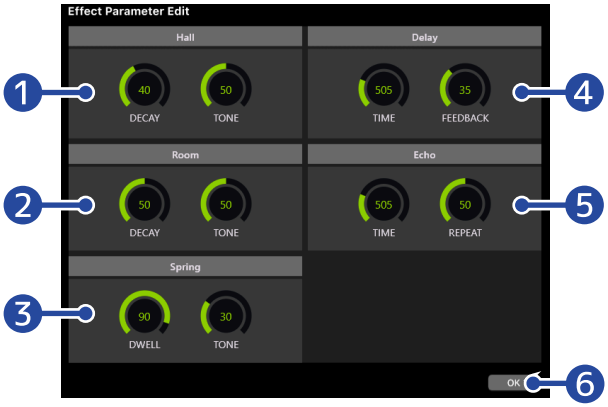
1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor on the computer. (→ Using the app)

2. Click “Edit” for “Effect Parameter”.



This opens a screen where effect parameters can be edited.

3. Adjust effect parameters,



To adjust the parameters, drag the knobs or click the numbers and input values.

1 Hall (hall reverb)

- DECAY sets the reverb duration.
- TONE adjusts the tone.

2 Room (room reverb)

- DECAY sets the reverb duration.
- TONE adjusts the tone.

3 Spring (spring reverb)

- DWELL adjusts the level input to the reverb.
- TONE adjusts the tone.

4 Delay (digital delay)

- TIME sets the delay time.
- FEEDBACK adjusts the amount of feedback.
- The tempo also follows MIDI CLOCK. (→ Connecting MIDI devices)

5 Echo (tape echo)

- TIME sets the delay time.
- REPEAT adjusts the number of repetitions.
- The tempo also follows MIDI CLOCK. (→ Connecting MIDI devices)

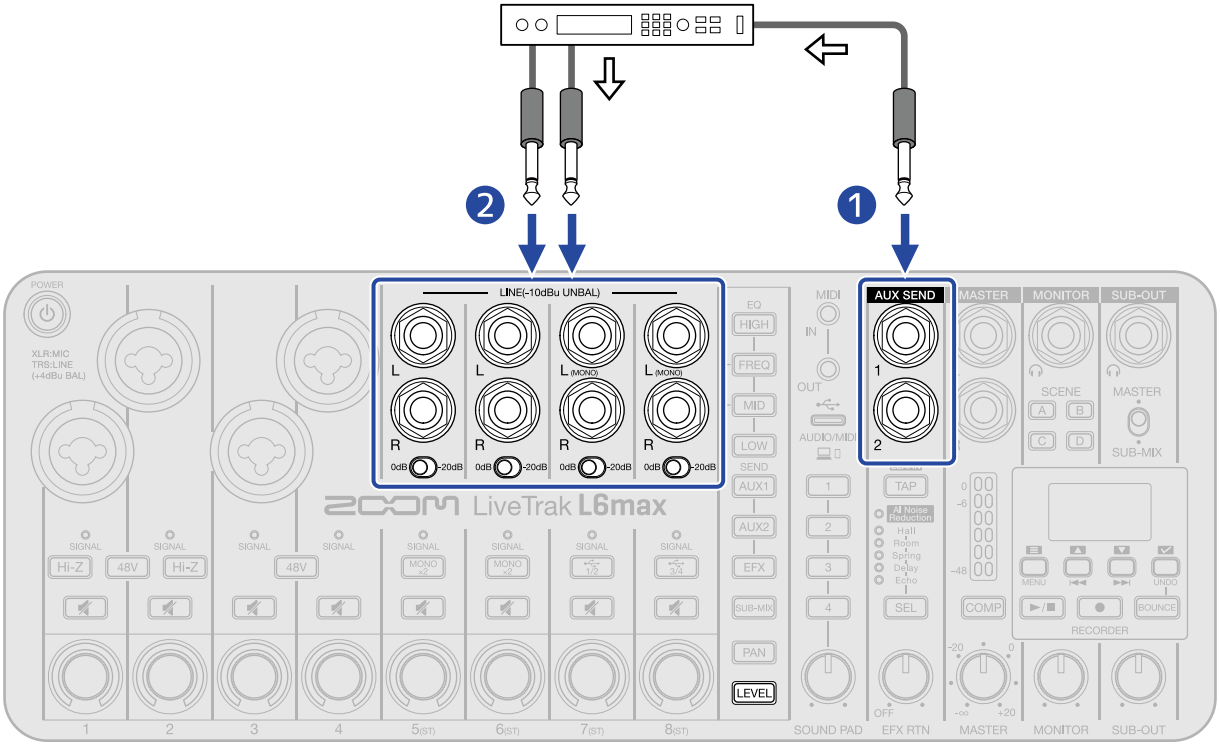
6 OK

Click this to apply the settings and return to the previous screen.

Using external effects

Up to two external effects can be connected and applied to each channel.

Connecting external effects



⇦: audio signal flow

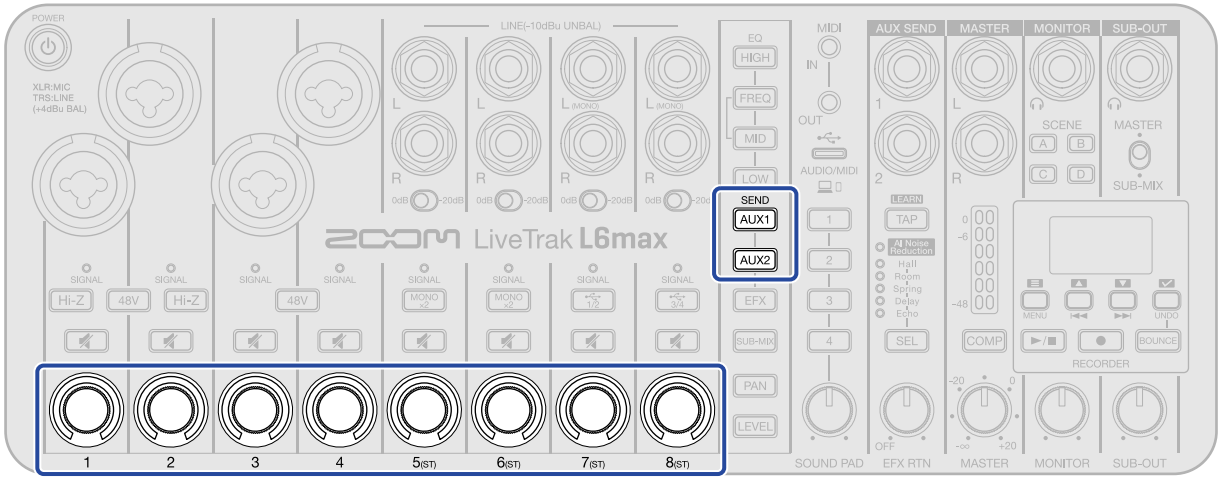
1. **Connect the L6max AUX SEND 1 or 2 jack to the input jack of an external effect.**
   This sends channel signals from the L6max to the external effect.

2. **Connect the output jacks of the external effect to INPUT 5–8 jacks on the L6max.**
   This inputs audio from the external effect to channels 5–8. To adjust external effect levels, do so with the connected channels.
   The attenuations of input signals from connected equipment can be switched between 0 dB and –20 dB using the PAD switches.

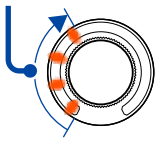
Using external effects

1. Adjust the levels of channels to which external effects are connected. (→ Adjusting channel levels)
   As necessary, adjust the panning (→ Adjusting panning for each channel) and EQ (→ Adjusting channel tone (EQ)).

2. Press the AUX1 (AUX1) or AUX2 (AUX2) button, lighting it, and then use the  (encoders) to adjust the amounts sent to the external effect from the channels to be affected.



How much the effect is applied can be adjusted by the send amount.
Adjusted values can be checked with the indicators.



NOTE
Always set the send amount to 0 for the channel that the external effect is connected to. (The default value is 0.)
Increasing this send level will create a feedback loop with the external effect and could cause loud sound to be output.

HINT

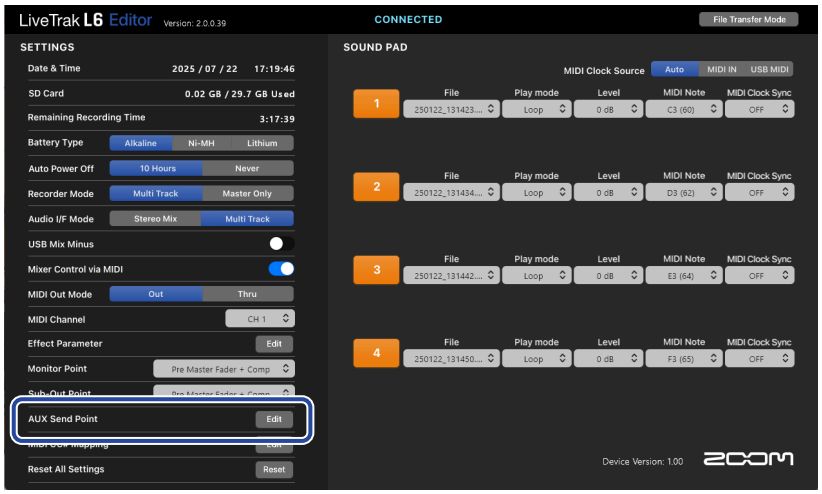
- While pressing the AUX1 (AUX1) or AUX2 (AUX2) button, press a (mute) button to light that and mute the send to the AUX SEND jack for that button.
  When the send is muted, the (mute) button will light while the AUX1 (AUX1) or AUX2 (AUX2) button is pressed.
  To cancel muting, while the AUX1 (AUX1) or AUX2 (AUX2) button is pressed, press a lit (mute) button to make it unlit. Turning an  (encoder) to adjust the send amount will also cancel muting.
- The signal sent from each channel to the AUX SEND 1/2 jacks can be set to either before or after level adjustment by the  (encoder). (→ Selecting the signal send positions for AUX SEND 1 and 2)

■ Selecting the signal send positions for AUX SEND 1 and 2

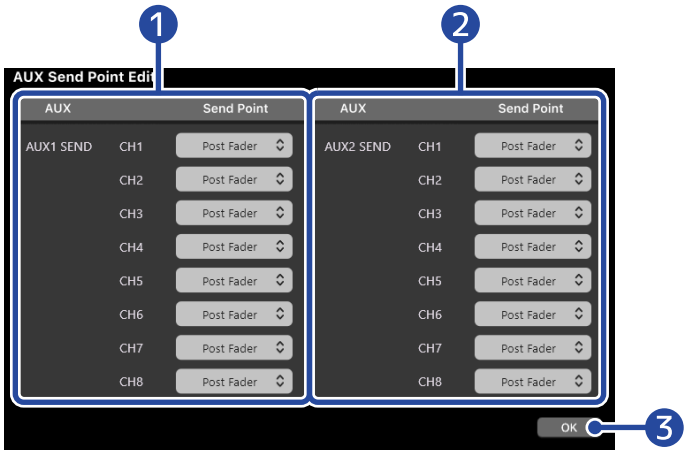
The signal sent from each channel to the AUX SEND 1/2 jacks can be set to either before or after level adjustment.

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor on the computer. (→ Using the app)

2. Click “Edit” for “AUX Send Point”.



3. Use the Send Point pull-down menus to select settings.
Selections can be made for each channel to both AUX SEND 1 and 2 jacks.



1. AUX SEND 1 jack settings
2. AUX SEND 2 jack settings
3. OK
Click this to apply the settings and return to the previous screen.

Setting value	Explanation
Pre Fader	Signals are sent to the AUX SEND 1/2 jacks before level adjustment. The send amounts will not be affected by adjusting the levels.
Post Fader	Signals are sent to the AUX SEND 1/2 jacks after level adjustment. The send amounts will be increased or decreased along with level adjustments.

Using AI Noise Reduction

By using AI noise reduction, vibrations picked up by mics, wind and other environmental noises as well as electronic instrument noise can be reduced.

1. Press the SEL (SEL) button repeatedly to select “AI Noise Reduction”.
   The AI Noise Reduction indicator will light.

2. Press the LEARN TAP (LEARN) button.
   The noise from the surroundings will be analyzed. Do not vocalize or play instruments during analysis (for 3 seconds as the blinking steadily speeds up). When analysis completes, it will stay lit and the function will be activated. Pressing the button again will make it blink, disabling AI Noise Reduction and resetting the analysis results.

NOTE

The amount that the AI Noise Reduction effect is applied to each channel cannot be adjusted. Moreover, the OFF EFX RTN (EFX RTN) knob cannot be used to adjust the level of this internal effect. It only affects the MASTER L/R outputs.

Selecting the signal sent to MONITOR (Monitor Point)

The MONITOR output point can be selected.

1. Press (MENU) (Operation button 1) on the Home Screen.
This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Mixer”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Monitor Point”, and press (UNDO) (operation button 4) to confirm.

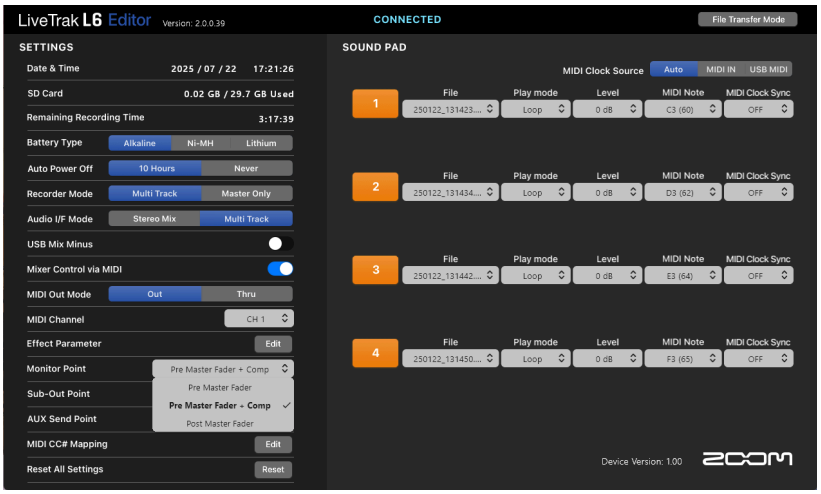
4. Use (operation button 2) and (operation button 3) to select the desired output point, and press (UNDO) (operation button 4) to confirm selection.

1. Pre Master Fader
   Signals are sent to the MONITOR before level adjustment by the MASTER OUT.
2. Pre Master Fader + Comp
   When the COMP (COMP) Button is on, the same compressor used on the MASTER is applied.
3. Post Master Fader
   Signals are sent to the MONITOR after level adjustment by the MASTER OUT.

Selecting the signal sent to MONITOR using the app (Monitor Point)

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Use the Monitor Point pull-down menu to select the desired output point.



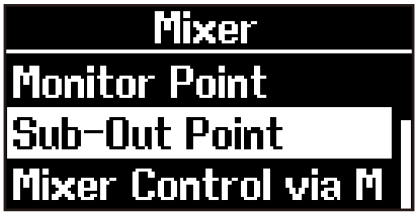
Selecting the signal sent to SUB-OUT (Sub-Out Point)

The SUB-OUT output point can be selected.

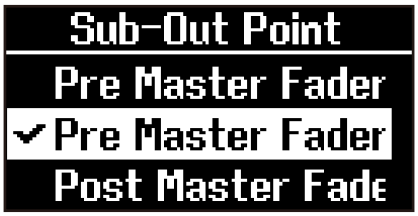
1. Press (MENU) (Operation button 1) on the Home Screen.
This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Mixer”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Sub-Out Point”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the desired output point, and press (UNDO) (operation button 4) to confirm selection.

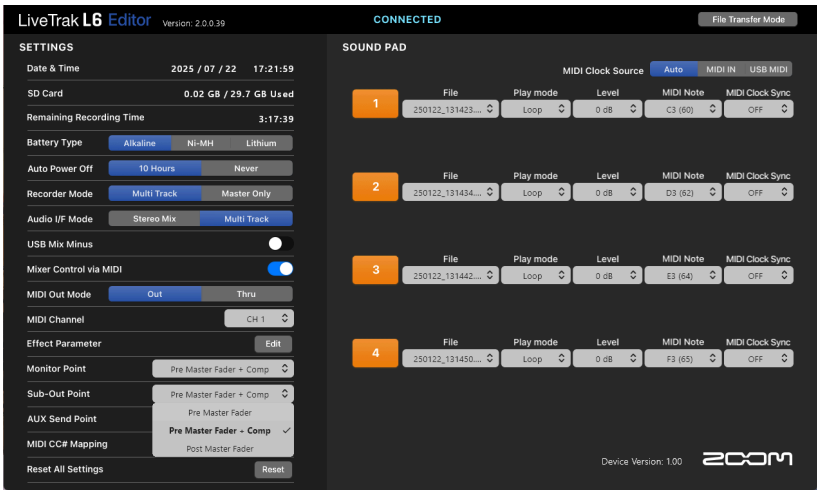


1. Pre Master Fader
   Signals are sent to the SUB-OUT before level adjustment by the MASTER OUT.
2. Pre Master Fader + Comp
   When the COMP (COMP) Button is on, the same compressor used on the MASTER is applied.
3. Post Master Fader
   Signals are sent to the SUB-OUT after level adjustment by the MASTER OUT.

Selecting the signal sent to SUB-OUT using the app (Sub-Out Point)

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Use the Sub-Out Point pull-down menu to select the desired output point.

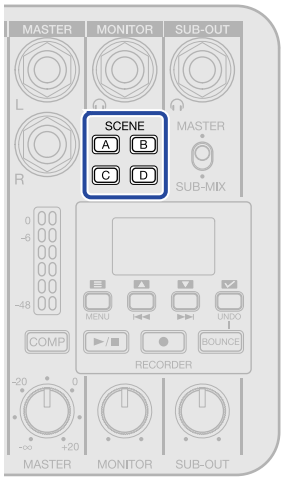


Saving settings (scenes)

Up to 4 sets of current mixer settings can be saved as scenes and these saved settings can be recalled at any time.

Saving scenes

1. Press and hold the button for the desired scene (A (A), B (B), C (C) or D (D) button) until it lights.
The current mixer settings will be saved to the scene of the lit button (A, B, C or D).



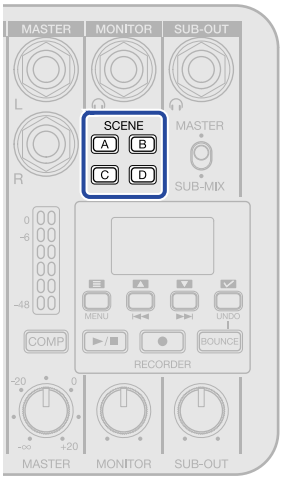
The button will blink if mixer settings are changed from the saved state of the scene. In this case, do one of the following.

- To restore settings to their original state: Press the blinking button briefly to recall the saved scene. (Be careful because pressing the button for a longer amount of time will cause the current settings to be saved instead.)
- To overwrite the scene: Press and hold the blinking button until it stays lit continuously.
- To save a new scene: Press and hold a button that is not blinking until it lights.

NOTE
The following settings are saved with scenes.
Channel 5/6 mono, channel 7/8 USB input, muting, EQ, effect send amounts, AUX send amounts, AUX output points, SUB-MIX levels, panning, levels, effect selection, effect parameters, tempo, compressor

Recalling scenes

1. Press the button for the scene to be recalled (A (A) B (B), C (C) or D (D)).
That button will light and its saved scene will be recalled.



Buttons that are unlit do not have scenes saved to them.

NOTE

- Press the button briefly to recall the scene. Pressing a button too long with it blinking will cause it to be overwritten with the current mixer settings.
- MIDI program change messages can also be used to recall scenes. (→ MIDI implementation chart)

Resetting mixer settings

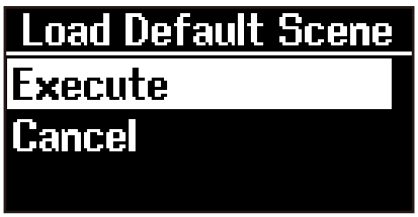
1. Press MENU (Operation button 1) on the Home Screen.

This opens the Menu Screen.

2. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Mixer”, and press UNDO (operation button 4) to confirm.

3. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Load Default Scene”, and press UNDO (operation button 4) to confirm.

4. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Execute”, and press UNDO (operation button 4) to confirm.



This resets the mixer settings to their defaults.

NOTE

The following settings are reset.

Channel 5/6 mono, channel 7/8 USB input, muting, EQ, effect send amounts, AUX send amounts, AUX output points, SUB-MIX levels, panning, levels, effect selection, effect parameters, tempo, compressor

Using sound pads

Audio files can be assigned to the SOUND PAD buttons. Press one to play the assigned file.
This is convenient for playing interviews that have been recorded in advance, opening and closing music and jingles. Level and play mode settings can be made for each pad. MIDI devices can also be used to play the sound pads.

Assigning audio files to SOUND PAD buttons

Audio files saved on the microSD card in advance can be assigned to SOUND PAD buttons.
In addition, the L6max can also be used to record audio files for assignment.

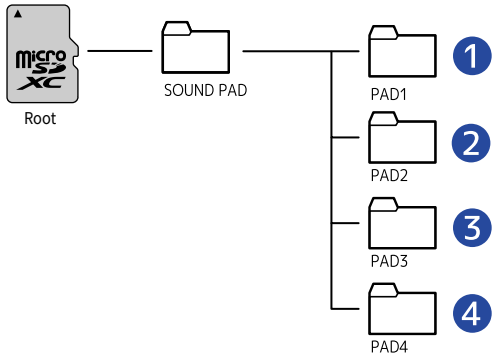
Assigning audio files saved on the microSD card to SOUND PAD buttons

Audio files saved on the microSD card loaded in the L6max can be assigned to SOUND PAD buttons.
Audio files must be saved in specific directories, so always use the L6max to format microSD cards to be used with it. (→ Formatting microSD cards)

NOTE
The SOUND PAD function supports the following audio file types.

- File format: WAV
- Sample rate: 44.1, 48, 88.2, 96, 176.4 or 192 kHz (converted to 48 kHz when assigned)
- Bit depth: 16, 24 or 32 (float)
- Channels: 1 or 2

1. Use a computer to save the desired audio files for sound pad assignment on the microSD card.
The root directory of the microSD card contains a “SOUND_PAD” folder with “PAD1”, “PAD2”, “PAD3” and “PAD4” subfolders. Save audio files in the subfolders. (→ Folder and file structure on microSD cards)



❶ Audio files assigned to the SOUND PAD 1 (1) button

❷ Audio files assigned to the SOUND PAD [2] (2) button

❸ Audio files assigned to the SOUND PAD [3] (3) button

❹ Audio files assigned to the SOUND PAD [4] (4) button

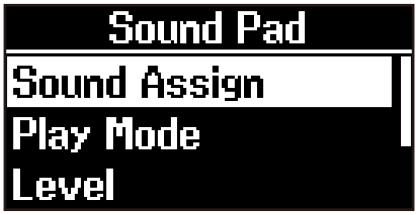
2. Insert the microSD card with the saved audio files in the L6max. (→ Inserting microSD cards)

3. Press MENU (Operation button 1) on the Home Screen.

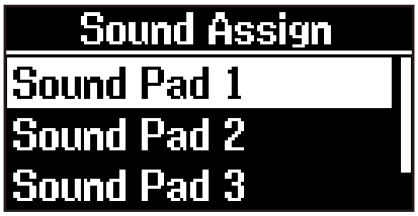
This opens the Menu Screen.

4. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Sound Pad”, and press UNDO (operation button 4) to confirm.

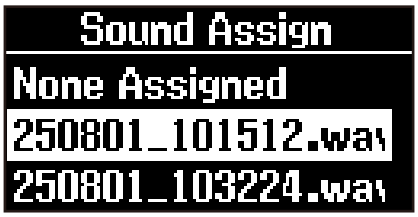
5. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Sound Assign”, and press UNDO (operation button 4) to confirm.



6. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select the desired sound pad, and press UNDO (operation button 4) to confirm.



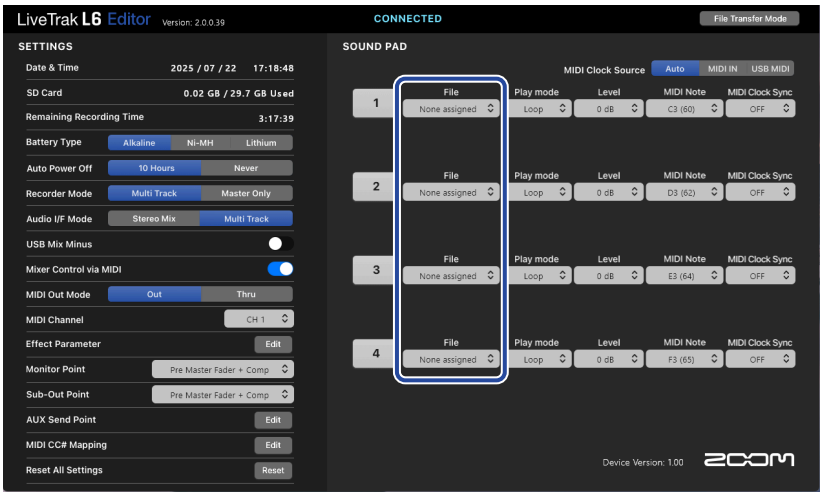
7. Use (operation button 2) and (operation button 3) to select the desired file, and press UNDO (operation button 4) to confirm.



Assigning audio files saved on the microSD card to SOUND PAD buttons using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor on the computer. (→ Using the app)

2. Use the “File” pull-down menus to click and select the audio files to be assigned.
The audio files saved in the “PAD1” – “PAD4” folders on the microSD card will be shown in the pull-down menus.



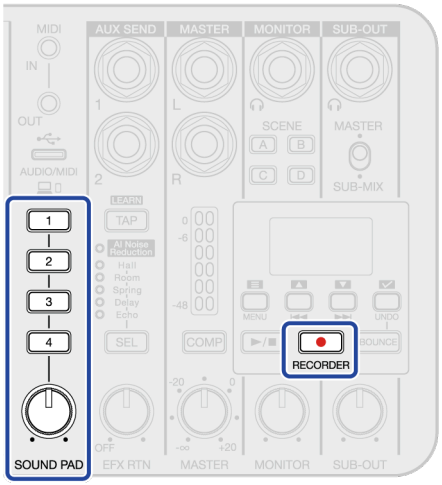
The selected audio files will be assigned to the 1 (1) to 4 (4) buttons and those buttons (1 (1) – 4 (4)) will light.

HINT

- If audio files are not assigned using ZOOM L6 Editor, the first file by name alphabetically in each folder will be assigned automatically.
- Audio files assigned to sound pads can be removed using the unit or the app.

Using the L6max to record audio files and assign them to sound pads

Stereo files mixed and recorded on the L6max can be assigned to sound pads.



1. Prepare to record.

Connect mics, instruments and audio devices, for example, to the L6max, and input and mix their sounds to check the audio to be assigned to a sound pad. (→ Making connections, Mixing)

2. While pressing the ● (record) button, press one of the SOUND PAD buttons (1 (1) – 4 (4)).

The SOUND PAD button (1 (1) – 4 (4)) with which the ● (record) button was pressed will blink and recording will start for the audio file assigned to that sound pad. Input the sound you want to record.

3. Press the blinking SOUND PAD (1 (1) – 4 (4)) button.

That SOUND PAD (1 (1) – 4 (4)) button will stop blinking and the recorded audio file will be assigned to it.

NOTE

- In step 2, pushing a lit sound pad, which already has an audio file assigned, to record will not overwrite that audio file.
- Recorded audio files can be checked using a computer. (→ Managing projects)

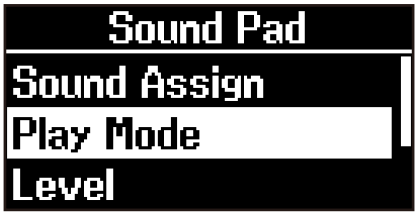
Setting sound pad play modes

The play modes used by sound pads when they are pressed can be set.

1. Press (MENU) (Operation button 1) on the Home Screen.
This opens the Menu Screen.

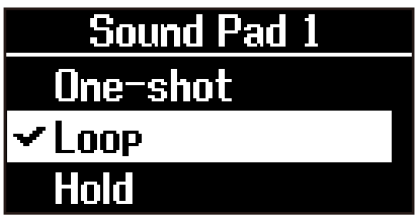
2. Use (operation button 2) and (operation button 3) to select “Sound Pad”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Play Mode”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the desired sound pad, and press (UNDO) (operation button 4) to confirm selection.

5. Use (operation button 2) and (operation button 3) to set the play mode, and press (UNDO) (operation button 4) to confirm.



Setting value	Explanation
One-shot	Each time the pad is pressed, the file will play once from its beginning to its end and then stop. This is useful for playing jingles and effect sounds, for example. Sound pad playback can be stopped by pressing and holding the same button (1 (1) – 4 (4)).
Loop	Each time the pad is pressed, playback will alternately stop and start. Playback will loop continuously until stopped. This is useful for background music, for example.
Hold	Loop playback will continue while the pad is being pressed. Playback will stop when it is released. This is useful for playing effect sounds for as long as desired.

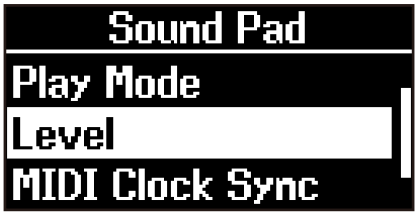
Setting sound pad levels

The levels used by sound pads when they are pressed can be set.

1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

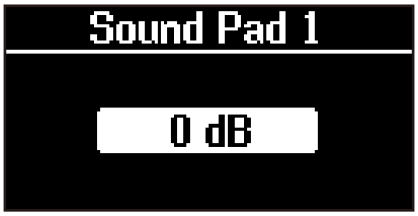
2. Use (operation button 2) and (operation button 3) to select “Sound Pad”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Level”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the desired sound pad, and press (UNDO) (operation button 4) to confirm selection.

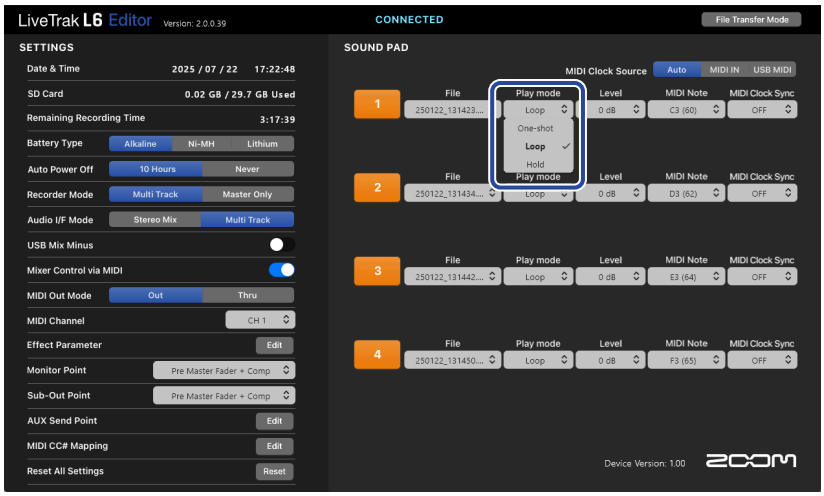
5. Use (operation button 2) and (operation button 3) to select the level, and press (UNDO) (operation button 4) to confirm.
   Levels can be set for each sound pad from −∞ – +10 dB.


Sound Pad 1
0 dB

Setting sound pad play modes and levels using the app

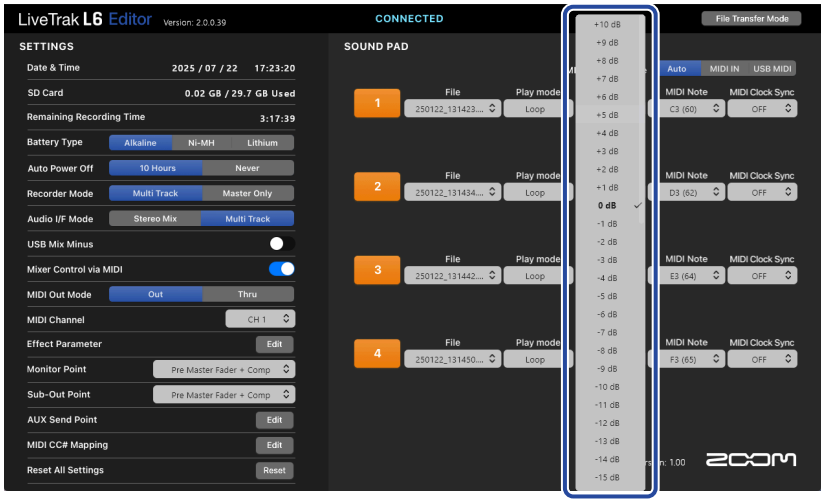
1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor on the computer. (→ Using the app)

2. Use the “Play mode” pull-down menus to click and select play modes.
This can be set for each sound pad.

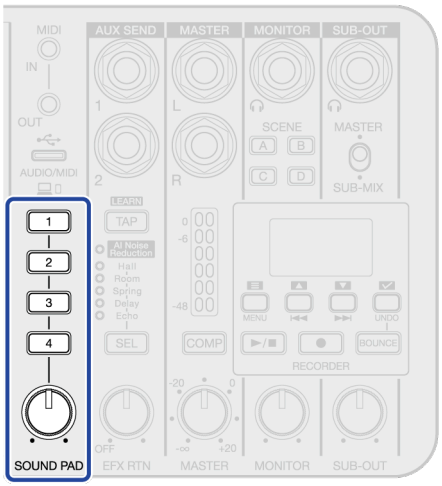


Setting value	Explanation
One-shot	Each time the pad is pressed, the file will play once from its beginning to its end and then stop. This is useful for playing jingles and effect sounds, for example. Sound pad playback can be stopped by pressing and holding the same button (1 (1) – 4 (4)).
Loop	Each time the pad is pressed, playback will alternately stop and start. Playback will loop continuously until stopped. This is useful for background music, for example.
Hold	Loop playback will continue while the pad is being pressed. Playback will stop when it is released. This is useful for playing effect sounds for as long as desired.

3. Use the “Level” pull-down menus to click and select levels.
Levels can be set for each sound pad from −∞ – +10 dB.



Playing sound pads



1. Press a lit SOUND PAD (1 (1), 2 (2), 3 (3) or 4 (4)).

This plays the audio file assigned to that SOUND PAD. During SOUND PAD playback, that SOUND PAD button will blink.

The playback mode can also be changed. (→ Setting sound pad play modes)

Unlit SOUND PAD buttons do not have audio files assigned to them.

2. Use the SOUND PAD (SOUND PAD) knob to adjust the overall SOUND PAD level.

Levels can also be adjusted separately for each sound pad. (→ Setting sound pad levels

---

HINT

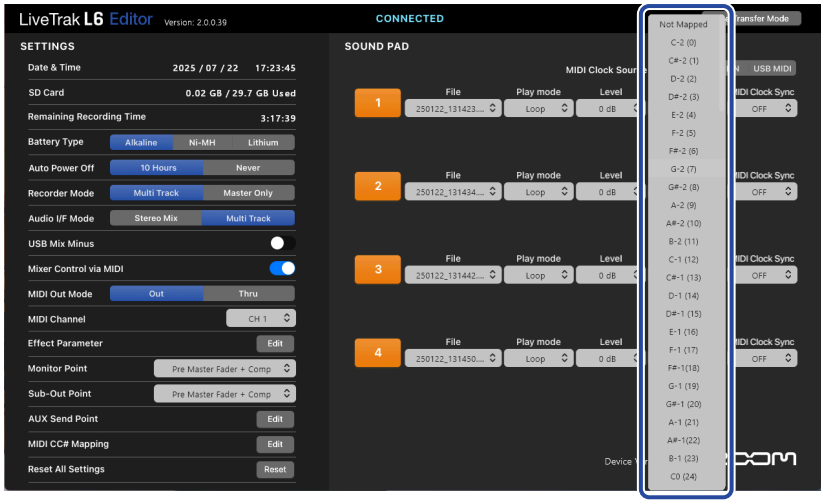
The playback of all sound pads can be stopped at once by pressing the LEVEL (LEVEL) button 4 times in a row.

Using computers, smartphones, tablets and MIDI devices to play sound pads

Computers, smartphones, tablets and MIDI devices, including MIDI keyboards, can be used to play sound pads.

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click the “MIDI Note” pull-down menus to set MIDI note numbers.
   This can be set for each sound pad.



   Select “Not Mapped” to not set a MIDI number.

3. Connect the L6max to a computer, smartphone, tablet or MIDI device. (→ Connecting MIDI devices)
   If a note number set in step 2 is received from a computer, smartphone, tablet or MIDI device, the corresponding sound pad will play.

NOTE
MIDI settings must be made to use MIDI devices to play sound pads. For details about MIDI settings, see “Using MIDI devices”.

HINT
MIDI note numbers can be sent to the host when the hardware sound pads are played.

Operating sound pads in time with MIDI clock

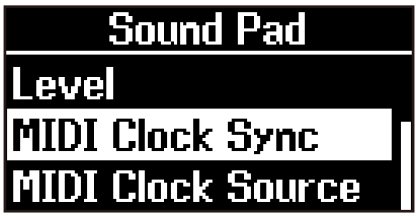
Operation can be set so that recording starting/stopping and playback starting occur in time (quantized) with the MIDI clock tempo.

Setting sound pad operation

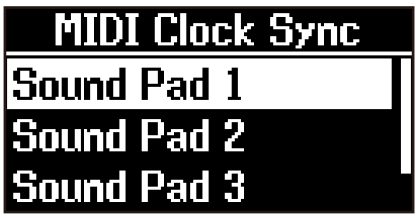
1. Press (MENU) (Operation button 1) on the Home Screen.
This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Sound Pad”, and press (UNDO) (operation button 4) to confirm.

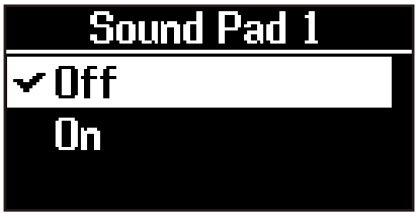
3. Use (operation button 2) and (operation button 3) to select “MIDI Clock Sync”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the desired sound pad, and press (UNDO) (operation button 4) to confirm selection.



5. Use (operation button 2) and (operation button 3) to select the setting, and press (UNDO) (operation button 4) to confirm.

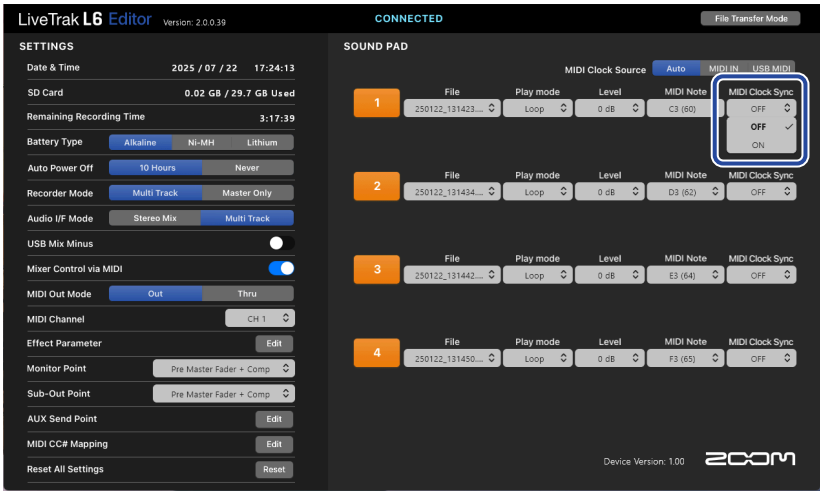


Setting value	Explanation
Off	Operate the sound pad without synchronizing with MIDI clock from another device.
On	Operate the sound pad synchronized with MIDI clock from another device.

■ Setting sound pad operation using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click settings in the MIDI Clock Sync pull-down menus.
This can be set for each sound pad.



Setting value	Explanation
Off	Operate the sound pad without synchronizing with MIDI clock from another device.
On	Operate the sound pad synchronized with MIDI clock from another device.

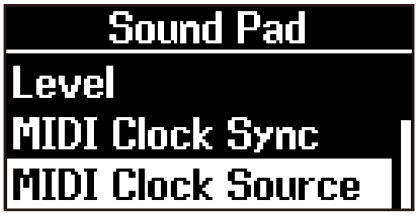
Setting the MIDI clock source device for synchronization

1. Press (MENU) (Operation button 1) on the Home Screen.

This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Sound Pad”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “MIDI Clock Source”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the setting, and press (UNDO) (operation button 4) to confirm.

Setting value	Explanation
Auto	The unit will automatically select the MIDI clock to synchronize with and use it for sound pad recording and playback operations. MIDI IN has priority over USB MIDI.
MIDI IN	The unit will synchronize to the MIDI clock from the device connected to the MIDI IN connector and use it for sound pad recording and playback operations.

Setting value	Explanation
USB MIDI	The unit will synchronize to the MIDI clock from the device connected to the USB port and use it for sound pad recording and playback operations.

NOTE

If the synchronization setting is changed during sound pad playback, MIDI clock synchronization with external devices might stop occurring correctly. If this happens, try the following operations.

- Reconnect after disconnecting once from the external device.
- Stop operation of the sequencer, for example, on the other device. Then, restart playback.

This should enable proper synchronization to occur.

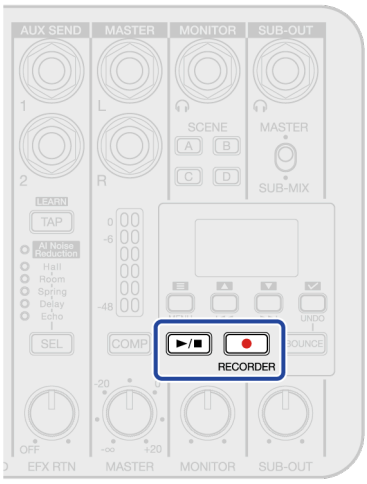
Recording and playing audio

By installing a microSD card in the L6max, audio from every channel as well as a stereo mix of all channels can be recorded.
Recorded files can also be played back.

NOTE

- Recorded files are saved in the following format
  - Sample rate: 48 kHz
  - Bit depth: 32-bit float
  - Mono files for channels 1–4, stereo files for channels 5–8, stereo files for MASTER output
- For details about recorded files, see "Managing projects".

Recording



1. Press the (record) button.

The (record) button will light red and recording will start.

NOTE

If a microSD card has not been installed or the file transfer mode is active (→ Transferring files to computers), the (record) button will blink and recording will not be possible.

2. To stop, press the ● (record) or ►/■ (play/stop) button.

Recording will stop and the ● (record) button will become unlit.

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

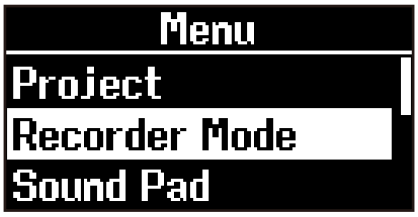
Since files are automatically saved at regular intervals, even if the power is interrupted or another problem occurs during recording, files could be restored to normal by having the L6max read the microSD card and play the affected files.

Selecting the type of files recorded

The type of files saved when recording can be set.

1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Recorder Mode”, and press (UNDO) (operation button 4) to confirm.



3. Use (operation button 2) and (operation button 3) to select the recording file setting, and press (UNDO) (operation button 4) to confirm.

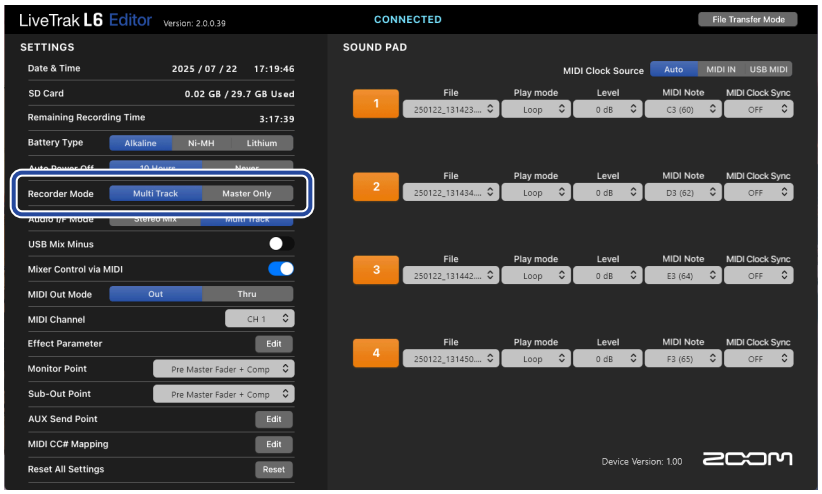
Setting value	Explanation
Multi Track	Separate recording files of the audio from every channel along with a stereo file that is a mix of the audio from all channels will be saved.
Master Only	Only a stereo file that is a mix of the audio from all channels will be saved.

NOTE
When recording with an existing project, the recorder mode set when it was created will be used.
This setting is applied when “Create Empty” is used to make a new empty project.

Selecting the type of files recorded using the app

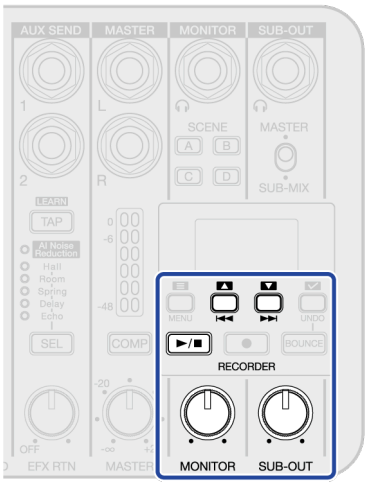
1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor on the computer. (→ Using the app)

2. Click a recording file setting for “Recorder Mode”.



Setting value	Explanation
Multi Track	Separate recording files of the audio from every channel along with a stereo file that is a mix of the audio from all channels will be saved.
Master Only	Only a stereo file that is a mix of the audio from all channels will be saved.

Playing recordings



1. Press the ►/■ (play/stop) button.

The ►/■ (play/stop) button will light green, and playback of the selected file will start.

- I Use the MONITOR (MONITOR) knob to adjust the headphone volume.
- Use the MASTER (MASTER) knob to adjust the volume output from the MASTER output jacks.
- Use the SUB-OUT (SUB-OUT) knob to adjust the volume output from the SUB-OUT jack.
- Press the ⏮ (rewind) button to move to the file beginning. Press and hold it to search backward.
- Press the ⏭ (fast forward) button to move to the next file. Press and hold it to search forward.

2. Press the ►/■ (play/stop) button.

The ►/■ (play/stop) button will become unlit and playback will stop.

Overdubbing

The bounce function can be used to combine already recorded tracks 1–8 into a stereo bounce track, allowing tracks 1–8 to be recorded on again. By repeating this operation, overdubbed stereo files can be created.

NOTE

- A file can be bounced up to 99 times.
- Bouncing is not possible if the track recording time exceeds 93 minutes.

1. Press the ● (record) button to start the first recording.

2. Press the ● (record) or ►/■ (play/stop) button to stop recording.

3. When the Home Screen is open, press the BOUNCE (BOUNCE) button to select the bounce method.

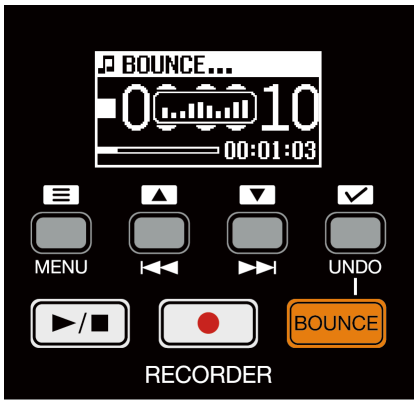
Use ▲ (operation button 2) and ▼ (operation button 3) to select the bounce method, and press UNDO (operation button 4) to confirm.

Item	Explanation
Quick Bounce	This bounces at high speed. This can combine tracks 1–8 into a stereo track in a short amount of time. The sound cannot be adjusted while bouncing.

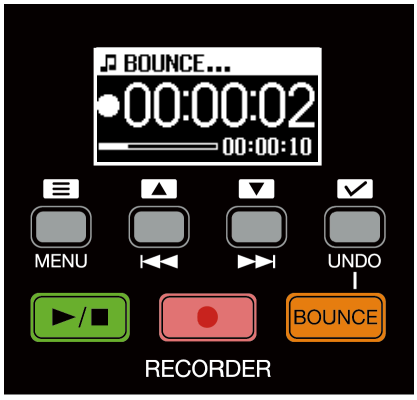
Item	Explanation
Real Time Bounce	This bounces the captured sound as it is in real time. Tracks 1–8 are combined into a stereo track with adjustments made during the bounce. This includes using channel encoders to adjust levels, EQ and panning, and playing sound pads.

A Bounce Screen will be shown.

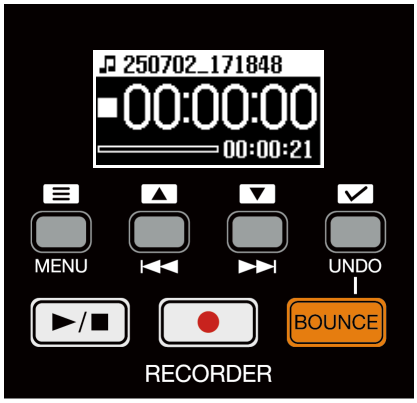
- When using Quick Bounce



- When using Real Time Bounce



After bouncing completes, additional recording will become possible.



The BOUNCE (BOUNCE) button will light orange.

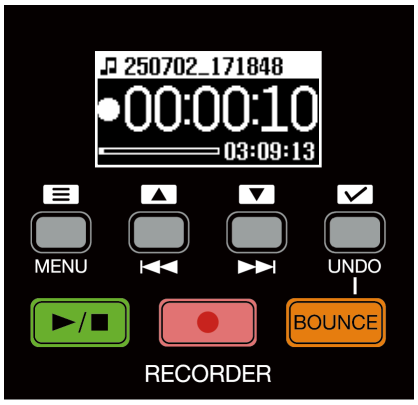
HINT

- If the bounce is not as desired when checked during playback, press 

(operation button 4) to revert to the state before the bounce (UNDO function). The UNDO function can only be used on the immediately preceding bounce.
- During a quick bounce, 

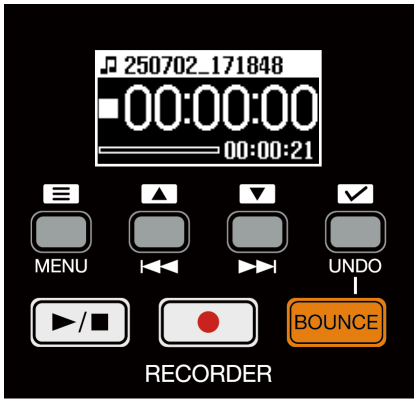
(operation button 1) can be pressed to cancel it.

4. Press the ● (record) button to record again.
The bounced stereo track will also play back.



HINT
Recording from the middle of the track is also possible.

5. Press the ● (record) or ►/■ (play/stop) button to stop recording.



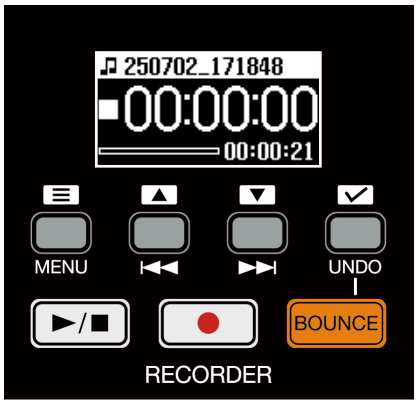
6. Repeat steps 3–5.
This repeats bouncing and recording.

NOTE
Recording without bouncing will delete the files recorded on tracks 1–8 and replace them with new recording files.

7. Finally, conduct the same procedures as step 3 to bounce and create a single overdubbed stereo file.

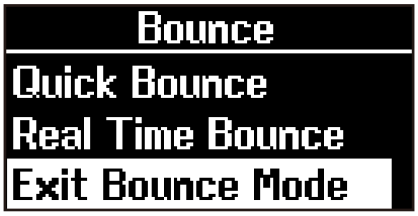
Exiting bounce mode

1. Press the BOUNCE (BOUNCE) button.



2. Use (operation button 2) and (operation button 3) to select “Exit Bounce Mode”, and press (operation button 4) to confirm.

UNDO



The BOUNCE (BOUNCE) button will become unlit and bounce mode will be exited.

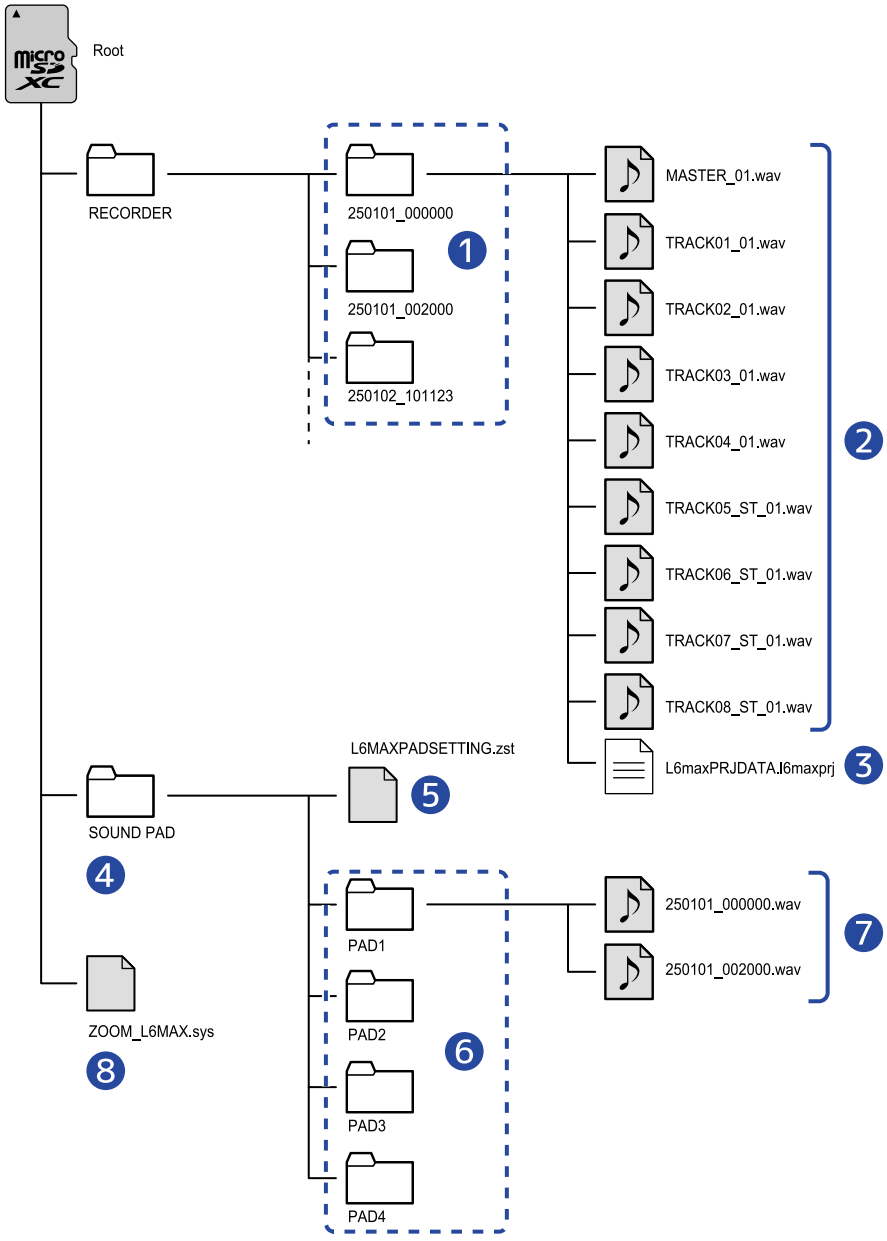
NOTE
Exiting bounce mode will automatically create an empty project and open it.

Managing projects

Projects created by the L6max will be saved on the microSD card.
Projects saved on the microSD card can be copied, deleted and have their names changed.

Folder and file structure on microSD cards

The following types of files are created when recording with a microSD card that was formatted by the L6max.



1 Project folders

These store project recording data and settings.

A new folder will be created with “yymmdd_hhmmss” as the name. (→ Naming of recording files and folders)

2 Recording files

See “Naming of recording files and folders” for details about recording file names.
The recording files for each channel and stereo files for mixes of the channels are saved as follows.

- Channels 1–4: Mono files are saved for each channel.
- Channels 5/6: Stereo files are saved for each channel.
- Channels 7/8: Stereo files are saved for each channel. (A stereo file will be saved even if only the L jack is connected, but the same sound will be recorded on both L and R channels.)
- Master channel: Stereo files will be saved.

3 Project file

This stores various settings specific to the project.

4 SOUND PAD folder

Audio files assigned to sound pads are stored in folders for each pad.

5 Sound pad settings file

Sound pad settings are saved in this file.

6 PAD1 – PAD4 folders

Save audio files you want to assign to sound pads in the folders for each pad. (→ Assigning audio files to SOUND PAD buttons)

7 Audio files that can be assigned to sound pads

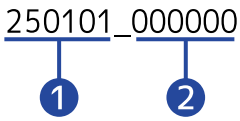
For details about the formats of audio files that can be assigned, see “Assigning audio files to SOUND PAD buttons”.

8 System file

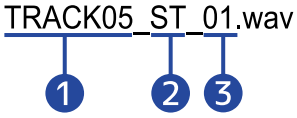
This is a system file used by the L6max. Do not delete it.

Naming of recording files and folders

Numerical dates and times of recording are used for the names of recording file folders.

Folder name example	Explanation
	❶ Date The date of recording is used as a number. ❷ Time The hour, minute and second are used as a number.

Files are named with the following format.

File name example	Explanation
	❶ Track name This shows the channel used when recording. • TRACK01–08: File recorded on channel 1–8 • MASTER: File that is a stereo mix of all channels ❷ File channel count • ST: Stereo channel • This is not shown for channels 1–4. ❸ File take count The first recording will be “01” with each later bounced recording increasing the count.

NOTE
If the file size would exceed 2 GB, a new file will be created automatically and recording will continue without pause. New files created in such cases will have “_01” – “_99” added to the ends of their names.

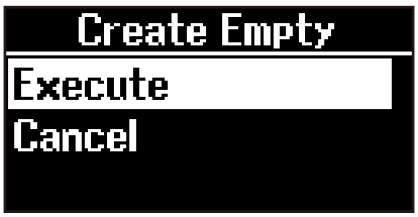
Creating empty projects

1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Project”, and press UNDO (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Create Empty”, and press UNDO (operation button 4) to confirm.

4. Use (operation button 2) and (operation button 3) to select “Execute”, and press UNDO (operation button 4) to confirm.



   A new project will be created.

Selecting projects

1. Press (MENU) (Operation button 1) on the Home Screen.

This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Project”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Select”, and press (UNDO) (operation button 4) to confirm.

4. Use (operation button 2) and (operation button 3) to select the project, and press (UNDO) (operation button 4) to confirm.

HINT

Projects can also be selected on the Home Screen using (operation button 2) and (operation button 3).

Assigning files to tracks

Audio files saved on the microSD card can be assigned to tracks in projects.
This is useful for playing along live and practicing guitar, for example.

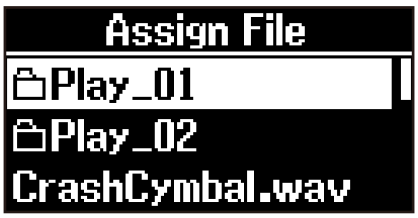
1. Create an empty project. (→ Creating empty projects)

2. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

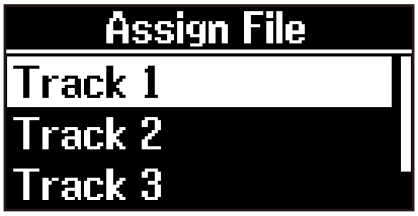
3. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Project”, and press UNDO (operation button 4) to confirm.

4. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Assign File”, and press UNDO (operation button 4) to confirm.

5. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select the file to assign, and press UNDO (operation button 4) to confirm selection.



6. Use (operation button 2) and (operation button 3) to select the track for assignment, and press (operation button 4) to confirm selection.



NOTE

- Assigning is only possible when the Recorder Mode is Multi Track and the project is newly created. (→ Selecting the type of files recorded)
- The file browser can access folders that are a maximum of 5 levels deep starting from the root of the microSD card.
- The RECORDER and SOUND_PAD folders will not be shown.
- Files must be 48 kHz, 32-bit float, mono/stereo WAV format to be assigned.
- Mono files can be assigned to tracks 1–4 and stereo files to tracks 5–8.
- Assignment is only possible to tracks that do not have recording files.
- To overdub live performance after assigning an audio file for playing along with, bounce once. (→ Overdubbing)

Deleting projects

1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Project”, and press UNDO (operation button 4) to confirm.

3. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Delete”, and press UNDO (operation button 4) to confirm.

4. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select the project to delete, and press UNDO (operation button 4) to confirm selection.

5. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Execute”, and press UNDO (operation button 4) to confirm.

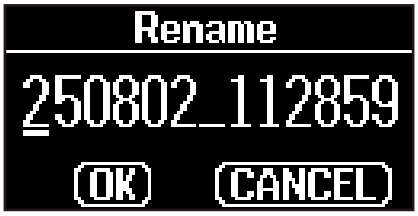
Changing project names

1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Project”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Rename”, and press (UNDO) (operation button 4) to confirm.

4. Use (operation button 2) and (operation button 3) to select the character to change, and press (UNDO) (operation button 4) to confirm selection.

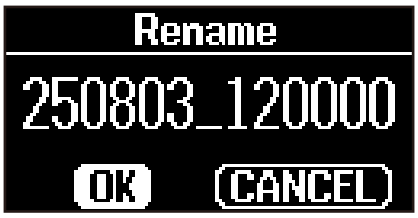


   The characters appear highlighted.

5. Use (operation button 2) and (operation button 3) to select the character to input, and press (UNDO) (operation button 4) to confirm selection.

6. Repeat steps 4–5 to set the project name.

7. After setting the project name, use (operation button 2) and (operation button 3) to select the (OK) button on screen, and press (operation button 4) to confirm.

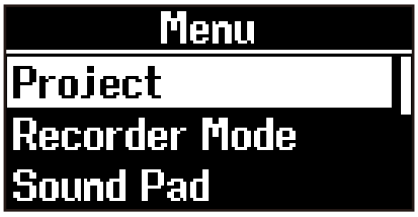


Protecting projects

Projects can be protected to prevent editing and deletion.

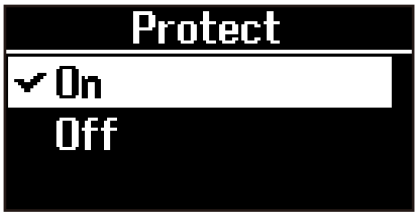
1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Project”, and press (UNDO) (operation button 4) to confirm.



3. Use (operation button 2) and (operation button 3) to select “Protect”, and press (UNDO) (operation button 4) to confirm.

4. Use (operation button 2) and (operation button 3) to select the setting, and press (UNDO) (operation button 4) to confirm.



Setting value	Explanation
On	The project will be protected, preventing editing and deletion.
Off	The project can be edited and deleted.

Copying projects

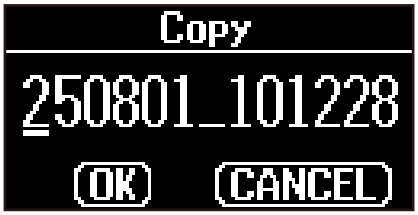
1. Press MENU (Operation button 1) on the Home Screen.

This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “Project”, and press UNDO (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Copy”, and press UNDO (operation button 4) to confirm.

4. Use (operation button 2) and (operation button 3) to select the character to change, and press UNDO (operation button 4) to confirm selection.

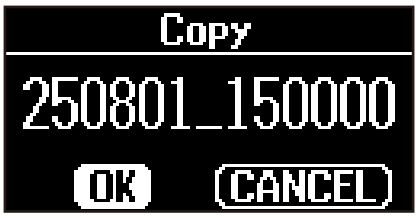


The characters appear highlighted.

5. Use (operation button 2) and (operation button 3) to select the character to input, and press UNDO (operation button 4) to confirm selection.

6. Repeat steps 4–5 to set the project name.

7. After setting the project name, use (operation button 2) and (operation button 3) to select the (OK) button on screen, and press (operation button 4) to confirm.



NOTE
When a project that has been bounced is copied, only the most recent recording file is copied, so undoing will not be possible.

Using as an audio interface

Signals input to the L6max can be sent to a computer, smartphone or tablet, and playback signals from that device can be output from the L6max.

- No driver is necessary for use with Mac computers, smartphones and tablets.
- To operate the L6max at 32-bit float with a Mac, see “Using with Mac computers”.
- To record with a DAW application on Windows, see “Using with Windows computers”.

Connecting to computers, smartphones and tablets

1. Use a USB cable (Type-C) to connect the L6max with a computer, smartphone or tablet. (→ Connecting computers, smartphones and tablets)
2. Launch an application on the computer, smartphone or tablet, and select “L6max” as the “Audio” or “Input/Output” device.

NOTE

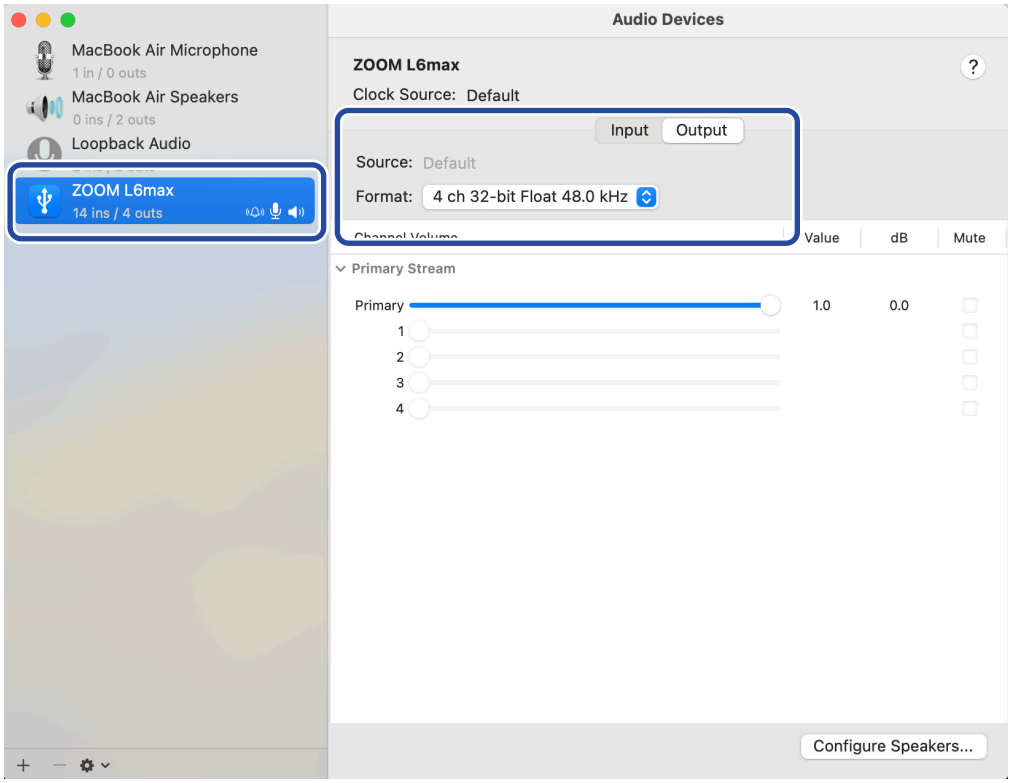
- The audio sample rate is 48 kHz when used as an audio interface.
- If issues occur with operation at 32-bit float format, try 24-bit format.
  - Using a Mac: → “Using with Mac computers”
  - Using a Windows computer: → “Using with Windows computers”
- See the application operation manuals for information about their operation.
- When using this with a smartphone or tablet, connect an AC adapter to provide power. (→ Connecting an AC adapter)

Using with Mac computers

The format used by the L6max for data transfer can be selected on the Mac.

1. From the “Utilities” subfolder of the “Applications” folder on the Mac, open “Audio MIDI Setup”.

2. In Audio Devices, select “ZOOM L6max” and set the Input and Output formats to 32-bit Float.



NOTE

For the bit depth, 32-bit float should normally be used as is, but try 24-bit if an application does not operate properly with this setting.

Using with Windows computers

Installing the driver

1. Download “ZOOM L6max Driver” from zoomcorp.com/help/l6max to the computer.

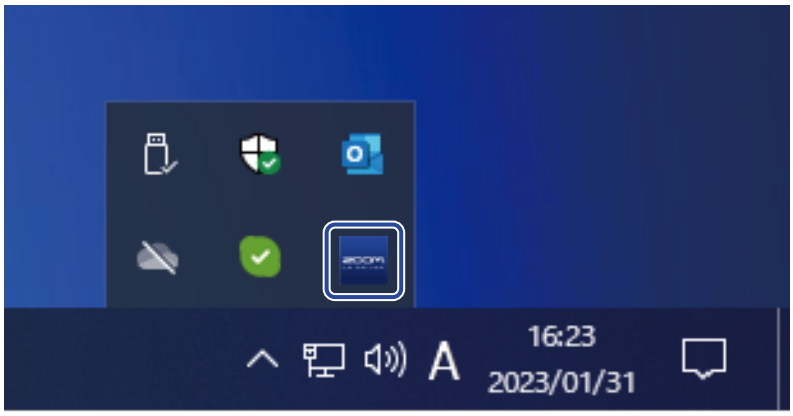
> **NOTE**
> The latest ZOOM L6max Driver can be downloaded from the above website.

2. Launch the installer and follow the instructions to install “ZOOM L6max Driver”.

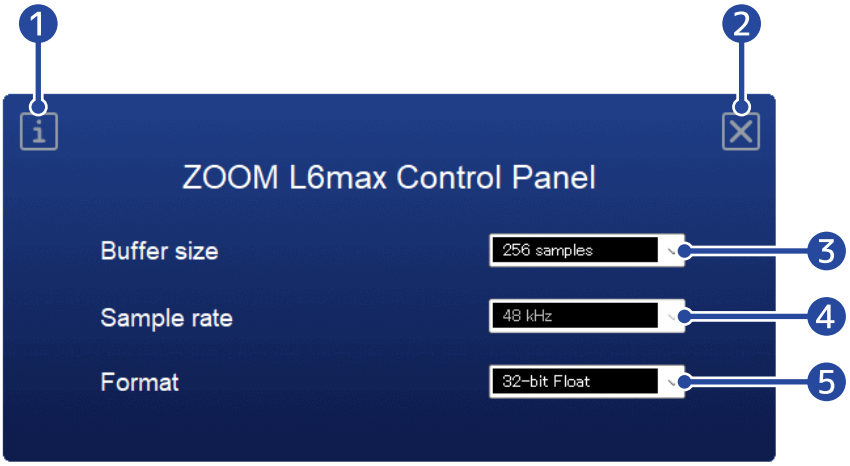
> **NOTE**
> - Do not connect the L6max to the computer during installation.
> - See the Installation Guide included in the driver package for detailed installation procedures.

Making driver control panel settings

1. Click the “ZOOM L6max Control Panel” icon in the notification area of the taskbar to launch the control panel.



2. Make control panel settings.



1 Open information dialog

The version and other information can be checked.

2 Close control panel

This closes the control panel.

3 Buffer size setting

This sets the buffer size used by the driver. Raising this number makes operation more stable but also increases latency.

4 Sampling frequency setting

The L6max sampling frequency is fixed at 48 kHz.

5 Transmission format setting

This sets the format that the L6max uses to send and receive data.
“32-bit Float” should normally be used as is, but try “24-bit” if an application does not operate properly with this setting.

Setting the USB audio mode

The USB audio mode can be set when the L6max is used as an audio interface.

1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “USB Audio Interface”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Mode”, and press (UNDO) (operation button 4) to confirm.

4. Use (operation button 2) and (operation button 3) to select the setting, and press (UNDO) (operation button 4) to confirm.

Setting value	Explanation
Stereo mix	Only a stereo file that is a mix of the audio from all channels will be output by USB.
Multi Track	The audio of each channel will be output separately by USB. The USB input signals will be shown in order on the computer as CH1, CH2, CH3, CH4, CH5 L, CH5 R... CH8 L, CH8 R, MASTER L and MASTER R.

Assigning USB audio to L6max inputs

1. Press the 1/2 (USB 1/2) or 3/4 (USB 3/4) button so that it lights.

   When the 1/2 (USB 1/2) button is lit and the L6max is being used as an audio interface, audio from channels 1–2 of the computer or smartphone will be input to L6max channel 7. Audio will not be input through the INPUT 7 (L (MONO)/R) jacks.

   When the 3/4 (USB 3/4) button is lit and the L6max is being used as an audio interface, audio from channels 3–4 of the computer or smartphone will be input to L6max channel 8. Audio will not be input through the INPUT 8 (L (MONO)/R) jacks.

Setting the USB Mix Minus function

When using the L6max as an audio interface with a call, feedback to the call participant can be prevented.

1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “USB Audio Interface”, and press UNDO (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Mix Minus”, and press UNDO (operation button 4) to confirm.

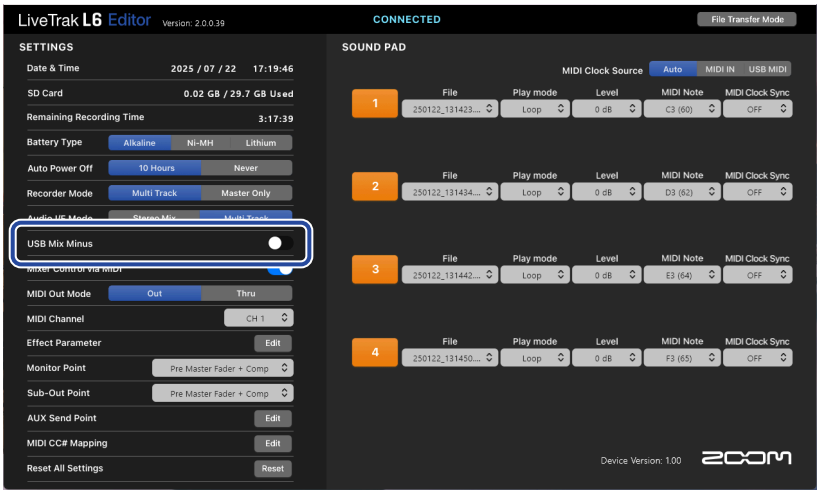
4. Use (operation button 2) and (operation button 3) to select the setting, and press UNDO (operation button 4) to confirm.

Setting value	Explanation
Off	Audio input by USB is output by USB.
On	Audio input by USB is not output by USB. The internal effects, including the compressor, will be turned off.

Setting the USB Mix Minus function using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click  next to “USB Mix Minus”.



Clicking this toggles it on and off.

On:  / Off: 

When on, audio input by USB will not be output by USB. The internal effects, including the compressor, will be turned off.

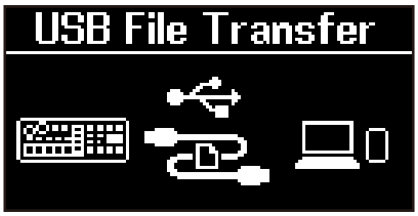
Transferring files to computers

By connecting the L6max to a computer, files on the microSD card can be checked and moved.

1. Press MENU (Operation button 1) on the Home Screen.

2. Use (operation button 2) and (operation button 3) to select “USB File Transfer”, and press UNDO (operation button 4) to confirm.

The USB File Transfer Screen will open.

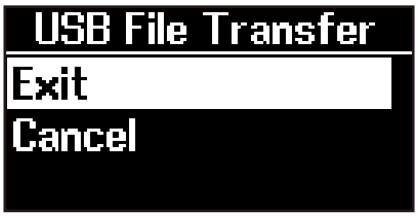


3. Use a USB cable (Type-C) to connect the L6max with a computer, smartphone or tablet. (→ Connecting computers, smartphones and tablets)

4. Use the computer, smartphone or tablet to work with the files saved on the microSD card.

5. Press MENU (operation button 1) after transfer is complete.

6. Use (operation button 2) and (operation button 3) to select “Exit”, and press UNDO (operation button 4) to confirm.

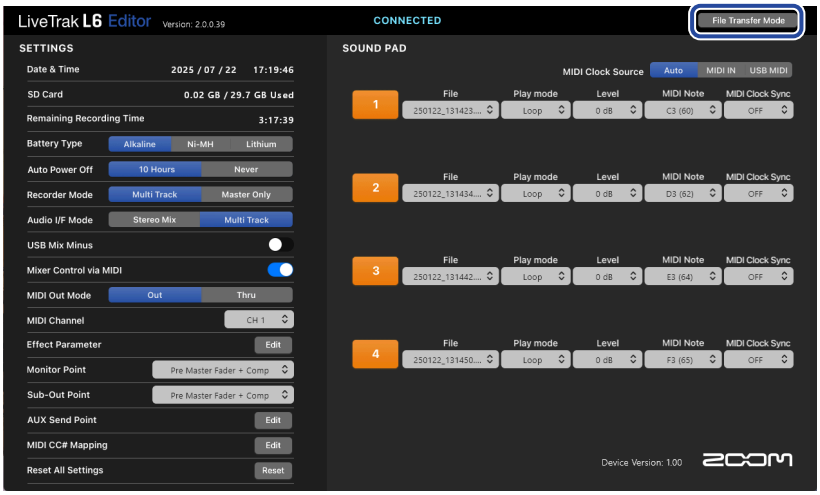


This opens the Menu Screen.

Connecting with a computer using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click “File Transfer Mode”.
   This puts the L6max into file transfer mode.



   When in file transfer mode, operation using “ZOOM L6 Editor” is not possible.

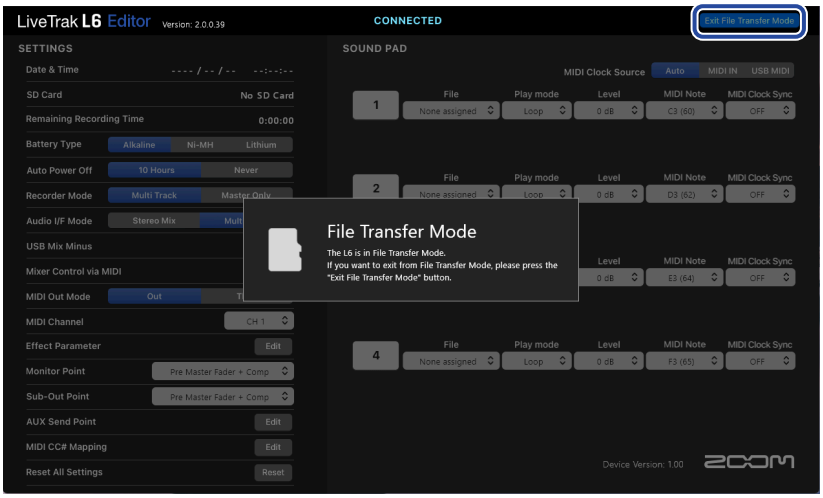
3. Use the computer to work with the files saved on the microSD card.

Disconnecting from a computer using the app

1. Disconnect on the computer.

- Windows:
  Select the L6max from “Safely Remove Hardware”.
- macOS:
  Drag the L6max icon to the Trash and drop it.

2. Click “Exit File Transfer Mode”.

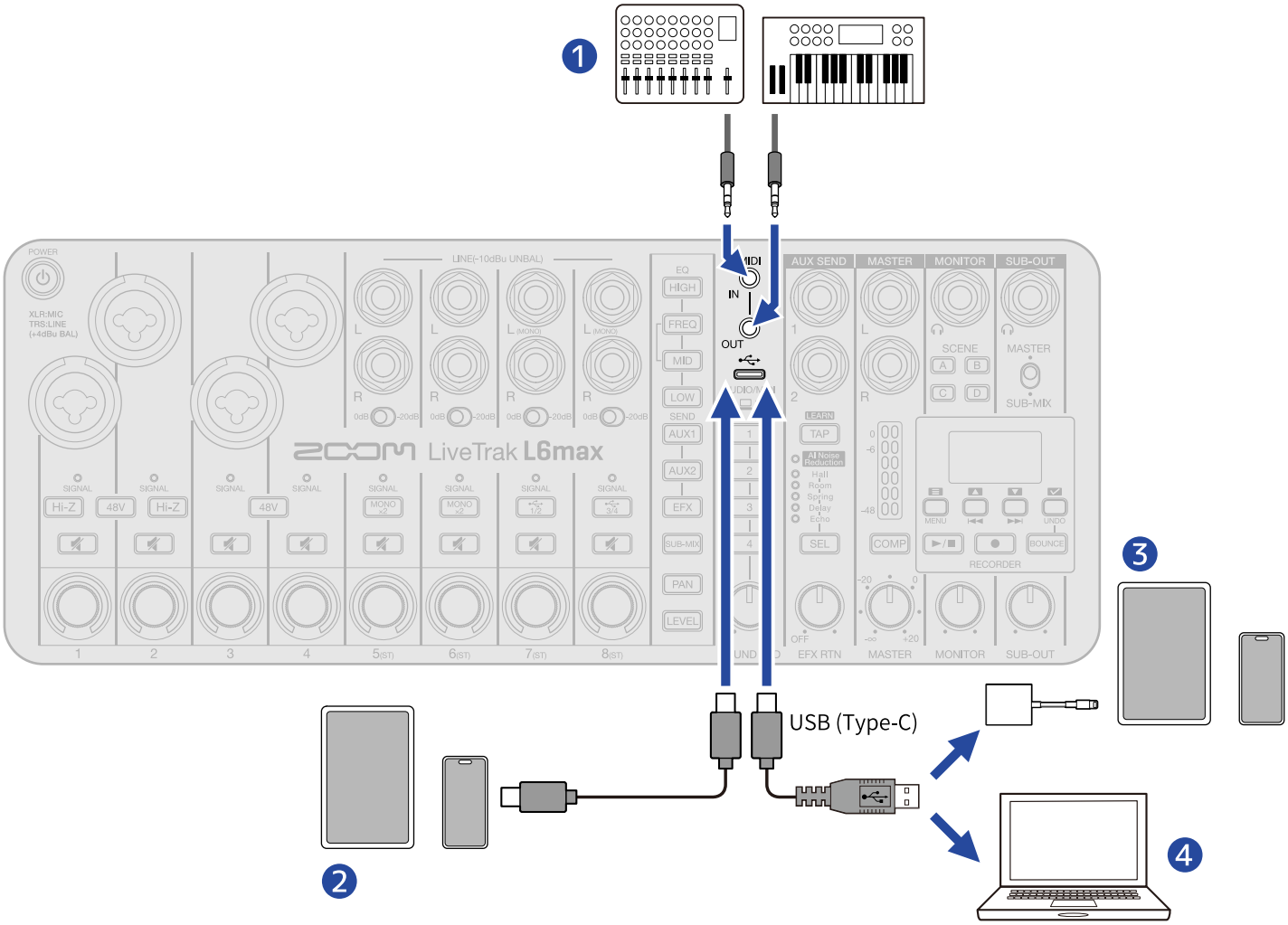


The ZOOM L6 Editor screen will return to normal.

Using MIDI devices

Connecting MIDI devices

Computers and MIDI devices can be connected to the L6max.



1 MIDI devices

Use 3.5mm TRS cables to connect MIDI devices, including controllers and keyboards.

To connect with MIDI devices that have 5-pin DIN connectors, use 5-pin DIN-TRS MIDI (Type-A) conversion cables.

When MIDI CLOCK is input, the tempo is quantized to notes ($\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}}}}}$, $\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}}}}}^{3}$, $\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}}}}}$, $\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}}}$, $\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}}^{3}$, $\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}$, $\mathbb{\mathbb{\mathbb{\mathbb{}}}}$, $\mathbb{\mathbb{\mathbb{\mathbb{}}}}$, $\mathbb{\mathbb{\mathbb{}}}$). In this state, if the MIDI CLOCK tempo is changed, the tap tempo will follow it.

2 Smartphone/tablet (USB Type-C)

3 iPhone/iPad (Lightning)

4 Computer (Windows/Mac)

NOTE

- Use a USB cable that supports data transfer.
- Use a Lightning to USB 3 Camera Adapter to connect to an iOS/iPadOS device with a Lightning connector.

USB MIDI port overview

When the L6max is connected to a computer, DAWs and other applications that use MIDI ports will recognize 3 MIDI ports on it.
Each port has a different function. Refer to the table below when selecting them.

Port name (Windows)	Port name (Mac/ iPhone/iPad)	Explanation
ZOOM L6max	L6max MIDI I/O Port	Select this port to use the MIDI IN/OUT jacks as a USB MIDI interface. Using a DAW or other software, MIDI signals input through the MIDI IN jack can be recorded, and MIDI signals can be output from the MIDI OUT jack to control external MIDI devices.
MIDIIN2/MIDIOUT2 (ZOOM L6max)	L6max Mixer Control Port	Select this port to control the L6max. L6max parameters can be controlled using MIDI control numbers assigned with “MIDI CC# Mapping”, and L6max operations can be recorded in a DAW or other software. (→ Assigning MIDI control numbers to L6max parameters) Select this port also when you want to play sound pads with MIDI notes or make the delay time of the internal effect follow the tempo.
MIDIIN3/MIDIOUT3 (ZOOM L6max)	for L6 Editor Port	This communication port is dedicated for use by the ZOOM L6 Editor computer app. Do not use it.

NOTE
If a DAW or another application that uses MIDI ports is launched before ZOOM L6 Editor, the MIDI ports needed by ZOOM L6 Editor could be used, preventing proper connection. Launch ZOOM L6 Editor before the other app, or set that app not to use the MIDIIN3 and MIDIOUT3 (ZOOM L6max) ports.

Making MIDI settings

Various MIDI settings can be made.

Enabling control of the L6max with a MIDI device connected to the MIDI IN/OUT jacks

To control the L6max with a MIDI controller, MIDI keyboard or other MIDI device connected to the MIDI IN/OUT jacks, turn on this setting.

1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select “Mixer”, and press UNDO (operation button 4) to confirm.

3. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select “Mixer Control via MIDI”, and press UNDO (operation button 4) to confirm.

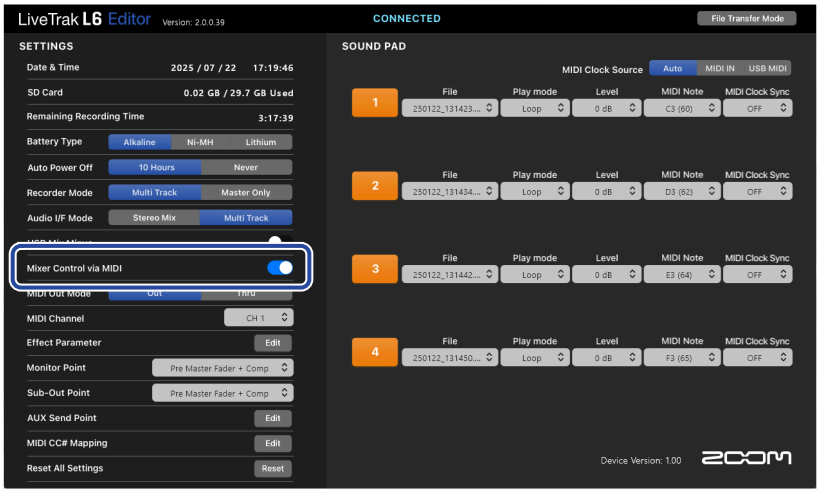
4. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select the setting, and press UNDO (operation button 4) to confirm.

Setting value	Explanation
Off	MIDI devices connected to the MIDI IN/OUT jacks will not be able to control the L6max.
On	MIDI devices connected to the MIDI IN/OUT jacks will be able to control the L6max.

■ Enabling control of the L6max with a MIDI device connected to the MIDI IN/OUT jacks using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click  for “Mixer Control via MIDI”.



Clicking this toggles it on and off.

On:  / Off: 

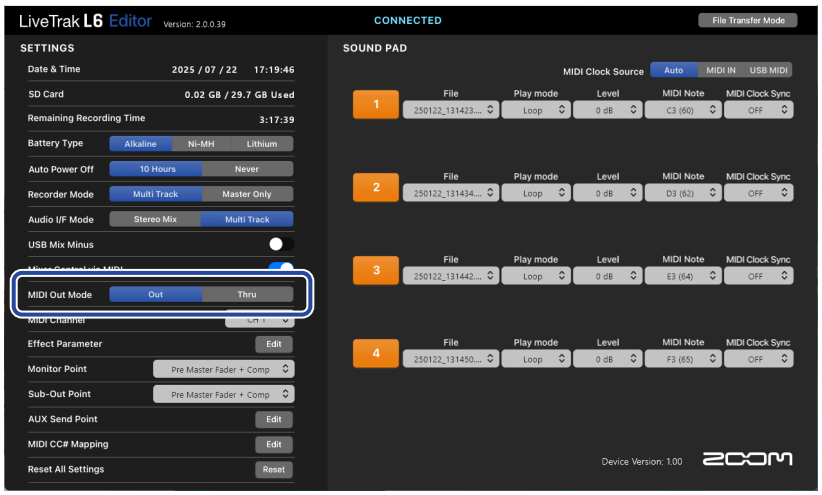
When on, MIDI devices connected to the MIDI IN/OUT jacks will be able to control the L6max.

Setting the MIDI output mode

MIDI signals output from the L6max MIDI OUT can be set to either the MIDI signals generated by the L6max or MIDI signals input through the MIDI IN.

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click the MIDI output setting for “MIDI Out Mode”.



Setting value	Explanation
Out	MIDI signals generated by the L6max or MIDI signals from a computer , for example, will be output.
Thru	MIDI signals input through the MIDI IN are output as is.

Setting the L6max MIDI channel

The MIDI channel that the L6max uses to send and receive data can be set.

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click a MIDI channel in the “MIDI Channel” pull-down menu to select it.

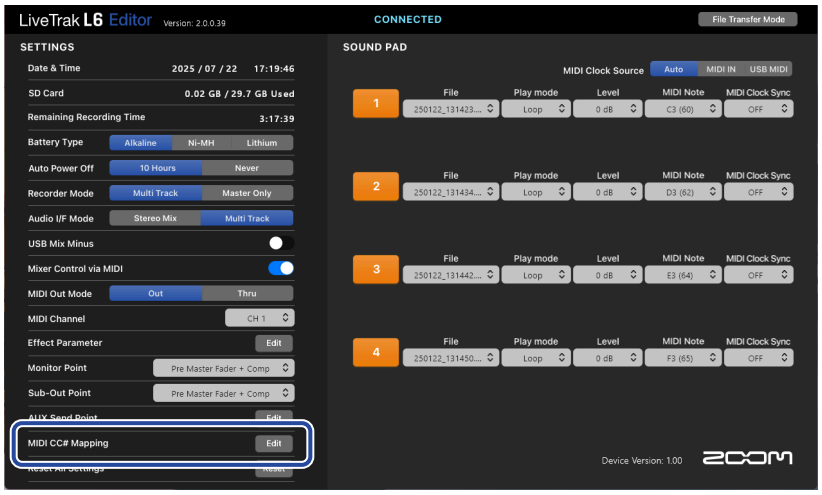
Select CH 1–16.

Assigning MIDI control numbers to L6max parameters

MIDI control numbers can be assigned to L6max parameters.
The L6max can be controlled with operations using the corresponding MIDI control numbers on MIDI devices, including MIDI controllers and keyboards, and in DAWs and other software.

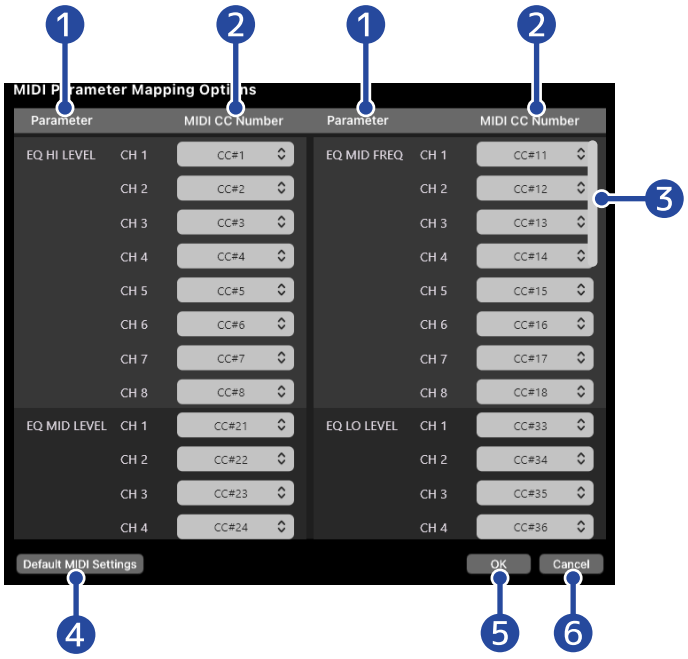
1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click “Edit” for “MIDI CC# Mapping”.



This opens a screen for assigning MIDI control numbers.

3. Use the pull-down menus for each parameter, and click MIDI control numbers to assign them.



1 Parameters

These are parameters used to control the L6max. See the Parameter List below for details about parameters.

2 MIDI control numbers

Use the pull-down menus to click MIDI control numbers and select them.
Select “Not Mapped” to not assign a MIDI control number to that parameter.

3 Scrollbar

Use this to scroll the parameters up and down.

4 Default settings

Click this to restore the MIDI control numbers to their default settings.

5 OK

Click this to apply the settings and return to the previous screen.

6 Cancel

Click this to cancel setting changes and return to the previous screen.

■ Parameter list

Parameter name	Explanation	Parameter name	Explanation
EQ HI LEVEL (CH 1–8)	Boost/cut high frequencies. Each channel can be adjusted separately.	EQ MID FREQ (CH 1–8)	Adjust the middle frequency of the mid band that is boost/cut. Each channel can be adjusted separately.
EQ MID LEVEL (CH 1–8)	Boost/cut middle frequencies. Each channel can be adjusted separately.	EQ LO LEVEL (CH 1–8)	Boost/cut low frequencies. Each channel can be adjusted separately.
SUB MIX SEND (CH 1–8)	Adjust the level sent to the SUB-MIX. Each channel can be adjusted separately.	AUX1 SEND (CH 1–8)	Adjust the level sent to the device connected to the AUX SEND 1 jack. Each channel can be adjusted separately.
AUX 2 SEND (CH 1–8)	Adjust the level sent to the device connected to the AUX SEND 2 jack. Each channel can be adjusted separately.	EFX SEND (CH 1–8)	Adjust the level sent to the internal effect. Each channel can be adjusted separately.
PAN (CH 1–8)	Adjust the left-right position. Each channel can be adjusted separately.	LEVEL (CH 1–8)	Adjust the level. Each channel can be adjusted separately.
MUTE (CH 1–8)	Mute/unmute the channel. Each channel can be adjusted separately.	MONO ×2 (CH 5–6)	Change the channel 5/6 input to dual mono.
USB 1/2, USB 3/4	Input audio from channels 1–2 or 3–4 of a computer or smartphone to L6max channel 7/8.	EFX TYPE	Select the internal effect.
COMPRESSOR	Turn on/off the compressor.		

HINT
See the manual for the MIDI device used with the L6max for its MIDI CC numbers.

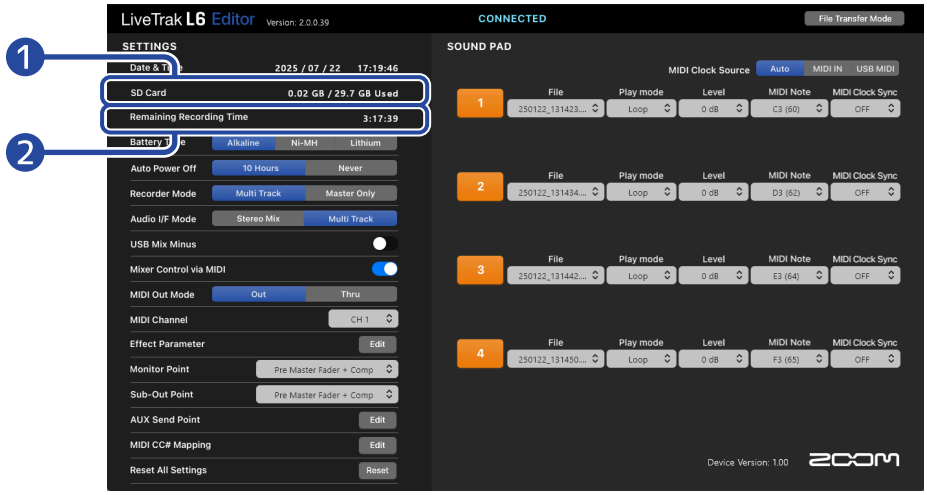
Managing microSD cards

Checking the microSD card state

The capacity and open space of the microSD card loaded in the L6max along with the available recording time can be checked.

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Check the state of the microSD card on the ZOOM L6 Editor screen.



1 microSD card use/capacity

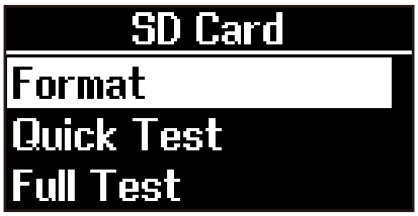
2 Recordable time

Formatting microSD cards

To maximize the performance of a microSD card, use the L6max to format it.

1. With the power off, insert the microSD card. (→ Inserting microSD cards)
2. Press the (power) button to turn on the L6max power.
3. Press (Operation button 1) on the Home Screen.
   This opens the Menu Screen.
4. Use (operation button 2) and (operation button 3) to select “SD Card”, and press (operation button 4) to confirm.

5. Use (operation button 2) and (operation button 3) to select “Format”, and press (operation button 4) to confirm.



6. Use (operation button 2) and (operation button 3) to select “Execute”, and press (operation button 4) to confirm.

The microSD card will be formatted.

NOTE

- 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

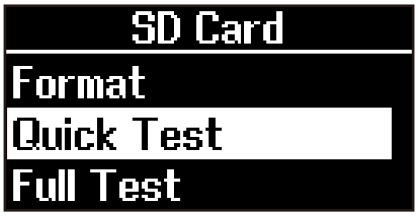
The writing speed of microSD cards can be tested to check if performance is good enough to save data recorded by the L6max.
A Quick Test can be done in a short amount of time, while a Full Test examines the entire microSD card.

Conducting a quick test

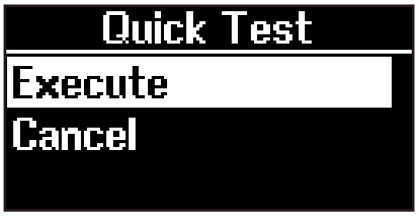
1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “SD Card”, and press UNDO (operation button 4) to confirm.

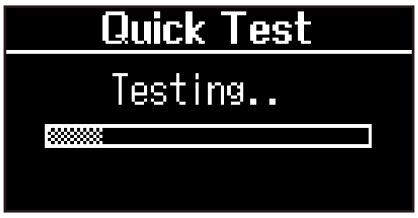
3. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Quick Test”, and press UNDO (operation button 4) to confirm.



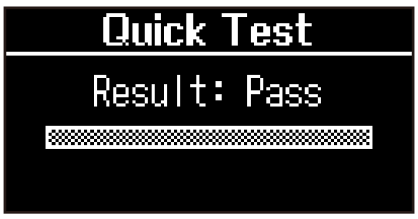
4. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Execute”, and press UNDO (operation button 4) to confirm.



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, MENU (operation button 1) can be pressed to stop it.

5. After the test result is shown, press MENU (operation button 1).

This returns to the previous screen.

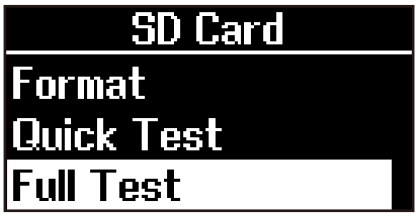
Conducting a full test

1. Press MENU (Operation button 1) on the Home Screen.

This opens the Menu Screen.

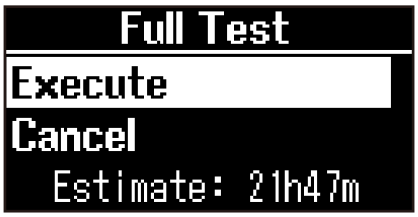
2. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select “SD Card”, and press UNDO (operation button 4) to confirm.

3. Use ⏮ (operation button 2) and ⏭ (operation button 3) to select “Full Test”, and press UNDO (operation button 4) to confirm.

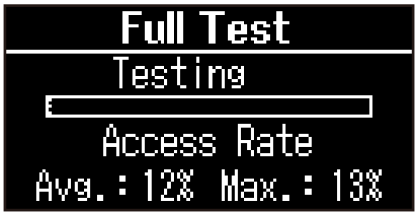


The amount of time required for the full test will be shown.

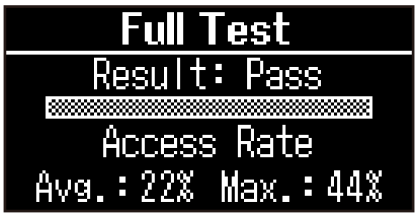
4. Use (operation button 2) and (operation button 3) to select “Execute”, and press (operation button 4) to confirm.



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

During a test, (operation button 1) can be pressed to stop it.

5. After the test result is shown, press (operation button 1).

This returns to the previous screen.

Making various settings

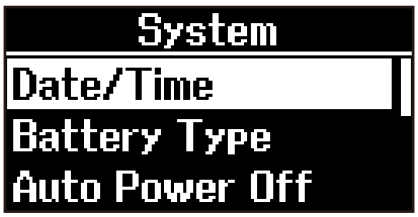
Setting the date and time

The date and time can be set.

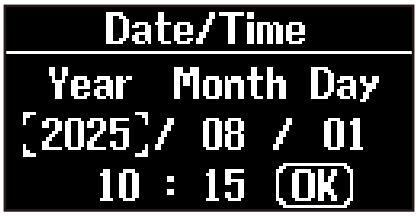
1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “System”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Date/Time”, and press (UNDO) (operation button 4) to confirm.

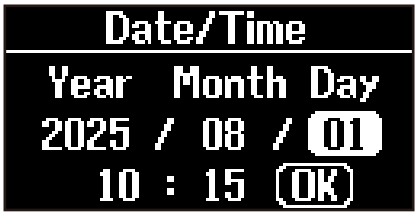


4. Use (operation button 2) and (operation button 3) to select the desired setting item, and press (UNDO) (operation button 4) to confirm selection.



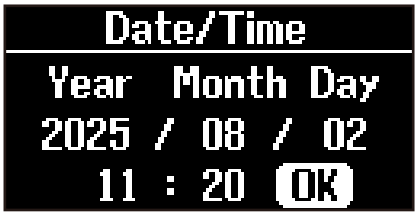
   The characters appear highlighted.

5. Use (operation button 2) and (operation button 3) to change the value, and press (UNDO) (operation button 4) to confirm it.



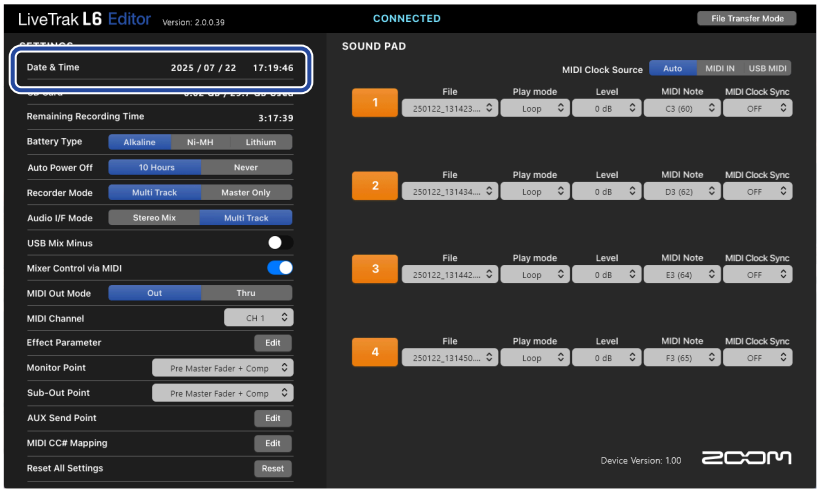
6. Repeat steps 4–5 to set the date and time.

7. After setting all items, use (operation button 2) and (operation button 3) to select the OK (OK) button on screen, and press UNDO (operation button 4) to confirm.



Setting the date and time using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)
When the L6max is connected to ZOOM L6 Editor, the date and time shown in the app will be acquired from the computer and set on the L6max.



NOTE
If factory default settings are restored (→ Restoring factory default settings), the date and time will be reset, so set them again.

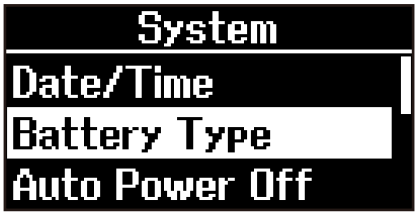
Setting the type of batteries used

Select the type of battery used by the L6max correctly so that the amount of remaining battery charge can be shown accurately.

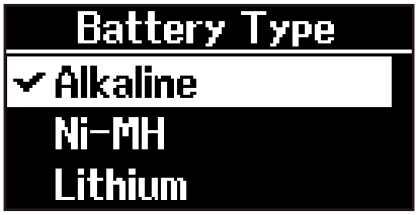
1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “System”, and press UNDO (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Battery Type”, and press UNDO (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the type of battery used, and press UNDO (operation button 4) to confirm it.

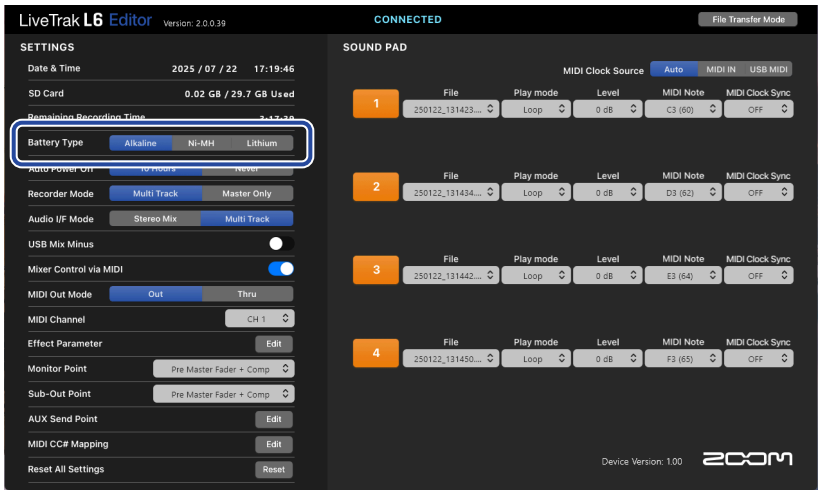


Setting value	Explanation
Alkaline	Alkaline batteries
Ni-MH	Nickel-metal hydride batteries
Lithium	Lithium batteries

Setting the battery type using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. For “Battery Type”, click the type of batteries to select it.



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

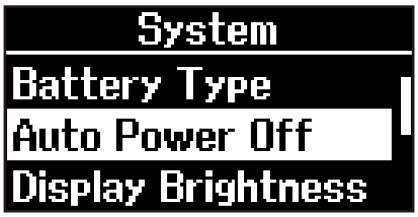
Turning the power off automatically (Auto Power Off)

The power will automatically turn off if the L6max is unused for 10 hours.
To keep the power on at all times, set Auto Power Off to “Never”.

1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “System”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Auto Power Off”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select the time until the power turns off, and press (UNDO) (operation button 4) to confirm.

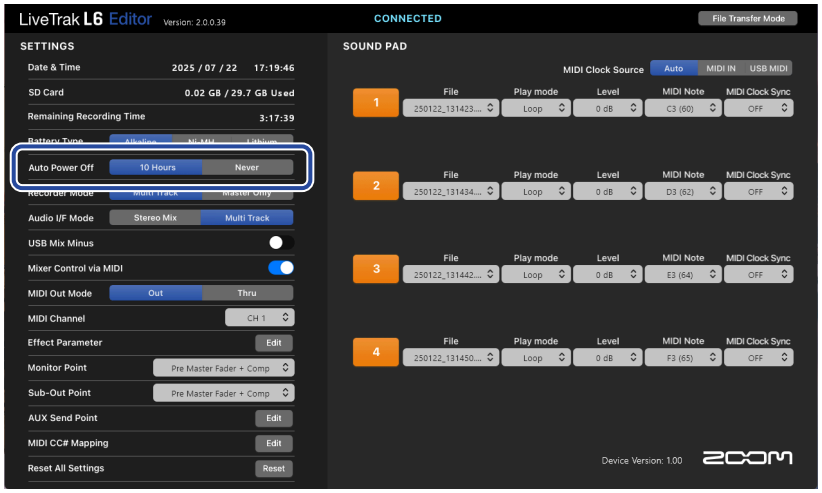
Setting value	Explanation
10 Hours	The power will automatically turn off if it is unused for 10 hours.
Never	The power will not turn off automatically.

Setting auto power off using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. For “Auto Power Off”, select an automatic power off setting.

Setting value	Explanation
10 Hours	The power will automatically turn off if it is unused for 10 hours.
Never	The power will not turn off automatically.



NOTE

- In the following cases, the power will not turn off automatically regardless of the Auto Power Off Setting.
  - When recording or playing back
  - When using the L6max as an audio interface
  - When using the file transfer function
  - When executing a firmware update
- Operating the L6max will reset the time until the Auto Power Off function activates.

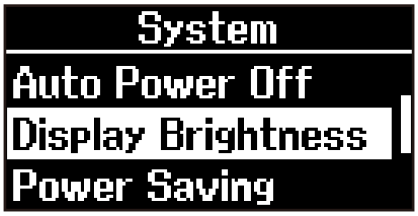
Setting the display brightness

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

1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “System”, and press UNDO (operation button 4) to confirm.

3. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to select “Display Brightness”, and press UNDO (operation button 4) to confirm.



4. Use ◀◀ (operation button 2) and ▶▶ (operation button 3) to set the display brightness, and press UNDO (operation button 4) to confirm.

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

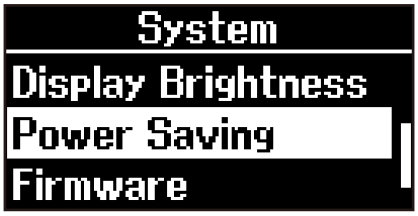
Setting display power saving

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 (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “System”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Power Saving”, and press (UNDO) (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to set the power saving time, and press (UNDO) (operation button 4) to confirm.

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

Restoring factory default settings

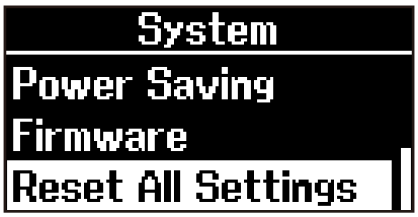
The L6max settings can be restored to their factory defaults.

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

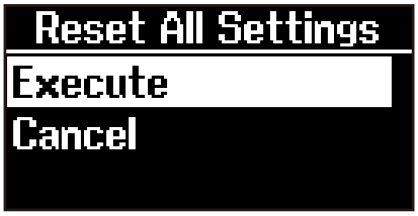
1. Press MENU (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “System”, and press UNDO (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Reset All Settings”, and press UNDO (operation button 4) to confirm.



4. Use (operation button 2) and (operation button 3) to select “Execute”, and press UNDO (operation button 4) to confirm.

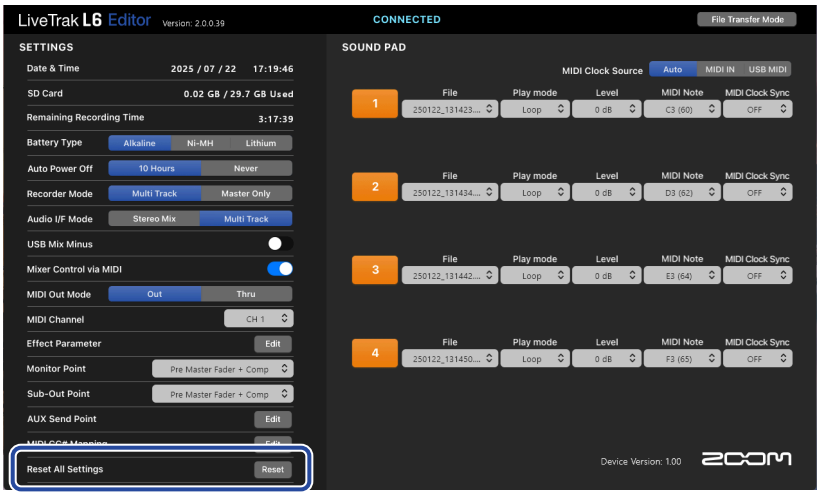


The L6max will be restored to its factory default state.

Restoring factory default settings using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Click “Reset”.



The L6max will be restored to its factory default state.

Managing the firmware

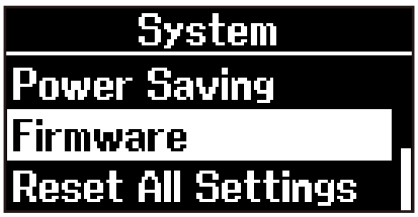
Checking firmware versions

The firmware versions used by the L6max can be checked.

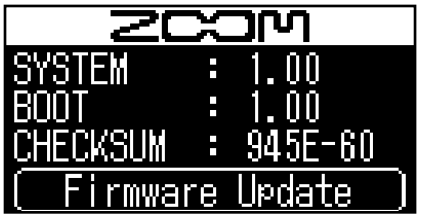
1. Press (MENU) (Operation button 1) on the Home Screen.
   This opens the Menu Screen.

2. Use (operation button 2) and (operation button 3) to select “System”, and press (UNDO) (operation button 4) to confirm.

3. Use (operation button 2) and (operation button 3) to select “Firmware”, and press (UNDO) (operation button 4) to confirm.



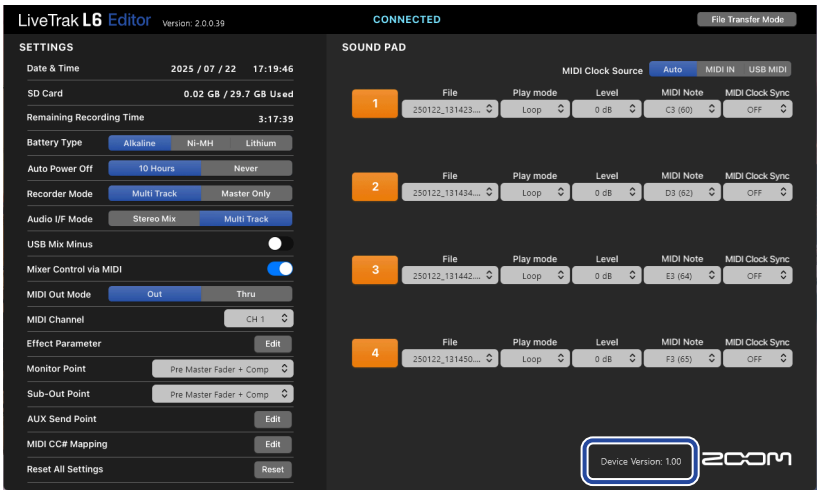
   This shows the firmware versions.



Checking firmware versions using the app

1. Connect the L6max with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor. (→ Using the app)

2. Check the firmware version on the ZOOM L6 Editor screen.



Updating the firmware

The L6max firmware can be updated to the latest versions.
Files for the latest firmware updates can be downloaded from the ZOOM website (zoomcorp.com/help/l6max).
Follow the instructions in the “L6max Firmware Update Guide” on the L6max download page.

Appendix

Troubleshooting

If the L6max seems to be operating strangely, check the following items first.

Mixing/recording/playback trouble

There is no sound or output is very quiet

- Confirm that headphones and output cables are connected properly. If sound is not output even when cables are connected properly, wires in the cables might be broken. Replace the headphones or output cables. (→ Making connections)
- Confirm that the output levels are not too low for MONITOR, MASTER, SUB-OUT and each of the tracks. (→ Adjusting the overall and monitoring levels)
- Confirm that the cables connecting the other device and the INPUT 1–8 jacks are connected properly. Connect dynamic and condenser mics using XLR plugs to the INPUT 1–4 jacks. If sound is not output even when cables are connected properly, wires in the cables might be broken. Replace the cables. (→ Making connections)
- If the levels of devices connected to INPUTS 5–8 are low, confirm that the 0dB -20dB (pad) switches are not set to −20 dB.
- Check the orientations of mics and level settings of connected equipment.
- Confirm that (mute) buttons are not lit. (→ Muting channels)
- If using a condenser mic, confirm that the 48V (phantom power) button is on. (→ Connecting to INPUT 1–4 jacks)

Output is distorted

- If a line level output device is connected (and sound is distorted or signal indicators light red), set the 0dB -20dB (pad) switch to −20 dB.
- If monitoring at a high volume, use the (MASTER), (MONITOR) and (SUB-OUT) knobs to lower the output volume. (→ Adjusting the overall and monitoring levels)
- Use the (encoders) to adjust the levels of each channel. (→ Adjusting channel levels)
- Confirm that the highest levels of the level meters are not lighting. If they are lighting, use the (MASTER) knob to adjust the MASTER output level.

Recorded audio is too loud, too quiet or silent

- If recorded audio is too loud, increase the distance between the mic and the sound source or lower the level of the connected device.
- If using a condenser mic, confirm that the 48V (phantom power) button is on. (→ Connecting to INPUT 1–4 jacks)

Recording is not possible

- Confirm that the microSD card has open space. (→ Checking the microSD card state)
- Confirm that a microSD card is loaded properly in the card slot. (→ Inserting microSD cards)

The recorded sound breaks up

- Use the card testing function on the unit and use a card that passes the test. (→ Testing microSD cards)
- We recommend using microSD cards that have been confirmed to work with this product. See the ZOOM website (zoomcorp.com/help/l6max).

Recorded files are corrupt

- Since files are automatically saved at regular intervals, even if the power is interrupted or another problem occurs during recording, files could be restored to normal by having the L6max read the microSD card and play the affected files.

Date and time become reset

- If power is not supplied by an AC adapter or batteries for a long time, and the power supply for date and time retention becomes depleted, data stored in the unit will be reset.
  If the Date/Time Setting Screen opens when the power is turned on, make the settings again, or connect the L6max with a computer using a USB cable (Type-C) and launch L6 Editor to acquire the date and time. (→ Setting date/time and battery type (making initial L6max settings before use), Setting the date and time using the app)

Internal effects are not working

- Use the 

(EFX RTN) knob to adjust the level of the internal effect. (→ Using internal effects)
- Press the EFX (EFX) button and use the  (encoders) to adjust the send levels of each channel. (→ Using internal effects)

Audio files cannot be assigned to SOUND PAD buttons

- Check the formats of the audio files to be assigned. (→ Assigning audio files to SOUND PAD buttons)
- Confirm that the audio files are saved in the correct directory. (→ Assigning audio files to SOUND PAD buttons)

SOUND PAD functions cannot be used

- Confirm that audio files have been assigned to the sound pads. (→ Assigning audio files to SOUND PAD buttons)
- Adjust the individual levels of the sound pads. (→ Setting sound pad levels, Playing sound pads)
- Use the 

(SOUND PAD) knob to adjust the sound pad level. (→ Playing sound pads)

Other trouble

Not recognized by a computer, smartphone or tablet even though a USB port is connected to it

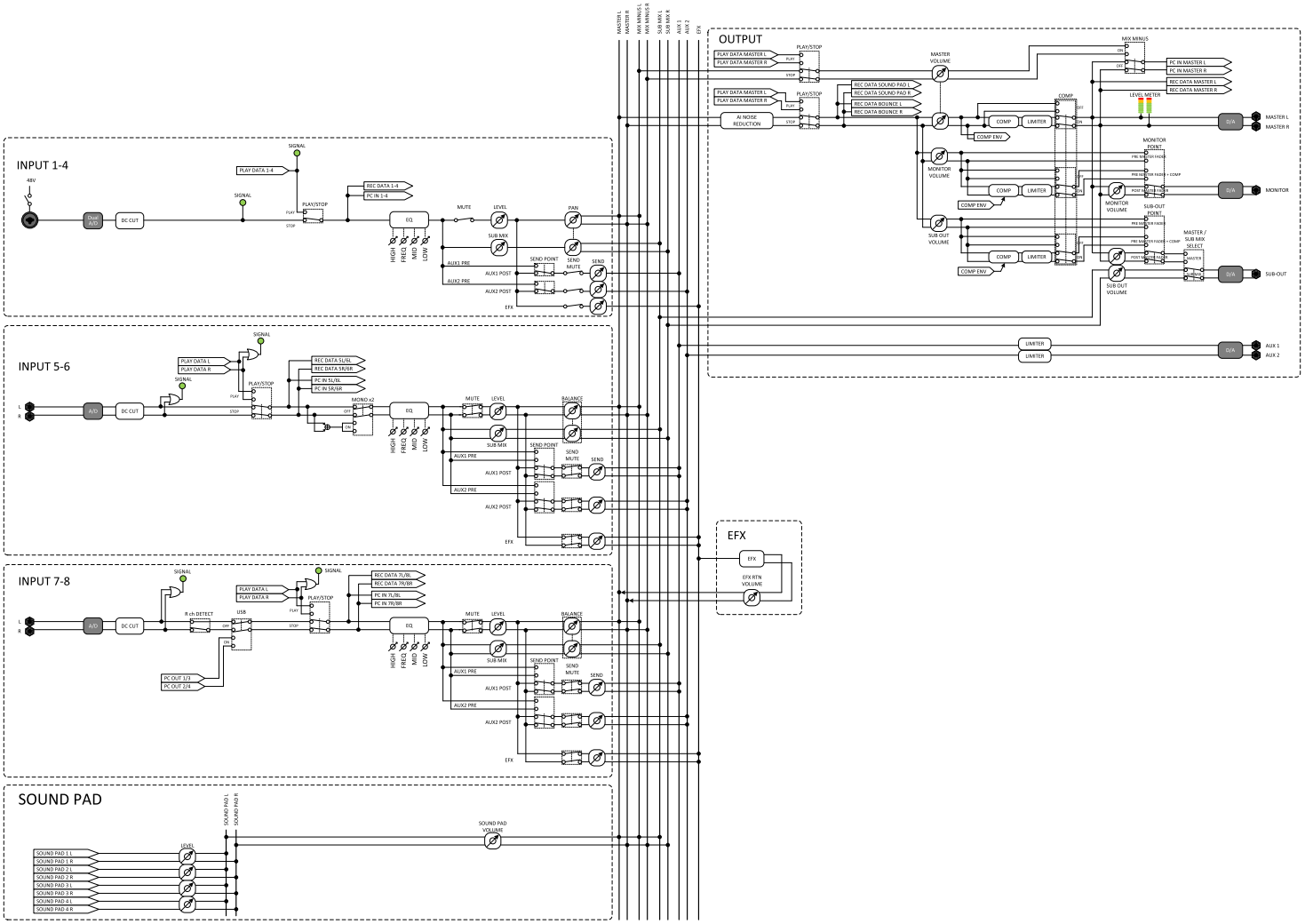
- Use a USB cable that supports data transfer. Charging cables cannot be used for data transmission.
- Connect the USB cable to the USB port on the top panel, not the USB port on the right side.
- The operation mode must be set on the L6max to allow the computer, smartphone or tablet to recognize it. (→ Transferring files to computers)
- Confirm that the computer, smartphone or tablet and the application being used support 32-bit float format.
- Even if “L6max” cannot be selected for the “Sound” setting on a computer, it can still be used as a 32-bit float audio interface by selecting “L6max” as the “Audio” or “Input/Output” device in an application that supports 32-bit float format.
- A driver is necessary to use 32-bit float format with Windows. The driver can be downloaded from the ZOOM website (zoomcorp.com/help/l6max).

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)
- Disconnect unnecessary cables from connectors.
- Due to their characteristics, using rechargeable nickel metal hydride batteries (especially high-capacity ones) or lithium batteries should enable longer use than alkaline batteries when power consumption is high.

Block diagram



MIDI implementation chart

Function		Transmitted	Received	Remarks
Basic channel	When powered on	1 – 16	1 – 16	
	Changed	1 – 16	1 – 16	
Mode	When powered on	Mode 3	Mode 3	
	Message	×	×	
	Altered	**********	**********	
Note number		0 – 127	0 – 127	
	True Voice	0 – 127	0 – 127	SOUND PAD 1 – 4
Velocity	Note On	×	×	
	Note Off	×	×	
Aftertouch	Keys	×	×	
	Channel	×	×	
Pitch Bend		×	×	
Control Change	0	×	×	
	1 – 31	○	○	
	32	×	×	
	33 – 95	○	○	
	96 – 101	×	×	
	102 – 119	○	○	
	120 – 127	×	×	
Program Change		○	○	
	Settable range	0 – 2	0 – 2	SCENE A – D
System Exclusive		×	×	
System Common	Song Position	×	○	
	Song Select	×	×	
	Tune	×	×	
System Real Time	Clock	×	○	
	Command	×	○	
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	×	×	
	Active Sense	×	×	
	Reset	×	×	

Mode 1: OMNI ON, POLY
Mode 2: OMNI ON, MONO
○: Yes
Mode 3: OMNI OFF, POLY
Mode 4: OMNI OFF, MONO
×: No

Specifications

Numbers of input and output channels	Inputs	MIC/LINE (mono)	4
		LINE (stereo)	4
	Outputs	AUX SEND (mono)	2
		MASTER (stereo)	1
		MONITOR (stereo)	1
		SUB-OUT (stereo)	1
Inputs	MIC/LINE	Connectors	4 XLR/TRS combo jacks (XLR: 2 HOT, TRS: TIP HOT)
		Input gain	Adjustment unnecessary (dual A/D converter circuits used)
		Input impedance	XLR: 3.8 kΩ or more TRS: 18 kΩ or more (when Hi-Z off) / 1 MΩ or more (when Hi-Z on)
		Maximum input level	XLR: +4 dBu TRS: +24 dBu
		Phantom power	+48 V Channel total 20 mA or less
	LINE	Connectors	8 TS phone jacks
		Input impedance	30 kΩ or more
		Maximum input level	+4 dBu (when PAD is 0 dB) +24 dBu (when PAD is -20 dB)
Outputs	AUX SEND	Connectors	2 TRS phone jacks (impedance balanced)
		Maximum output level	+9.5 dBu
		Output impedance	147 Ω
	MASTER	Connectors	2 TRS phone jacks (balanced)
		Maximum output level	+15 dBu
		Output impedance	147 Ω
	MONITOR / SUB-OUT	Connector	TRS phone jack
		Maximum output level	50 mW + 50 mW (63Ω load)
		Output impedance	14.7 Ω
Buses		MASTER	1
		SUB-MIX	1
		AUX SEND	2

		SEND EFX	1
Channel strip	EQ	HIGH	10 kHz, ±15 dB, shelving
		MID	100 Hz – 8 kHz, ±15 dB, peaking
		LOW	100 Hz, ±15 dB, shelving
Level meters			6 segments
Send effects			6 types
Recorder		Maximum simultaneous recording tracks	14
		Maximum simultaneous playback tracks	14
		Recording formats	48kHz, 32-bit float, mono/stereo WAV
		Recording media	microSDHC memory cards (Class 10 or higher) microSDXC memory cards (Class 10 or higher) See the ZOOM website (zoomcorp.com/help/l6max) for information about microSD cards that have been confirmed to work with this unit.
Display			128×64 OLED
Audio interface		Numbers of inputs and outputs	Input: 14 channels Output: 4 channels
		Sampling frequency	48 kHz
		Bit depth	32-bit float / 24-bit
		Interface	USB 2.0
Card reader		Class	Mass storage class USB 2.0 High Speed
Sampling frequency			48 kHz
Frequency response			20 Hz – 20 kHz, −1.0 dB / +0.5 dB
Equivalent input noise			–120 dBu or less (IHF-A) at 150Ω input
Power			4 AA batteries (alkaline, lithium, or rechargeable NiMH) AC adapter (ZOOM AD-17): DC 5V/1A • USB bus power is supported.

Estimated continuous recording time 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.	14-track recording, phantom power off, headphones used (63Ω load), no MASTER output connections	Alkaline batteries: about 1.5 hours NiMH batteries (1900 mAh): about 2.5 hours Lithium batteries: about 5 hours
Power consumption		5 W maximum
Dimensions		284 mm (W) × 114 mm (D) × 46.5 mm (H)
Weight (main unit only)		673 g
Weight (including batteries)		767 g

Note: 0 dBu = 0.775 Vrms

ZOOM CORPORATION
4-4-3 Kanda-surugadai, Chiyoda-ku, Tokyo 101-0062 Japan
zoomcorp.com

Z2I-5717-01