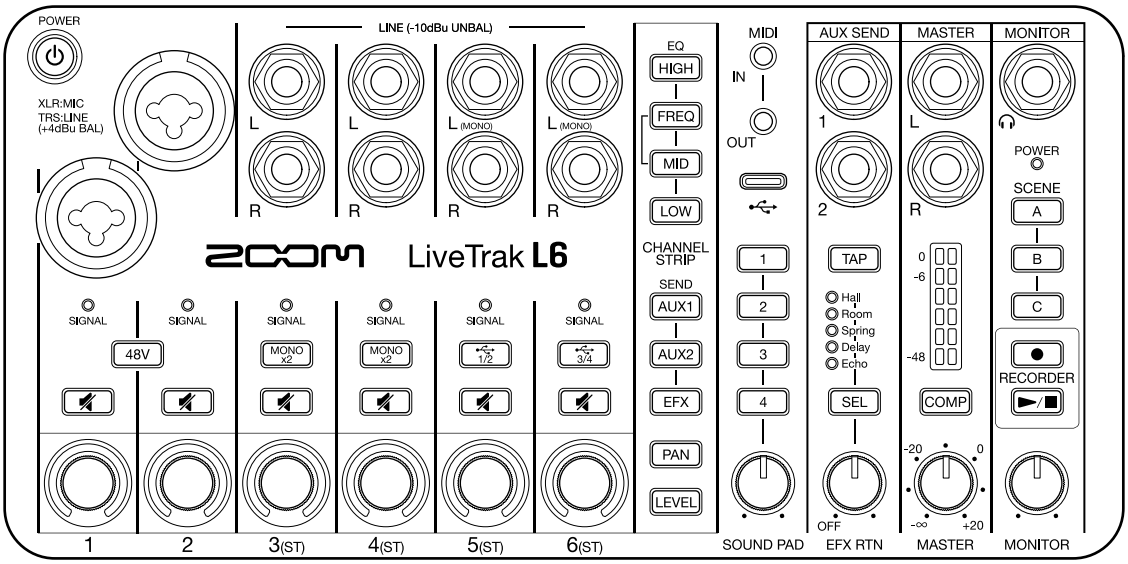
L6

LiveTrak



Operation Manual

You must read the Usage and Safety Precautions before use.

Notes about this Operation Manual

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Contents

L6 overview

Realizing high audio quality while mixing

With dual A/D converter circuits and support for 32-bit float format, the L6 can maintain the highest audio quality while mixing.

> **NOTE**
> On the L6, only INPUT 1 and INPUT 2 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.

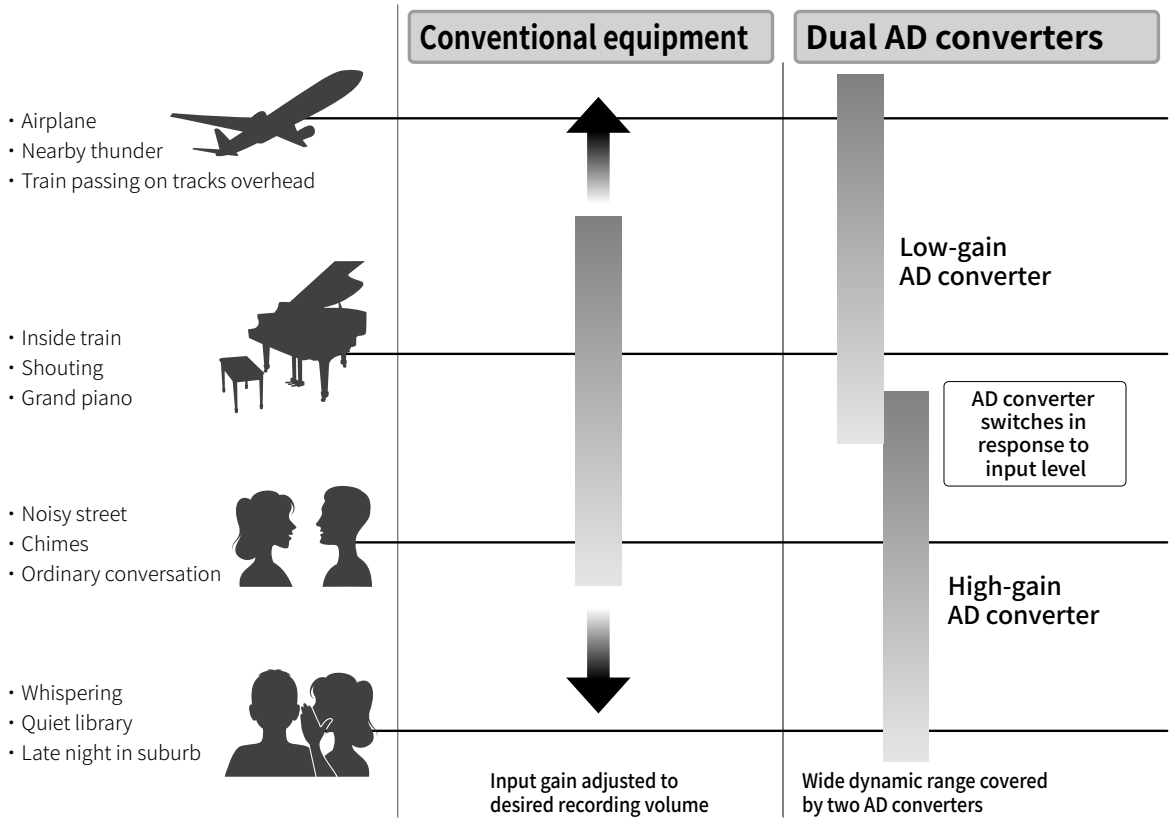
Dual A/D converter circuit overview

For each input circuit, the L6 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 L6, only INPUT 1 and INPUT 2 jacks have dual A/D converter circuits.

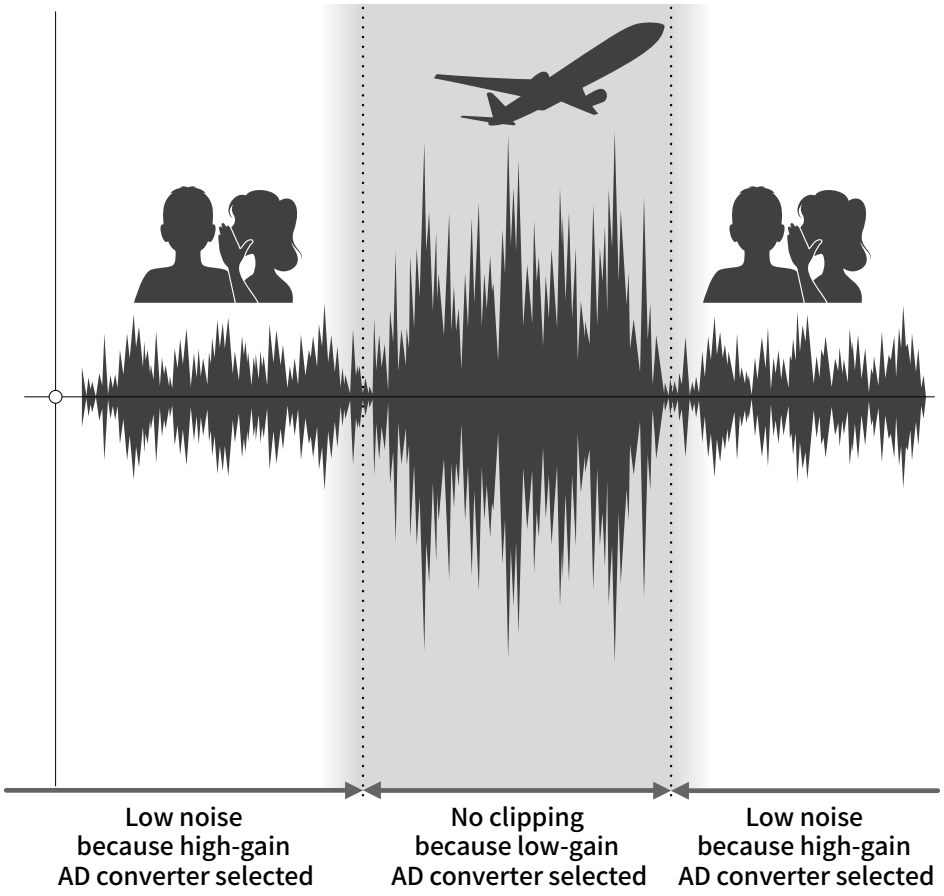
Providing amazing dynamic range

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 L6 constantly monitors data from the two A/D converters and automatically selects the one that provides the best input results.



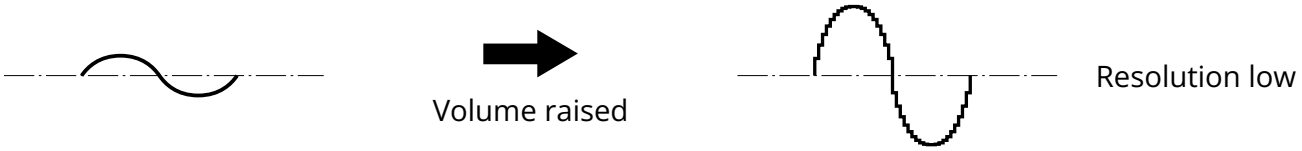
32-bit float WAV file overview

The L6 can record input audio and mixed audio. This recorded audio is saved in a 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.

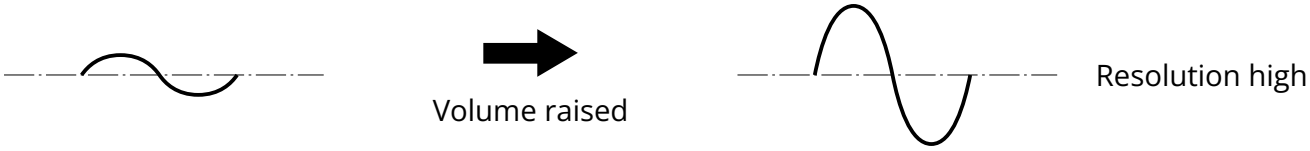
Resolution advantage

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



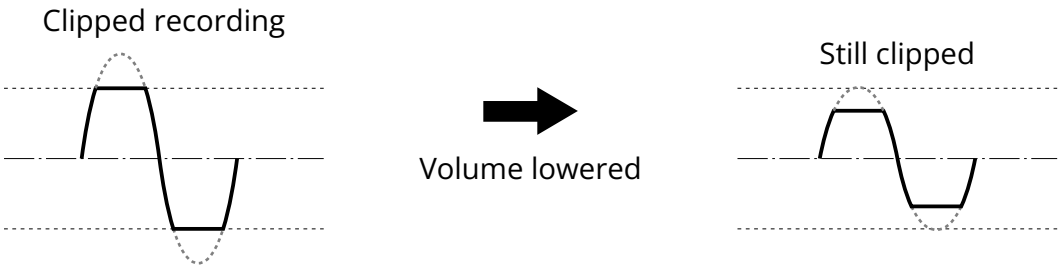
■ 32-bit float WAV



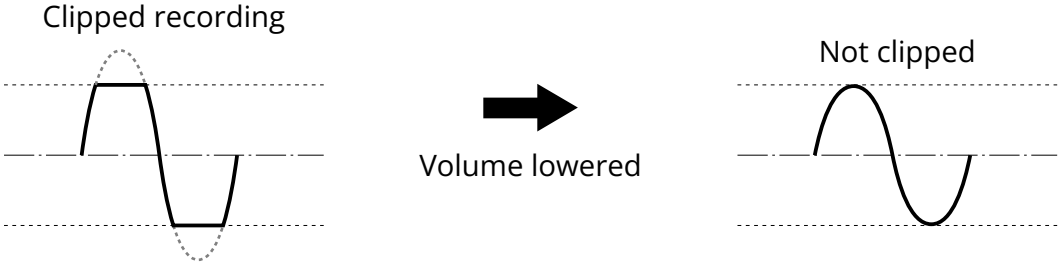
Clipping advantage

If a waveform sounds clipped when output from the L6 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

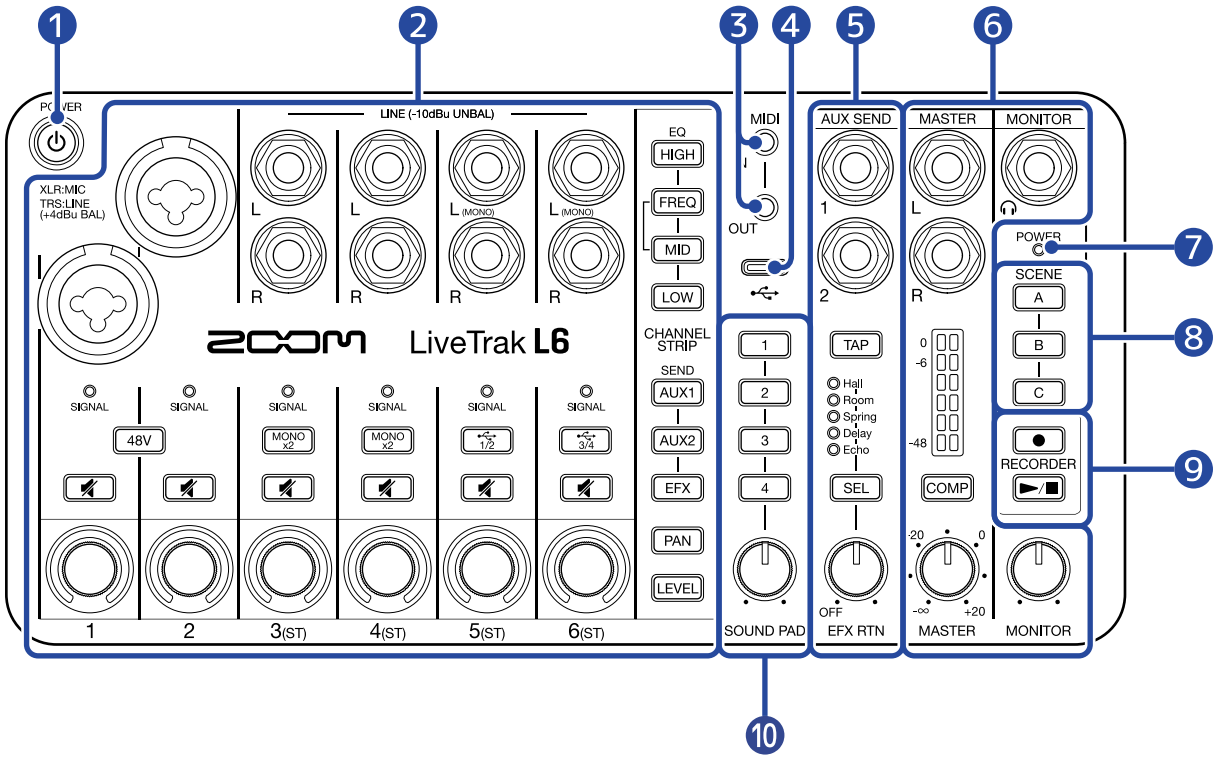


■ 32-bit float WAV



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 with MIDI devices that have 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 L6 as an audio interface
- Control the L6 using MIDI functions

This supports operation on USB bus power.

5 Send effect section (→ Send effect section)

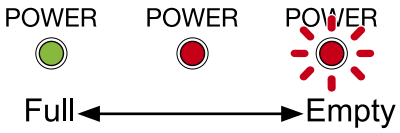
Select the internal effect and adjust its level.
External effects (2) can also be connected.

6 Output section (→ Output section)

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

7 Power indicator

This lights when the power is on.
If using batteries, this shows the remaining battery charge. If the remaining battery charge becomes low, replace the batteries (→ Installing batteries) or connect an AC adapter (→ Connecting an AC adapter) or portable battery (→ Other power sources).



8 Scene selection buttons

Use these to save and recall L6 settings (→ Saving settings (scenes)).

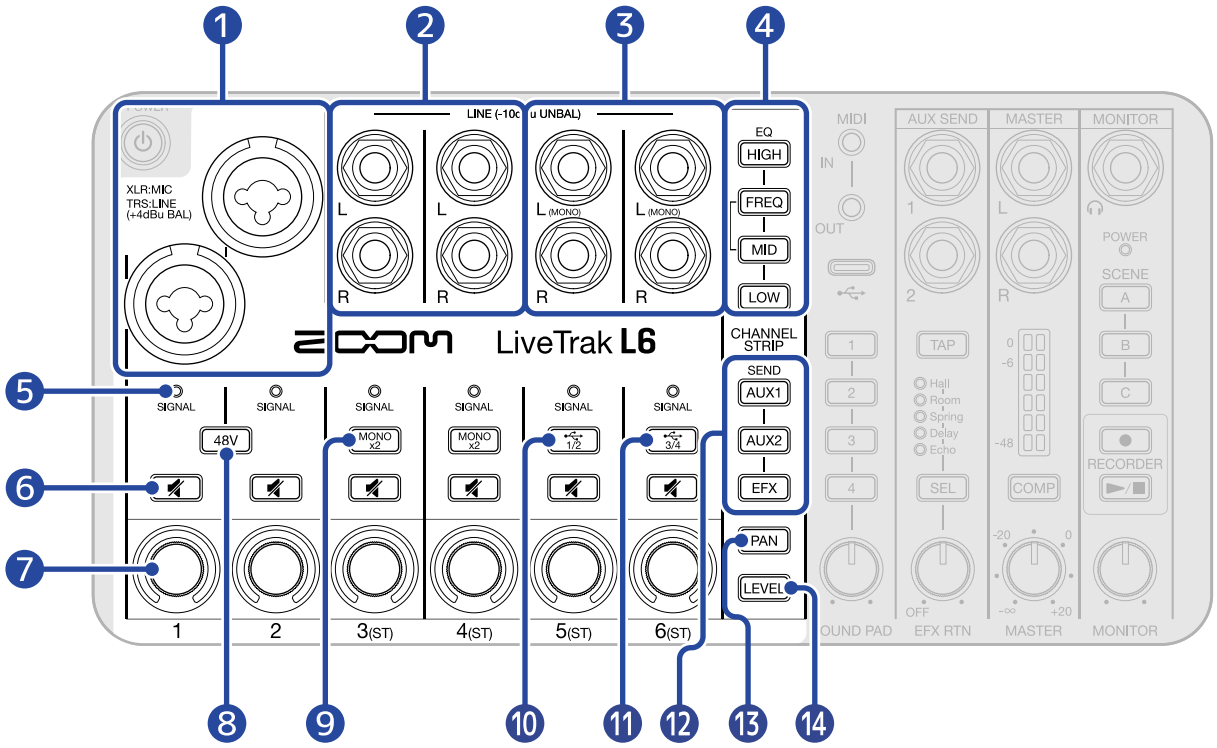
9 Recorder section

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.

10 Sound pad section

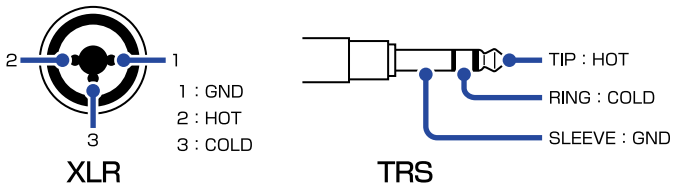
Audio files assigned to the 1 – 4 (1 – 4) pads can be played back by pressing them.
Use the SOUND PAD (SOUND PAD) knob to adjust the sound pad level.

■ Channel operation section



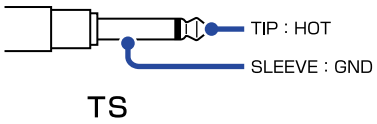
1 INPUT 1 and INPUT 2 jacks (mono channels)

Connect mics and instruments, for example, to input them on channels 1 and 2. These can be used with XLR and TRS plugs.



2 INPUT 3 (L/R) and INPUT 4 (L/R) jacks (stereo channels)

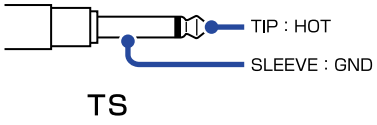
Connect synthesizers and effects, for example, to input them in stereo on channels 3 and 4. These can be used with TS plugs.



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

3 INPUT 5 (L (MONO)/R) and INPUT 6 (L (MONO)/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.



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

When using the L6 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 the tone.

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

5 Signal indicators (channels 1 – 6)

These show input signal states.

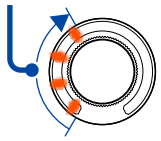
SIGNAL : Audio being input / SIGNAL : Clipping

6 Mute buttons (channels 1 – 6)

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

7 Channel encoders (channels 1 – 6)

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 encoder.



8 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.

9 MONO buttons (channels 3 – 4)

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.

10 USB 1/2 button (channel 5)

When using the L6 as an audio interface, press this to light it and input audio from channels 1 and 2 of the computer or smartphone.
When lit, audio cannot be input through the INPUT 5 (L (MONO)/R) jacks.

11 USB 3/4 button (channel 6)

When using the L6 as an audio interface, press this to light it and input audio from channels 3 and 4 of the computer or smartphone.
When lit, audio cannot be input through the INPUT 6 (L (MONO)/R) jacks.

⑫ 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.

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

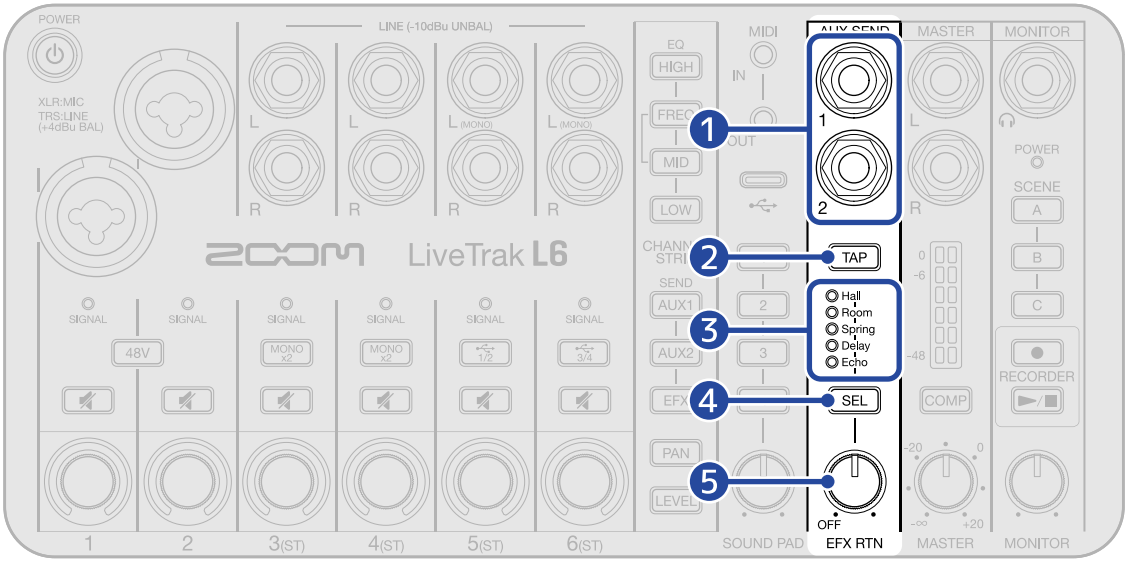
⑬ PAN button

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

⑭ LEVEL button

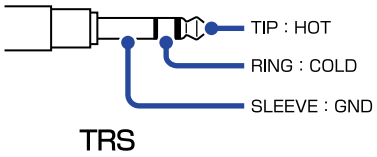
Press this, lighting it, and then use the channel  (encoders) to adjust their levels.

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

3 Internal effect indicators

The indicator lights for the selected internal effect.

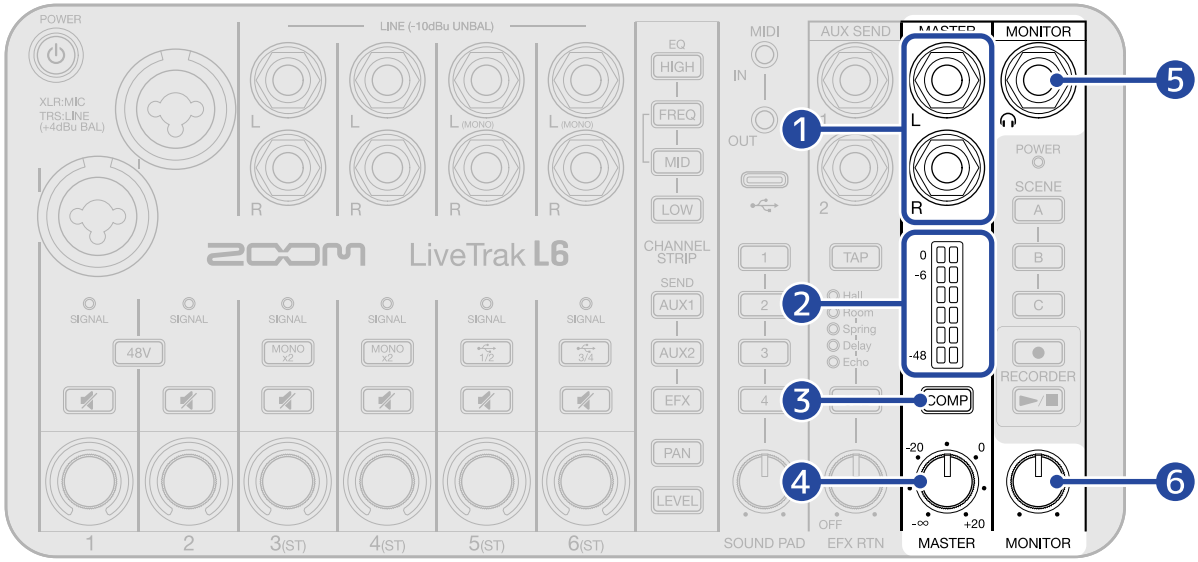
4 SEL button

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

5 EFX RTN knob

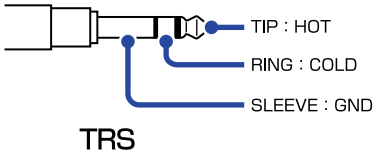
This adjusts the internal effect level.

■ 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 L6. 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 (compressor) 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.

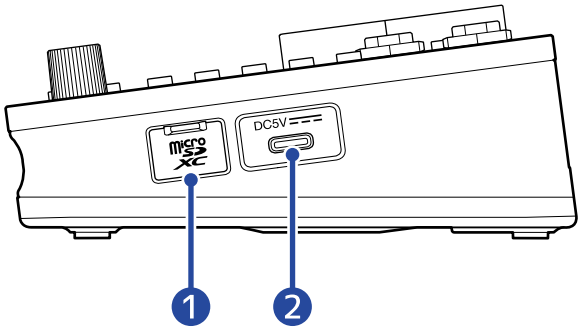
5 MONITOR output jack

Connect headphones here to monitor the stereo sound mixed on the L6.

6 MONITOR knob

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

Right side



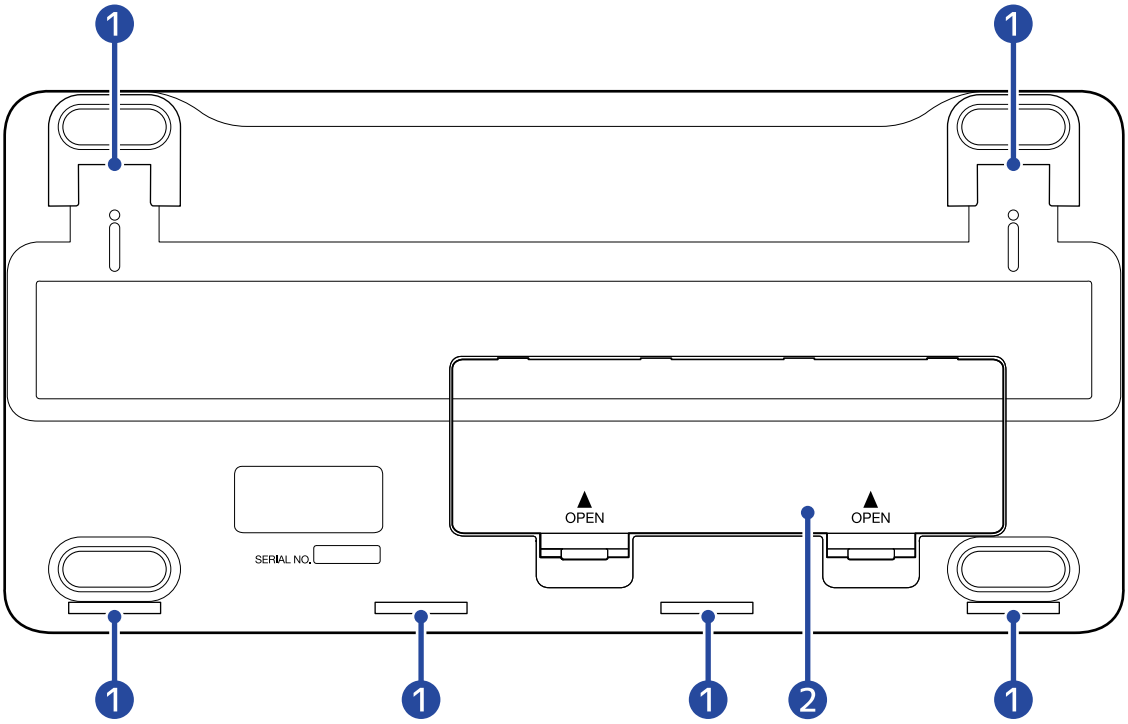
1 microSD card slot

Insert a microSD card here.

2 USB power port (Type-C)

Power can be supplied to the L6 by connecting a specified AC adapter (AD-17) or a 5V portable battery.

Bottom



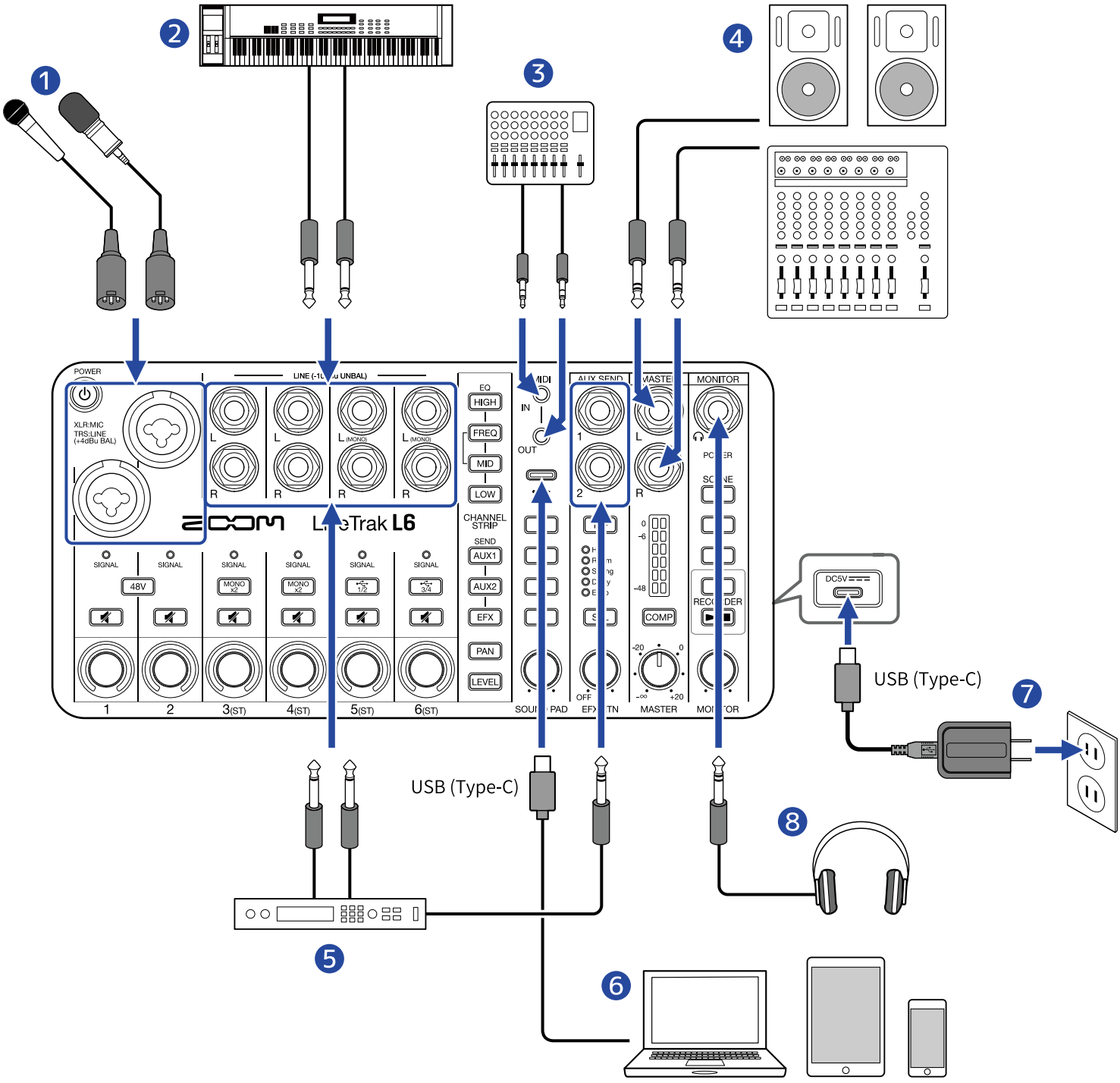
1 **Openings for connecting a Eurorack adapter (ERL-6)**

The L6 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)

Connection example



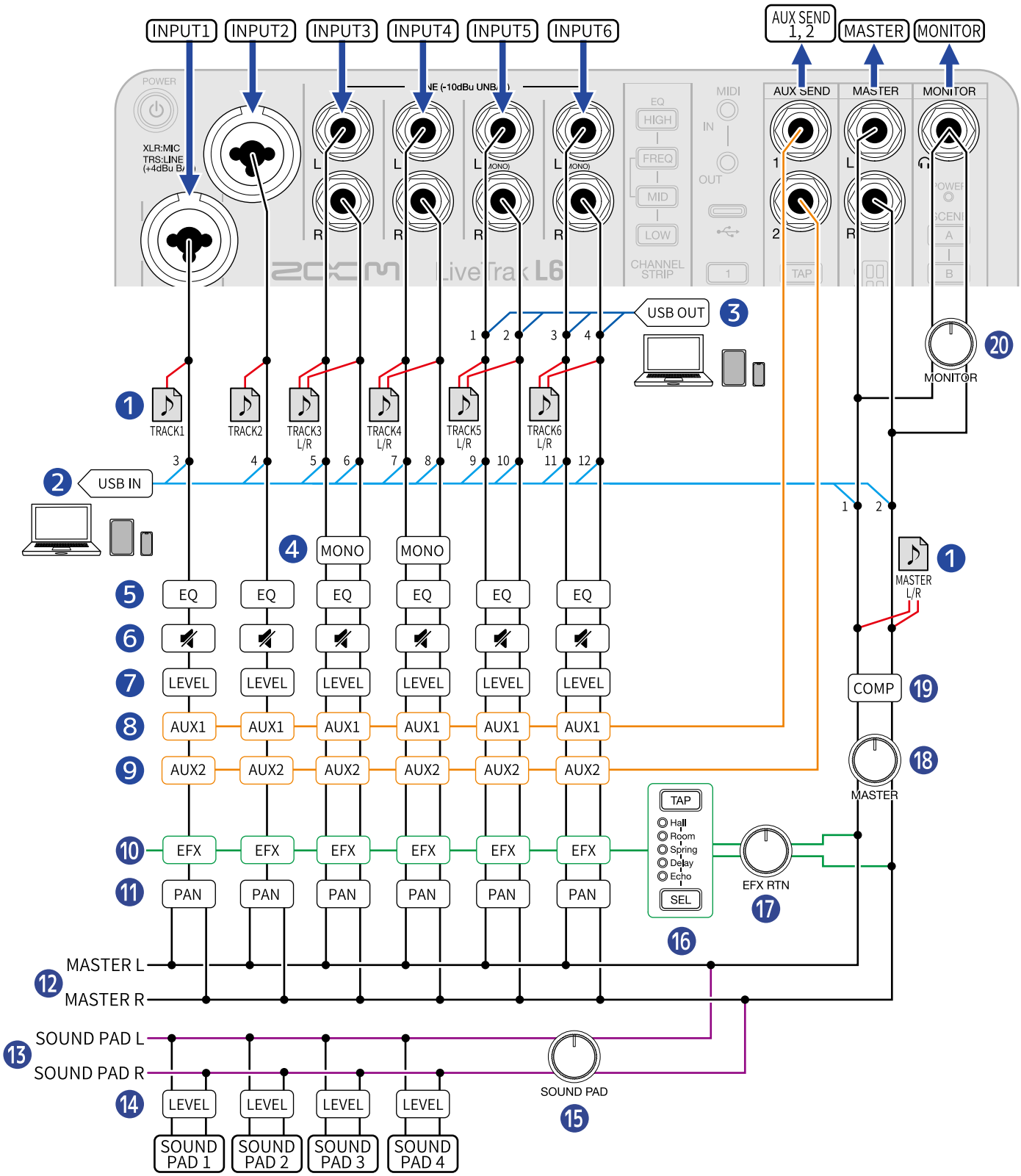
1. Mics for lead and backing vocals and drums, for example (→ Connecting mics)
2. Synthesizers and other instruments (→ Connecting synthesizers and effects)
3. MIDI devices, including keyboards and controllers (→ Connecting MIDI devices)
4. Powered monitors and PA systems, for example (→ Connecting headphones, 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 – 6 and the master outputs are recorded on the microSD card.

During playback on the L6, MASTER L/R recording files are 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.

❷ USB input (light blue)

When in use as an audio interface, these sounds are input to the computer, smartphone or tablet.

❸ USB output (blue)

When in use as an audio interface, these sounds are output from the computer, smartphone or tablet.

❹ MONO ×2 buttons

The handling of the L and R signals of channels 3 and 4 can be switched between stereo and mono.

❺ Equalizer

The tones of channels 1 – 6 can be adjusted.

❻ Muting

Channels 1 – 6 can be muted.

❼ Levels

The levels of channels 1 – 6 can be adjusted.

❽ AUX 1 outputs (orange)

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

❾ AUX 2 outputs (orange)

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

❿ Effect (green)

Signals can be sent to the internal effect. The level sent from each channel can be adjusted.

⓫ Panning

The stereo positions of channels 1 – 6 can be adjusted.

⓬ MASTER L/R (black)

Signals are output to the MASTER jacks.

⓭ SOUND PAD L/R (purple)

Sound pad signals are output.

⓮ Levels

The levels of sound pads 1 – 4 can be adjusted. These can only be set using the ZOOM L6 Editor computer app. (→ Setting sound pad play modes and levels)

⓯ Sound pad level

The overall level of all sound pads can be adjusted.

⑯ Internal effects

Effects that can be selected from 5 types.

⑰ Effect level

The internal effect level can be adjusted.

⑱ Master level

The master level can be adjusted.

⑲ Compressor

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

⑳ Monitoring volume

The monitoring volume can be adjusted.

Preparing for use

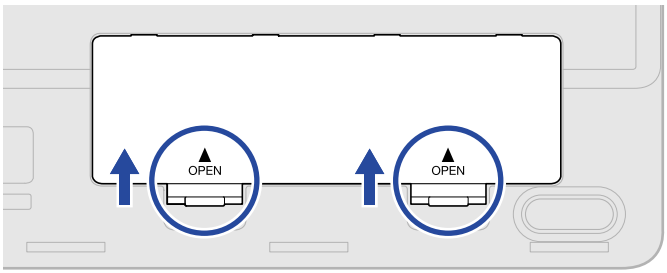
Supplying power

The L6 can be powered by a connected power supply (AC adapter, USB bus power or portable battery) or batteries.
Power sources will be used in the following order of priority: USB port on right side, USB port on top, batteries.

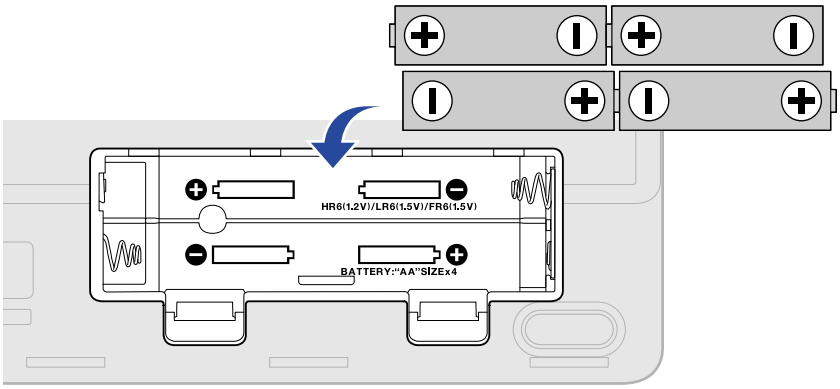
Installing batteries

To power the L6 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.



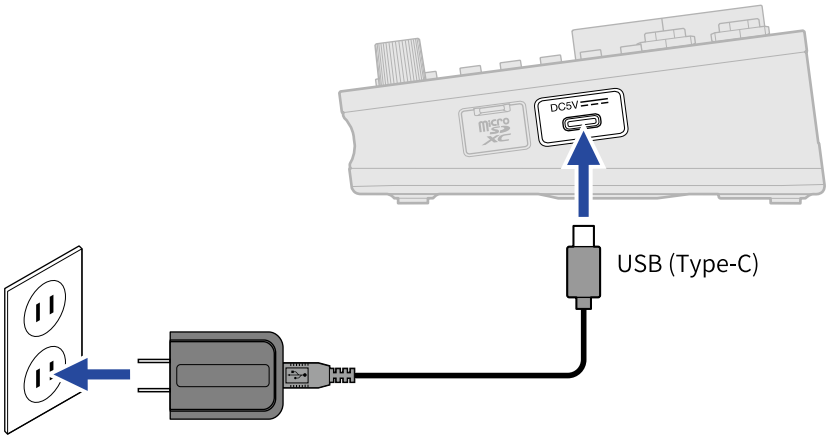
3. Replace the battery cover.

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 with the POWER (power indicator). (→ Top)

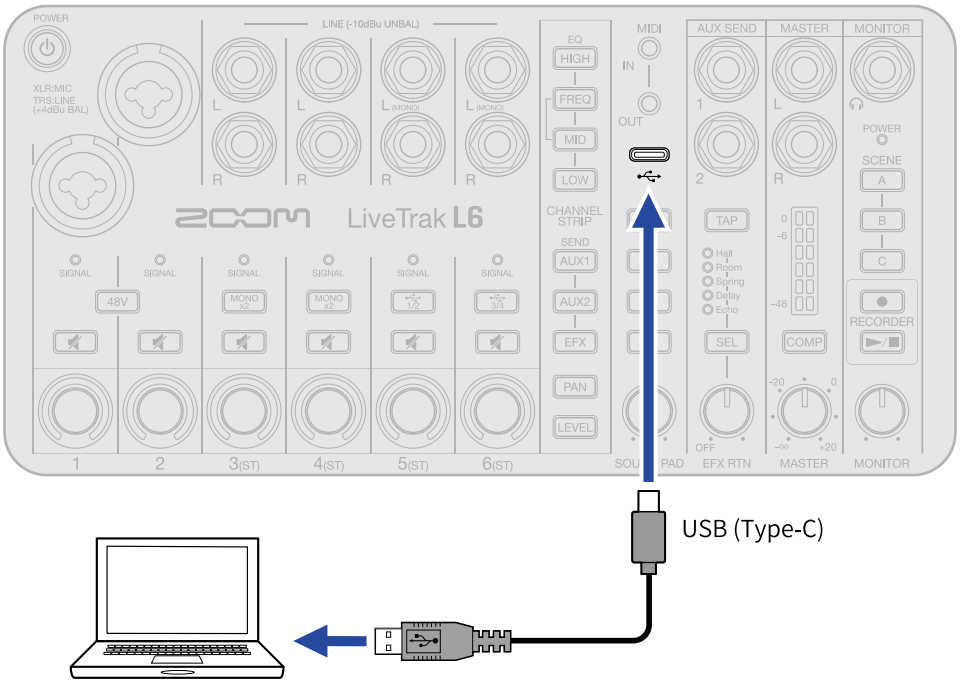
Connecting an AC adapter

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.



Other power sources

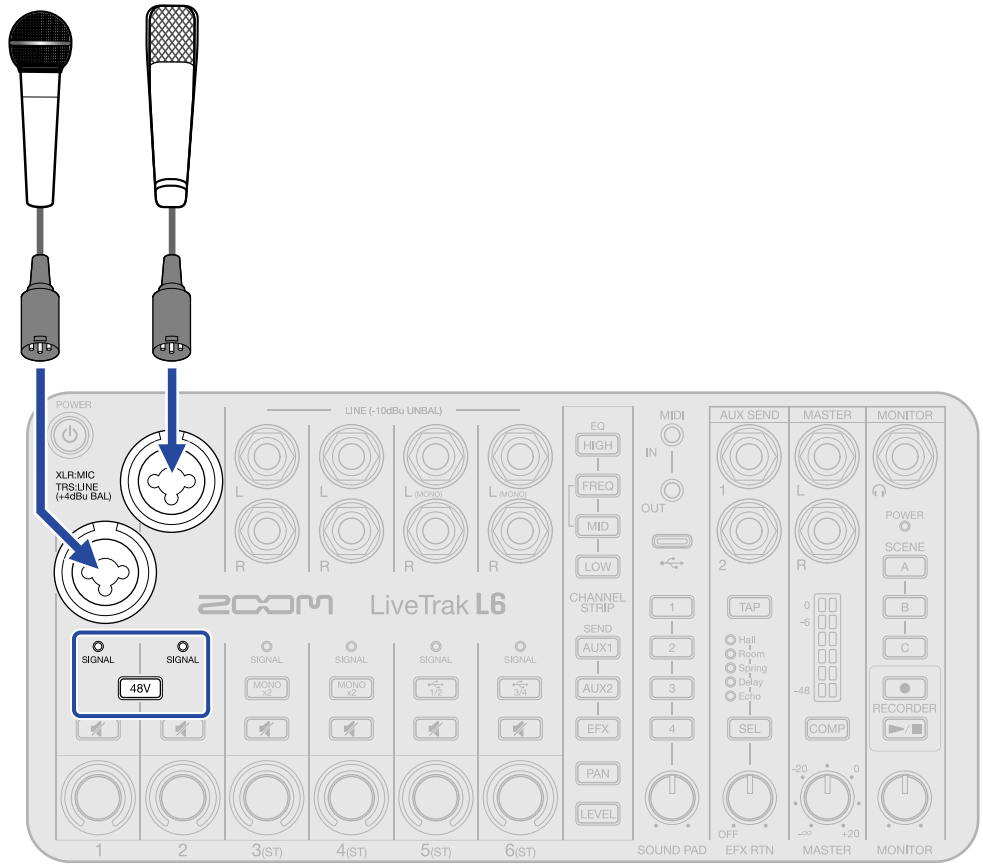
The L6 can be operated using USB bus power by connecting a computer to the USB (Type-C) port on the top of the unit. A 5V mobile battery (commercially-available) can also be used to provide power.



Making connections

Connecting mics

Connect dynamic and condenser mics with XLR plugs to the INPUT 1 and 2 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.

NOTE

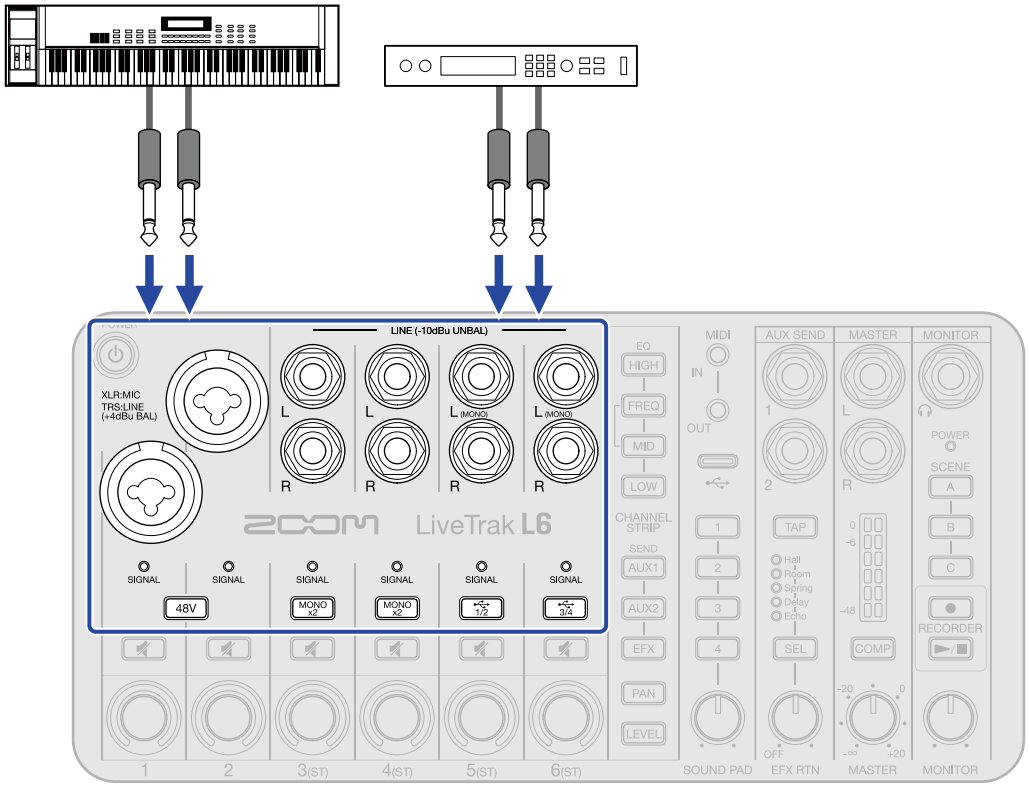
- If the SIGNAL (SIGNAL) indicator lights red, move the mic farther from the sound source or make other adjustments so that the SIGNAL (SIGNAL) indicator stops lighting red.
- When connecting devices that are not compatible with phantom power, do not turn on the phantom setting. Doing so could damage the device.
- On the L6, to make handling levels of input signals easier, the input level is set according to the type of plug connected to the input jack. 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 – 6.
1 – 2 are mono inputs and 3 – 6 are stereo inputs.



■ Connecting to INPUT 1 – 2

- Connect devices to each input with TRS plugs.
- Phantom power (+48 V) can be supplied. To supply phantom power, press the 48V (phantom power) button so that it lights.
- To make handling levels of input signals easier, input levels are set according to the type of plug connected to the INPUT 1 and 2 jacks. Use line level devices when connecting with TRS plugs.

■ Connecting to INPUT 3 – 4 (L/R)

- Connect stereo devices to the L/R jacks of each input. These can be used with TS plugs.
- Two mono devices each can also be connected to INPUT 3 – 4. When doing this, press the MONO x2 (MONO ×2) button.

■ Connecting to INPUT 5 – 6 (L (MONO)/R)

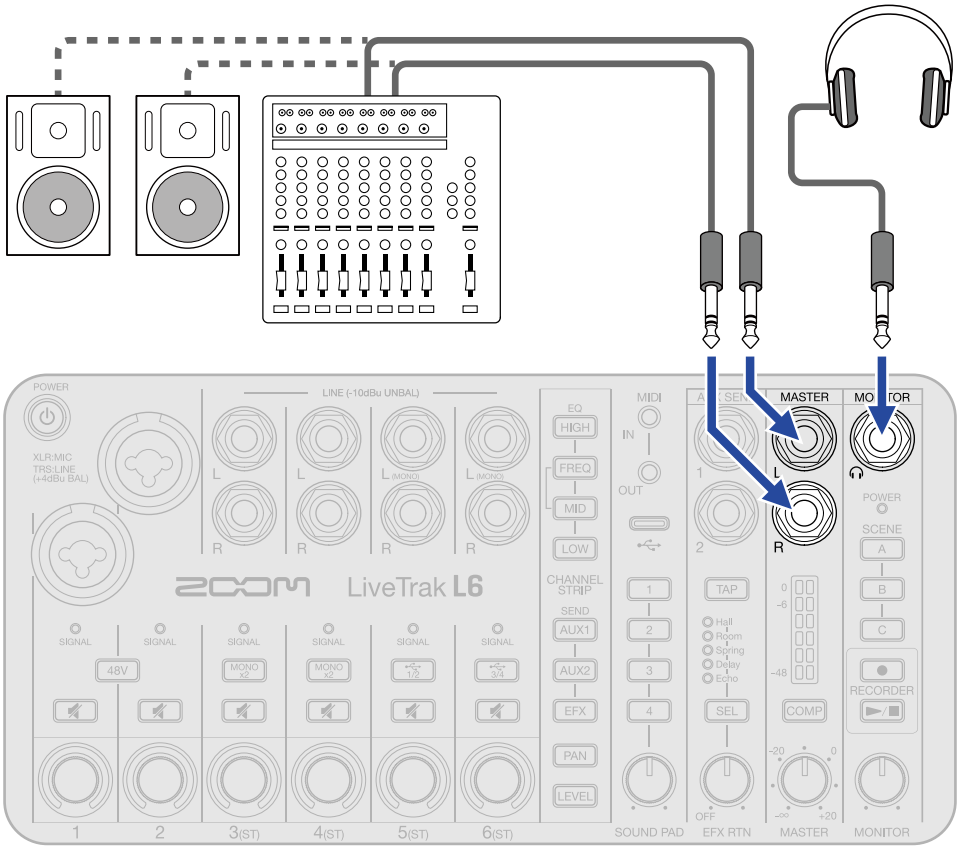
- Connect stereo devices to the L/R jacks of each input. These can be used with TS plugs.
- Connect mono devices to the L (MONO) jacks.
- Stereo audio can also be input from a computer, smartphone or tablet. Press 1/2 the (USB 1/2) button to input using INPUT 5, and press the 3/4 (USB 3/4) button to input using INPUT 6. (→ Using as an audio interface)

NOTE

- Direct input of passive guitars and basses is not supported. Connect these instruments through a mixer or effects device.
- If the 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.

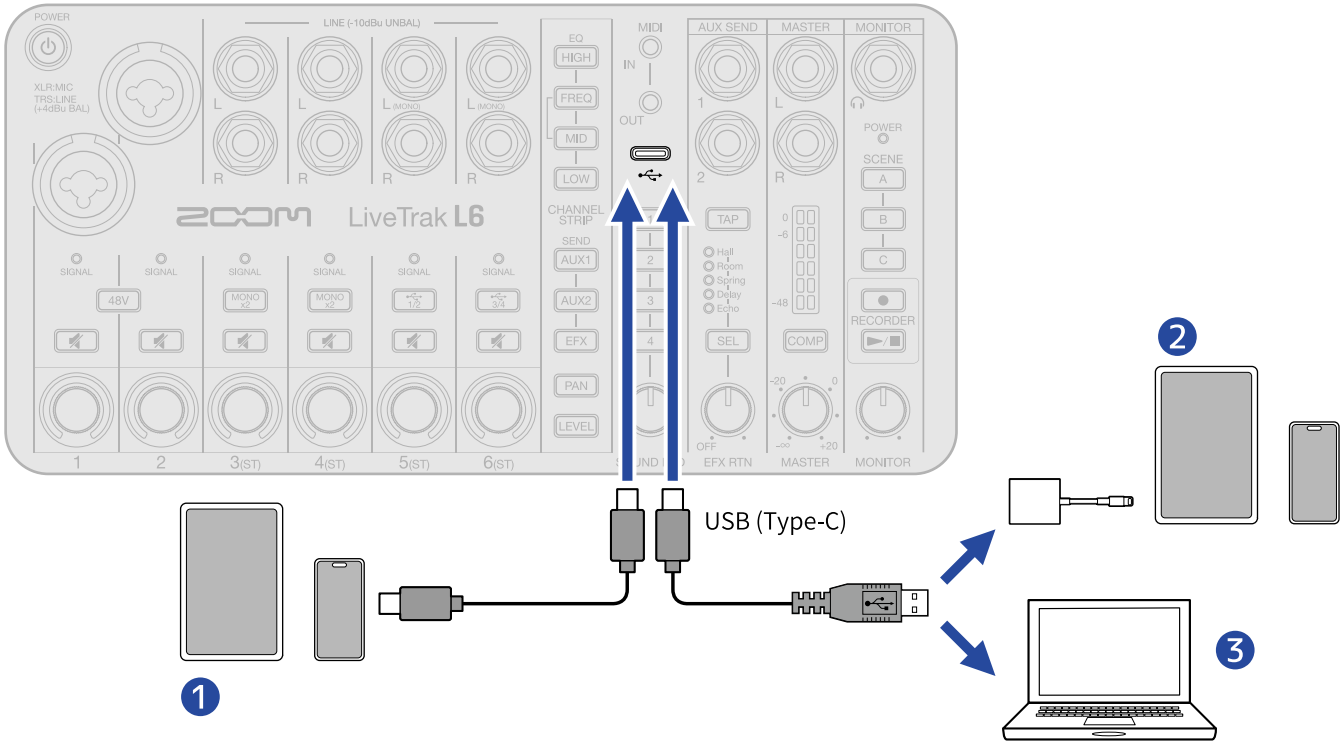
Connecting headphones, powered monitors and mixers

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 output jack.



Connecting computers, smartphones and tablets

Computers, smartphones and tablets can be connected to the USB port on the top of the L6.



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 lighting connector.
- When using a smartphone or tablet, connect an AC adapter to supply power. (→ Connecting an AC adapter)

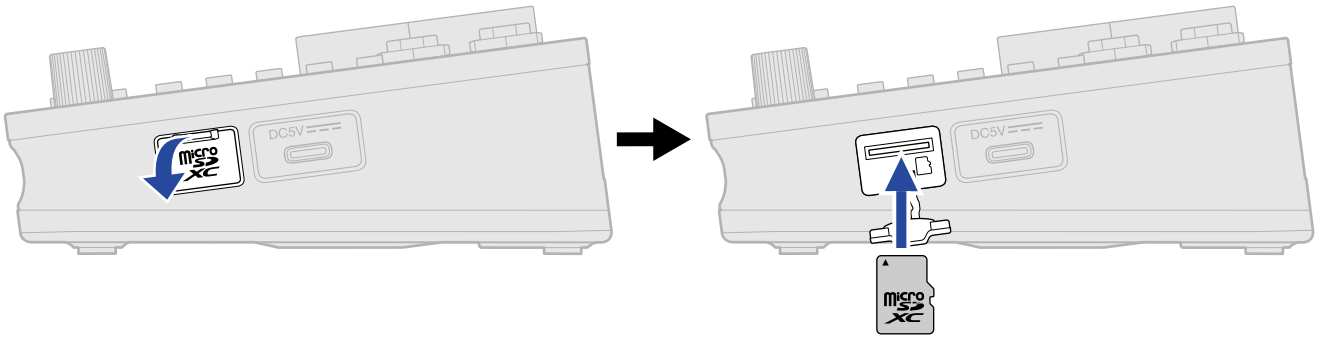
By connecting the L6 to a computer, smartphone or tablet, the following uses are possible.

- Install the ZOOM L6 Editor on a computer and use it to make sound pad settings and other detailed settings. (→ Using the app)
- L6 input sounds can be sent to a computer, smartphone or tablet and playback signals from that device can be output from the L6. (→ Using as an audio interface)
- Files on the microSD card in the L6 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 L6. (→ 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 insert the correct end with the top side up as shown.
- 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 L6 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/l6) for information about microSD cards that have been confirmed to work with this unit.

Use examples

Using as a synth mixer

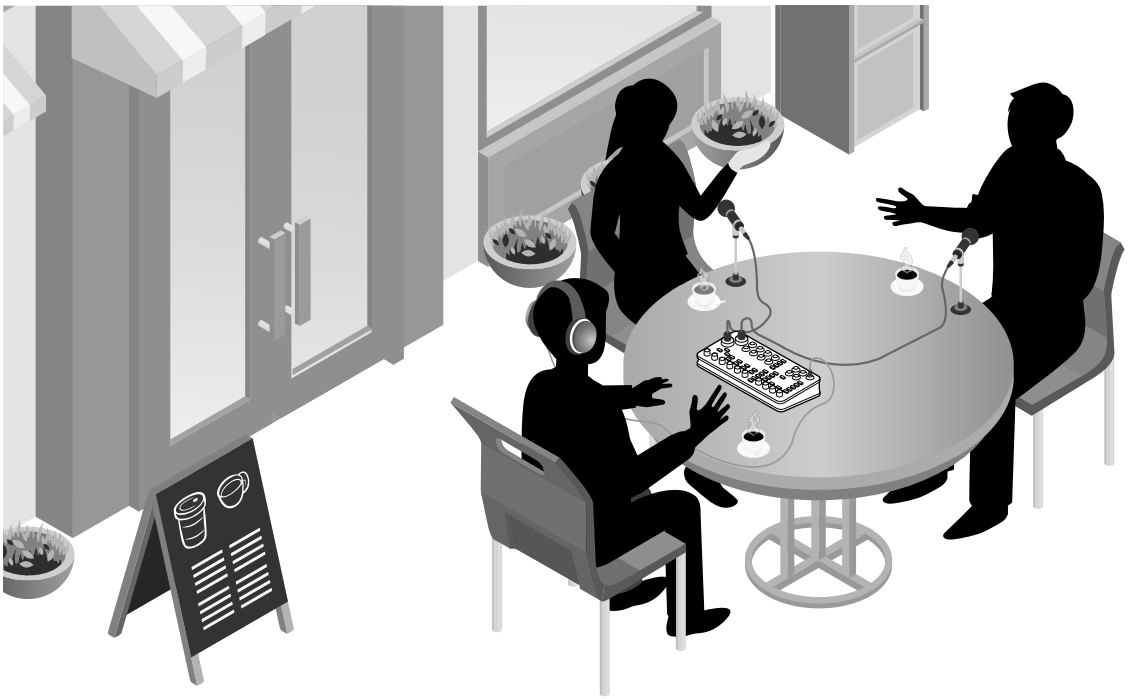
Used to mix multiple synthesizers, it can be manipulated in live performances and recording.

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 L6 can simultaneously record.

Using in the field

Powered by regular batteries or a portable battery, the L6 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 POWER (POWER) indicator lights.

   This turns on the L6 power.

NOTE

The power will automatically turn off if the L6 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 the power off

1. Press the ⏻ (POWER) button until the POWER (POWER) indicator becomes unlit.

   This turns off the L6 power.

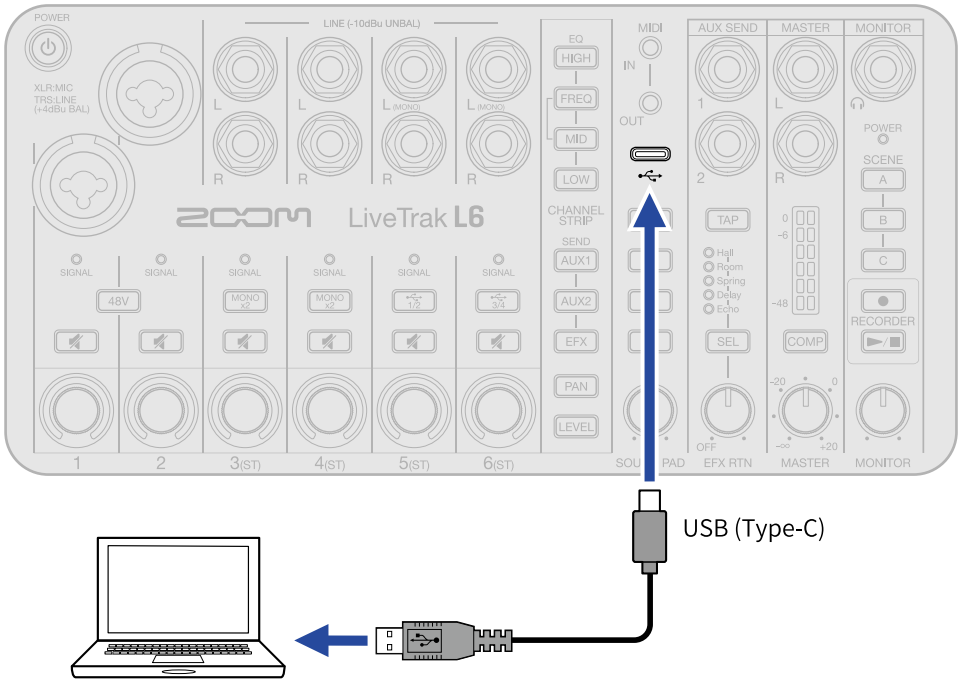
NOTE

L6 settings are always saved automatically. The state when the power was turned off will be restored the next time the power is turned on.

Using the app

Install the ZOOM L6 Editor on a computer and use it to make initial settings, sound pad settings and other detailed settings.

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

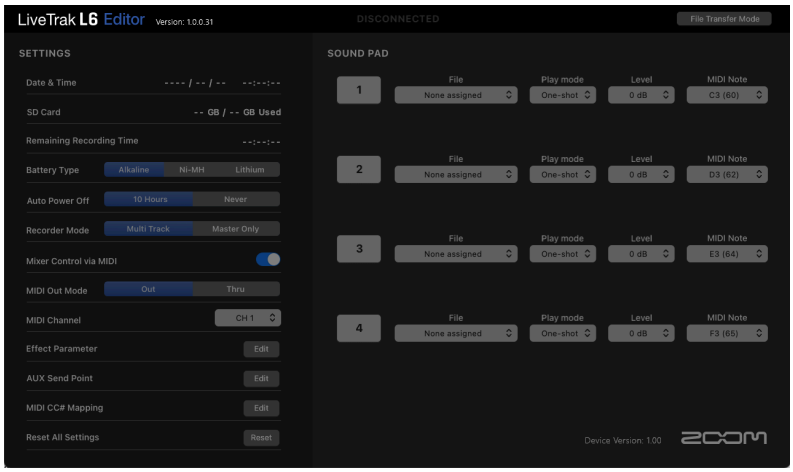


2. Download “ZOOM L6 Editor” from zoomcorp.com/help/l6 to the computer.

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

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

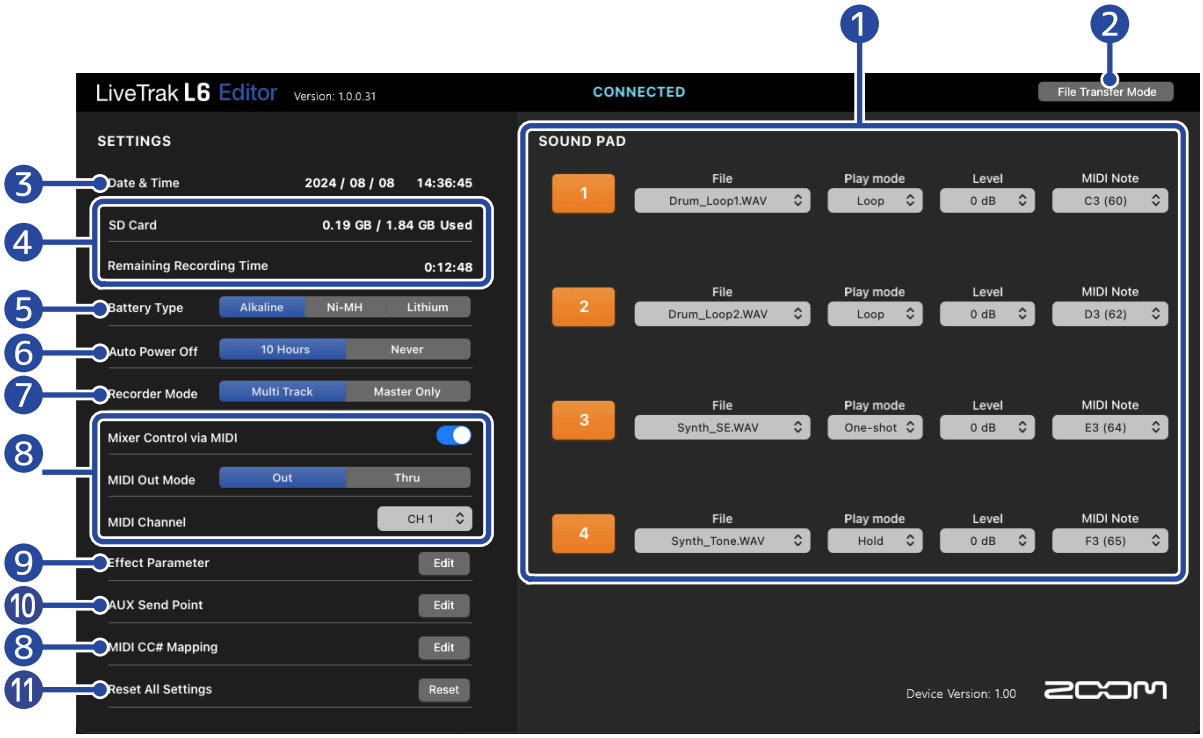
4. Launch ZOOM L6 Editor.



5. Turn on the L6 power. (→ Turning on the power)
“CONNECTED” will appear at the top of ZOOM L6 Editor when the L6 is connected, enabling use of the app to set the L6.

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 L6) ports. (→ USB MIDI port overview)

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 L6 is connected to a computer.

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

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

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

⑩ 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.

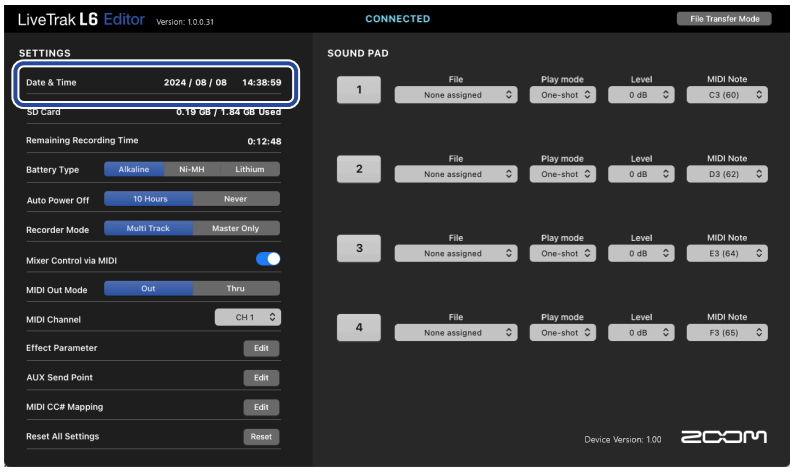
⑪ Resetting (→ Restoring factory default settings)

The L6 settings can be reset to their factory defaults.

Setting date and time, battery type and automatic power off (making initial L6 settings before use)

Before use, set the date and time, battery type and automatic power off function.
The date and time will be added to the name of the folder where recording files are saved. Moreover, to enable accurate display of remaining battery charge, the type of batteries used in the L6 must be selected correctly.
The power will automatically turn off if the L6 is unused for 10 hours. To keep the power on at all times, set Auto Power Off to Never.

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



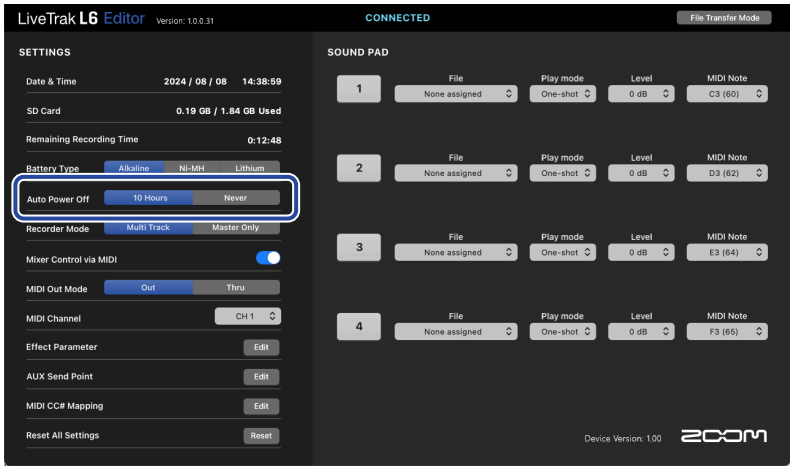
NOTE
If power is not supplied for a long time, the date and time settings stored in the hardware will be reset. If this occurs, connect the L6 with a computer again using a USB cable (Type-C), and launch ZOOM L6 Editor to allow the date and time to be acquired.

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

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

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

Setting	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 L6 as an audio interface
  - When using the file transfer function
  - During execution of a firmware update
- Operating the L6 will reset the time until the Auto Power Off function activates.

HINT

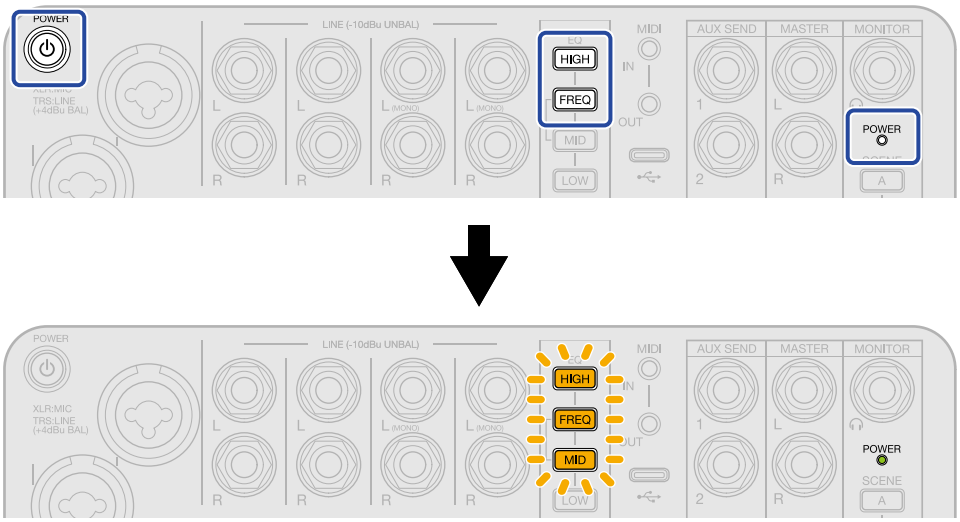
The date and time, battery type and automatic power off settings can be changed without using the app.
(→ Setting date and time, battery type and auto power off without using the app)

Setting date and time, battery type and auto power off without using the app

Initial L6 settings can be made without using the app by putting the L6 in setting mode.
The settings can be confirmed using sound output from the L6. Connect powered monitors or headphones to the L6. (→ Connecting headphones, powered monitors and mixers)

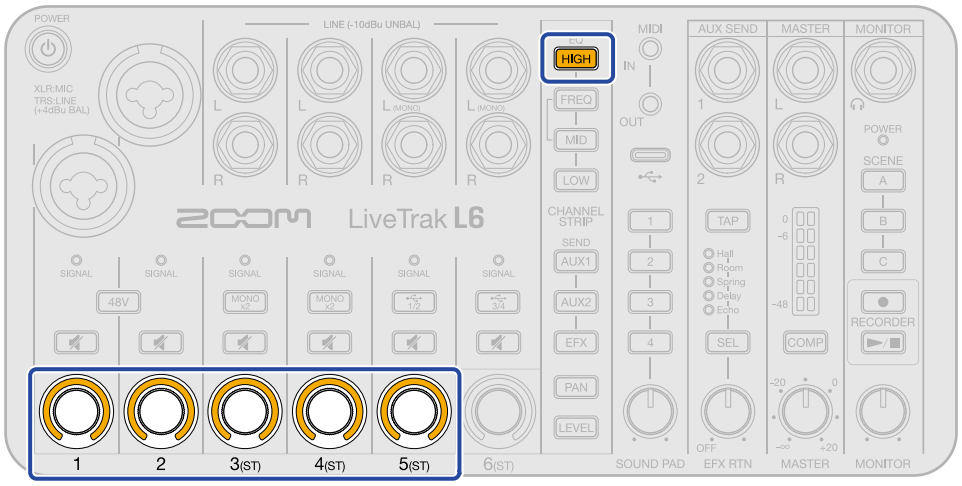
1. While pressing the HIGH (HIGH) and FREQ (FREQ) buttons, press the ⏻ (POWER) button until the POWER (POWER) indicator lights.

The L6 will start in setting mode and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

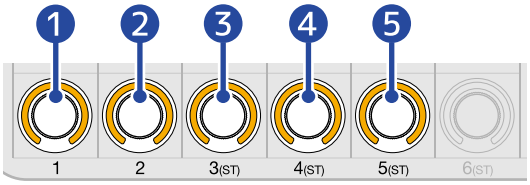


2. Press the HIGH (HIGH) button.

The HIGH (HIGH) button and the indicators for channel 1 – 5 ◎ (encoders) will light and date and time setting mode will be enabled. (“Date time” will be output as audio guidance.)



3. Use the channel 1 – 5 (encoders) to set the date and time.



The setting values will be output as audio guidance.

1. **Year**
   This can be set from 0 to 99. (2000 – 2099 CE)
2. **Month**
   This can be set from 1 to 12. (January – December)
3. **Day**
   This can be set from 1 to 31. (1 – 31)
4. **Hour**
   This can be set from 0 to 23. (00:00 – 23:00)
5. **Minute**
   This can be set from 0 to 59. (00:00 – 00:59)

NOTE

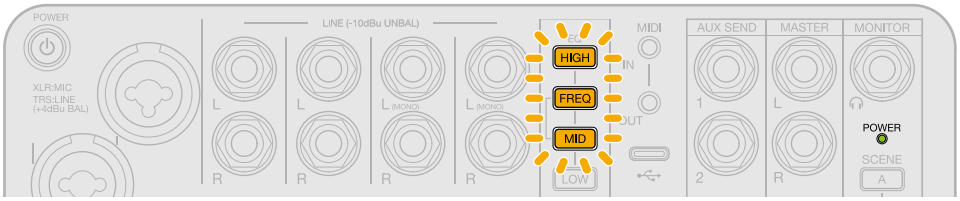
Press the ►/■ (play/stop) button to output the current setting as audio.

4. After setting all items, press the blinking ● (record) button.

The date and time are confirmed, and the ● (record) button becomes unlit.

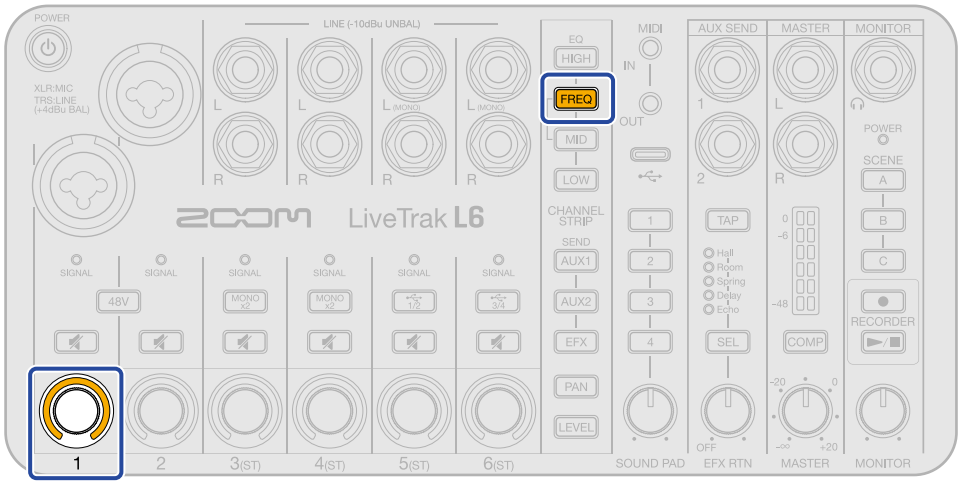
This returns to setting mode, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

Next, set the type of battery being used.



5. Press the FREQ (FREQ) button.

The FREQ (FREQ) button and channel 1 (encoder) indicator will light and battery type setting mode will be enabled. (“Battery type” will be output as audio guidance.)



6. Use the channel 1 (encoder) to set the battery type.

The setting values will be output as audio guidance.

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

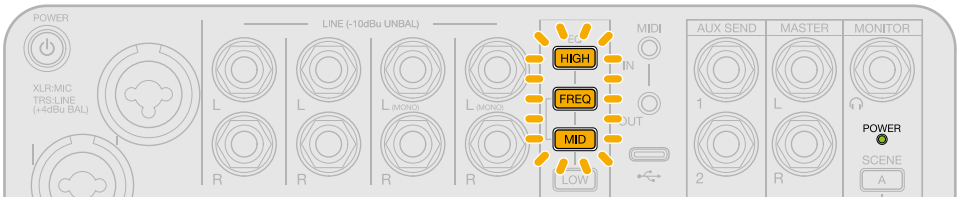
NOTE

Press the (play/stop) button to output the current setting as audio.

7. Press the blinking (record) button.

The battery type is confirmed, and the (record) button becomes unlit.

This returns to setting mode, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink. Next, set the Auto Power Off function.



8. Press the MID (MID) button.

The MID (MID) button and channel 1 (encoder) indicator will light and Auto Power Off setting mode will be enabled. (“Auto power off” will be output as audio guidance.)

9. Use the channel 1 (encoder) to select the Auto Power Off setting.

The setting values will be output as audio guidance.

- “On”: The power will automatically turn off if it is unused for 10 hours.
- “Off”: The power will not turn off automatically.

NOTE

Press the ►/■ (play/stop) button to output the current setting as audio.

10. Press the blinking ⏺ (record) button.

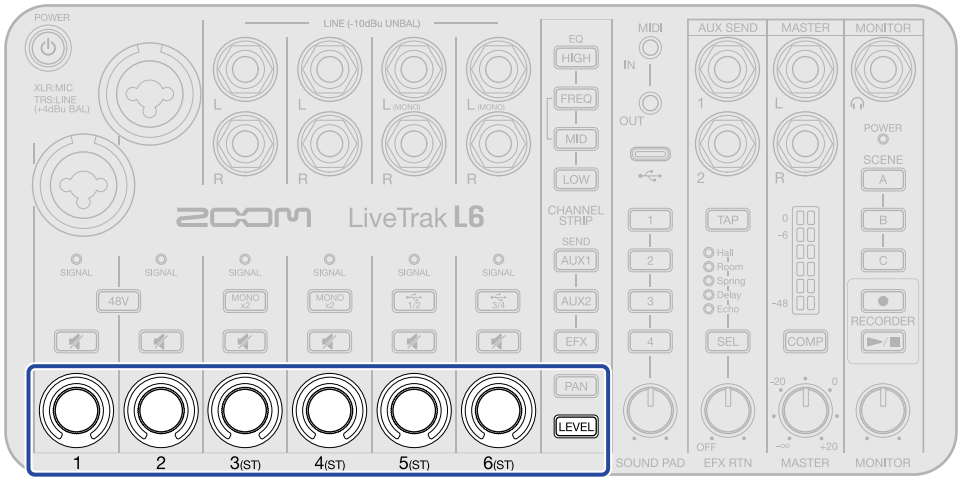
The Auto Power Off setting is confirmed, and the ⏺ (record) button becomes unlit.

11. Press the ⏻ (POWER) button until the POWER (POWER) indicator becomes unlit.
This exits setting mode and turns off the L6 power.

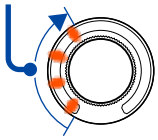
Mixing

Adjusting channel levels

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



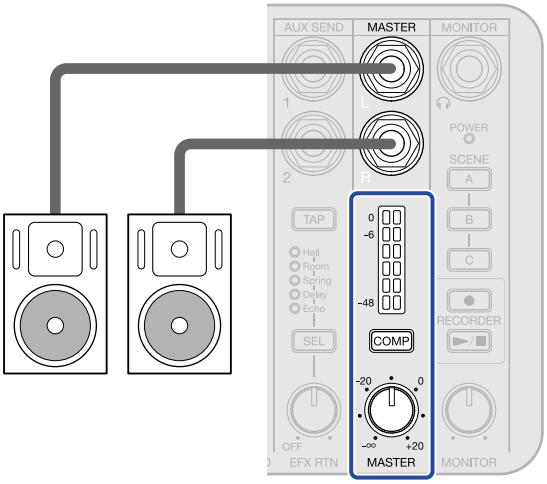
Adjusted values can be confirmed with the indicators.



Adjusting the overall and monitoring levels

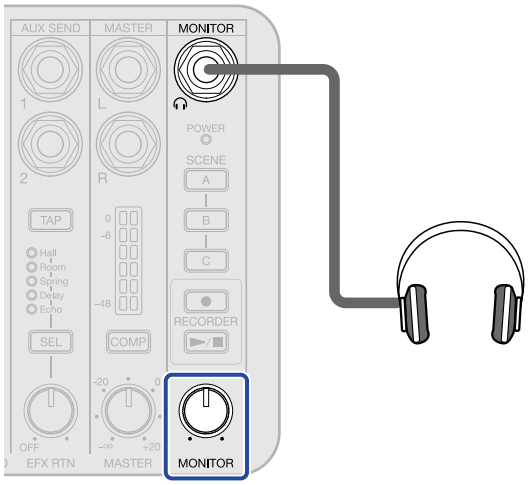
Sound mixed on the L6 can be output to powered monitors or a PA system connected to the MASTER output jacks. It can also be monitored using headphones connected to the MONITOR output jack.

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.

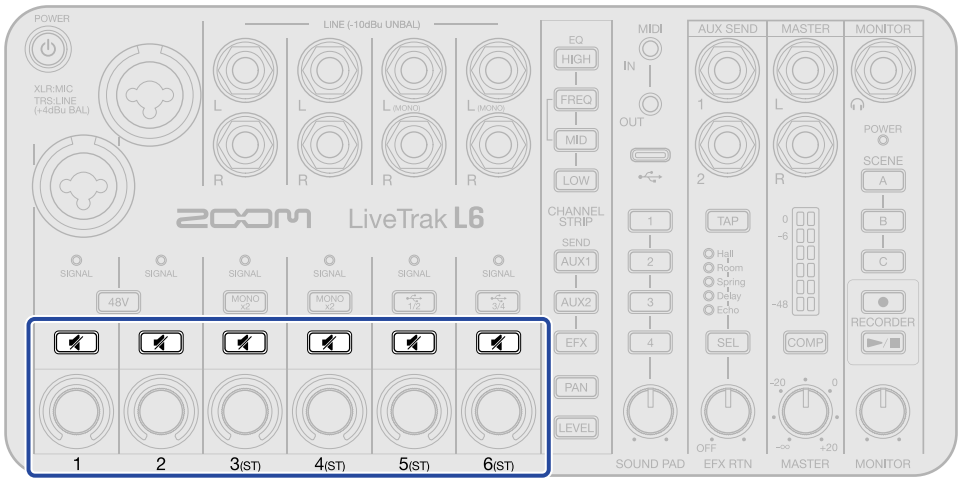
- Adjusting the level with the 

(MASTER) knob will also change the MONITOR output level. The level adjusted by the 

(MONITOR) knob does not affect the MASTER output level.

Muting channels

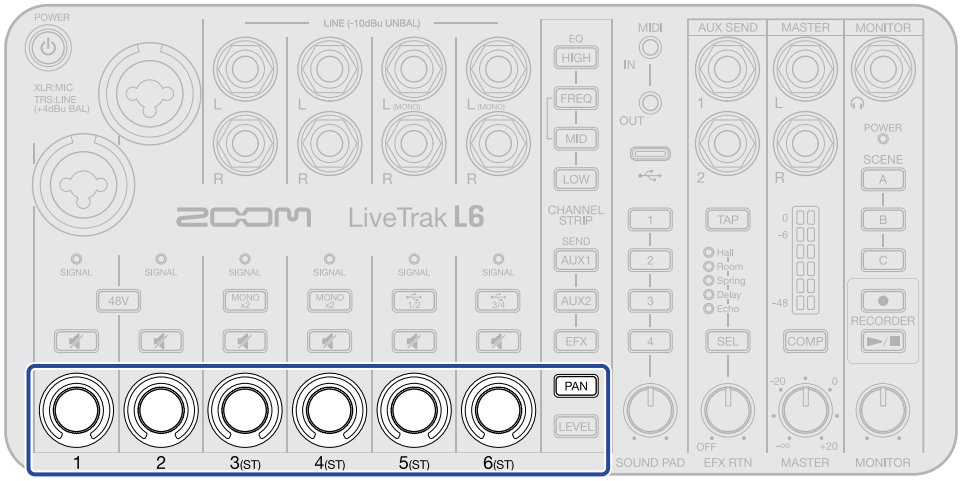
1. Press the  (mute) button of the channel to be silenced to light it.



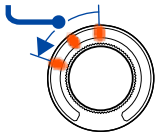
This mutes sound from the selected channel. Multiple channels can be muted.
Press a lit  (mute) button to unmute that channel.

Adjusting panning for each channel

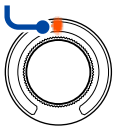
1. Press the PAN (PAN) button, lighting it, and then use the  (encoders) to adjust the left-right positions of the desired channels.



Adjusted values can be confirmed with the indicators.



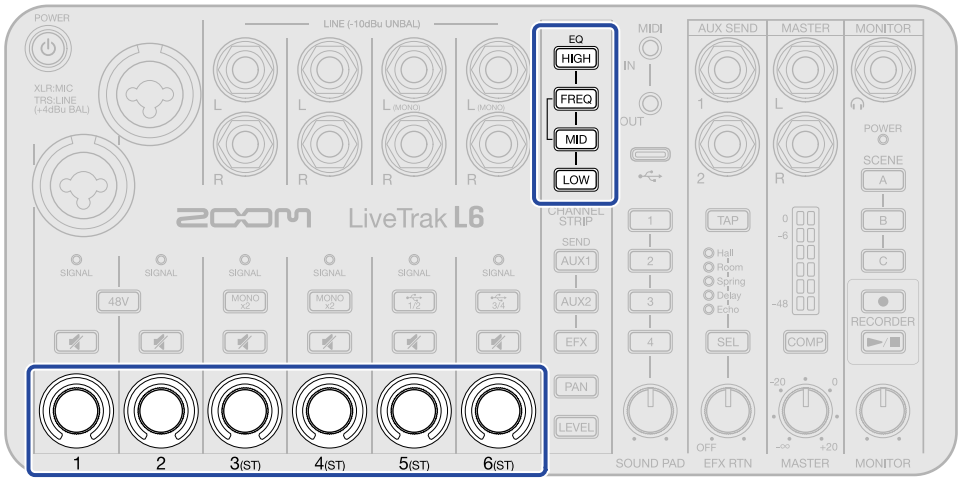
When set to the center, the middle indicator lights.



Adjusting channel tone (EQ)

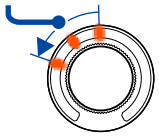
Frequency bands can be boosted/cut to adjust the tones of each channel.

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.

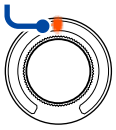


Turn the  (encoder) right to boost it or left to cut it.

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.

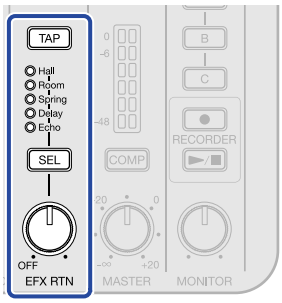
Using effects

The internal effects of the L6 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.

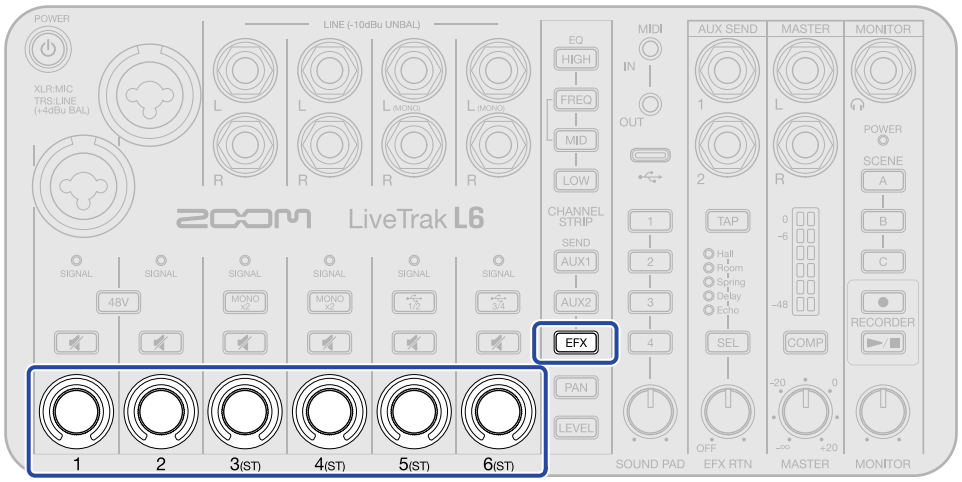


- Hall: Hall reverb (dense reverb)
- Room: Room reverb (simulates the echoes of a chamber)
- Spring: Spring reverb (sound modeled on a '63 Fender Reverb)
- Delay: Digital delay (supports long delay times up to 2000 ms)
- Echo: Tape echo (simulates the effect of a tape echo)

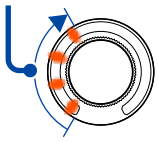
- When the “Delay” or “Echo” internal effect is selected, by tapping the TAP (TAP) button, the delay time can be set to the tapped tempo (tap tempo function).
  The TAP (TAP) button blinks at the set delay time tempo.
  (When MIDI CLOCK is input, the tempo is quantized to notes ($\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{\mathbb{}}}}}}}}$). In this state, if the MIDI CLOCK tempo is changed, the tap tempo will follow it.
- Use the 

(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 amount 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 confirmed with the indicators.



HINT

While pressing the EFX (EFX) button, press a (mute) button to light that and mute the send amount.

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.

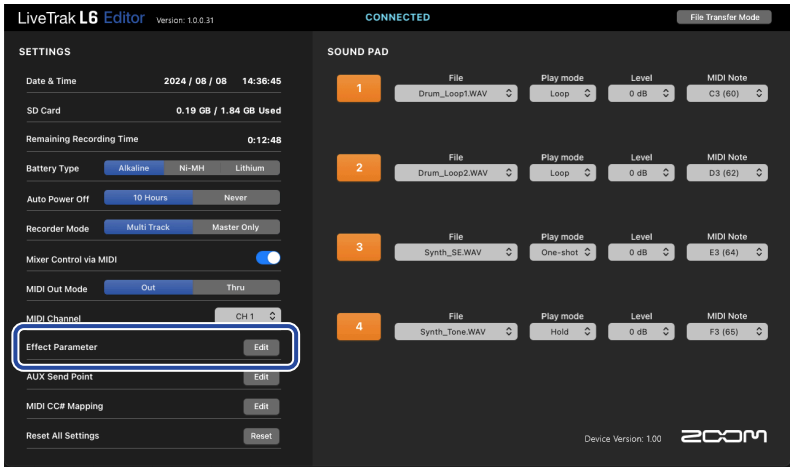
Turning an (encoder) to adjust the send amount will also cancel muting.

■ Adjusting internal effect parameters

Use ZOOM L6 Editor to adjust internal effect parameters.

1. Connect the L6 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.

5 Echo (tape echo)

- TIME sets the delay time.
- REPEAT adjusts the number of repetitions.

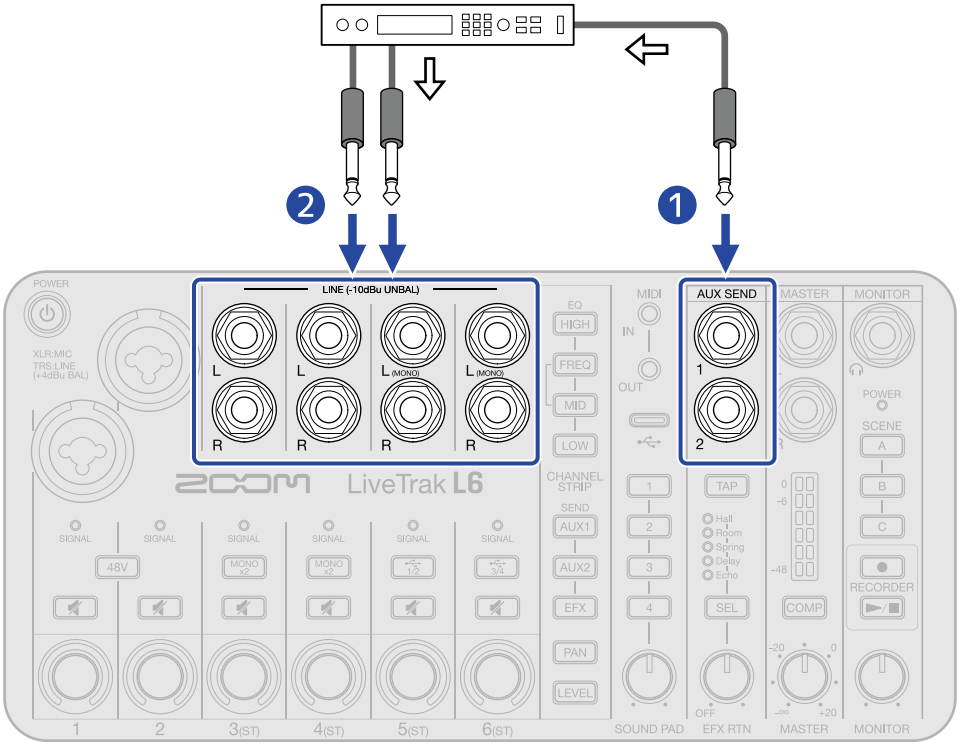
6 OK

Click this to 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

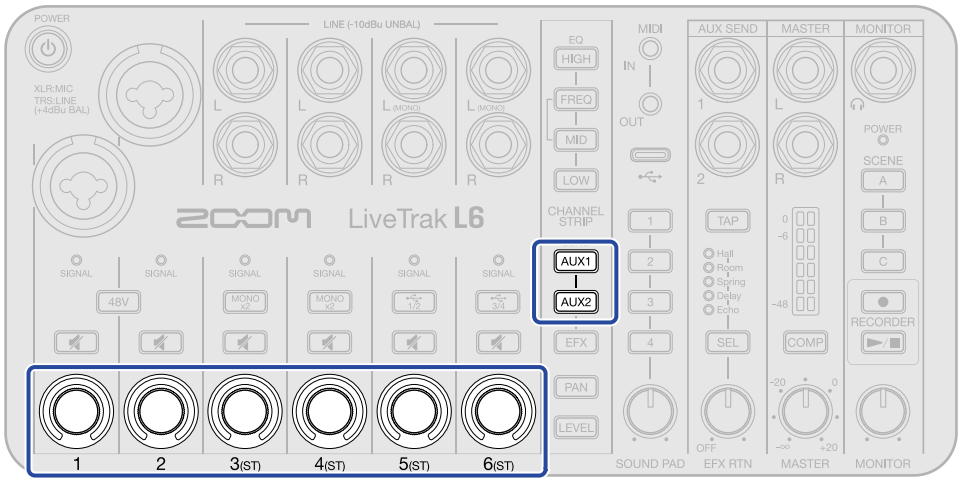
1. **Connect the L6 AUX SEND 1 or 2 jack to the input jack of an external effect.**
   Send channel signals from the L6 to the external effect.

2. **Connect the output jacks of the external effect to INPUT 3 – 6 jacks on the L6.**
   Input the sound of the external effect on channel 3 – 6. To adjust the level of the external effect, do so on the connected channel.

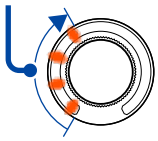
■ Using external effects

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 confirmed 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 the send level will create a feedback loop with the external effect and could cause loud sound to be output.

HINT

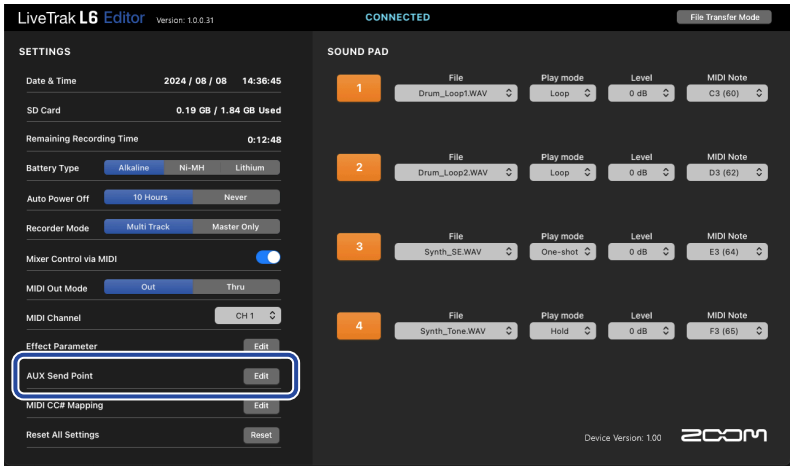
- While pressing the AUX1 (AUX1) or AUX2 (AUX2) button, press a (mute) button to light that and mute the send to the AUX SEND jack for that button.
  When the send is muted, the (mute) button will light while the AUX1 (AUX1) or AUX2 (AUX2) button is pressed.
  To cancel muting, while the AUX1 (AUX1) 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

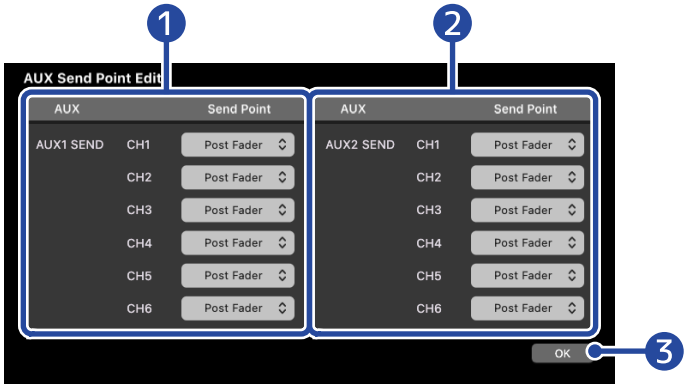
The signal sent from each channel to the AUX SEND 1/2 jacks can be set to either before or after level adjustment.

1. Connect the L6 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 return to the previous screen.

Setting	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.

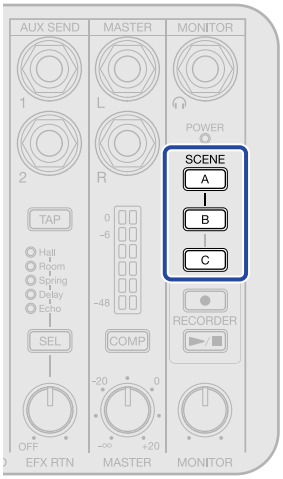
Setting	Explanation
Post Fader	Signals are sent to the AUX SEND 1/2 jacks after level adjustment. The send amounts will be increased or decreased along with level adjustments.

Saving settings (scenes)

Up to 3 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) or C (C) button) until it lights.
The current mixer settings will be saved to the scene of the lit button (A, B or C).



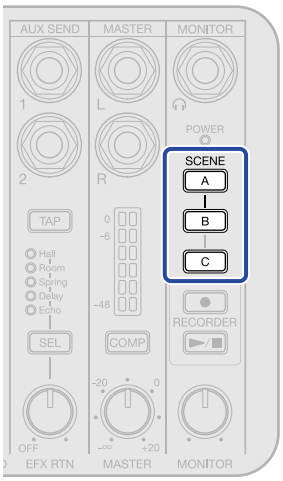
The button will blink if mixer settings are changed from the saved state of the scene. In this case, do one of the following.

- 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
Settings for the following are saved with scenes.
Channel 3/4 mono, channel 5/6 USB input, muting, EQ, effect send amounts, AUX send amounts, AUX output positions, panning, levels, effect selection, effect parameters, tap tempo, compressor.

Recalling scenes

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



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

NOTE

- When recalling scenes, be careful not to press a button so long that it starts to blink. Pressing a button too long will cause the scene to be overwritten with the current mixer settings.
- MIDI program change messages can also be used to recall scenes. (→ MIDI implementation chart)

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 L6 can also be used to record audio files for assignment.

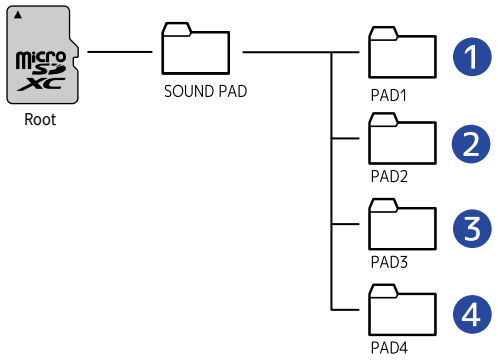
Assigning audio files saved on the microSD card to SOUND PAD buttons

Audio files saved on the microSD card loaded in the L6 can be assigned to SOUND PAD buttons.
Audio files must be saved in specific directories, so always use the L6 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. (→ L6 folder and file structure)



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

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

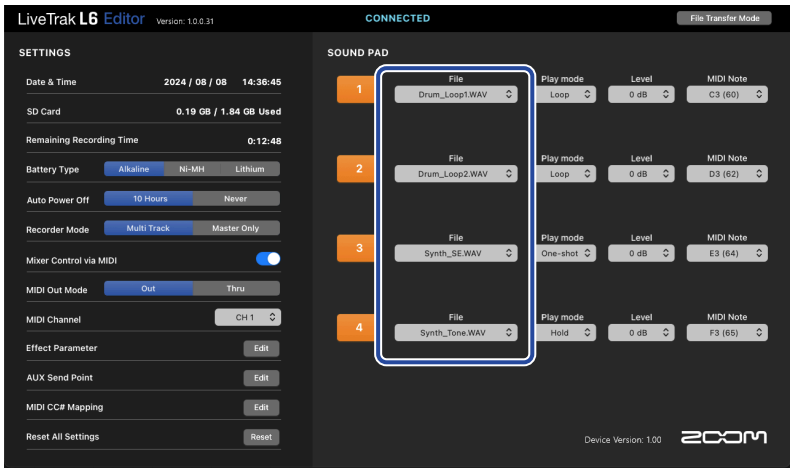
❸ Audio files assigned to the SOUND PAD [3] (3) button

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

2. Insert the microSD card with the saved audio files in the L6. (→ Inserting microSD cards)

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

4. 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.



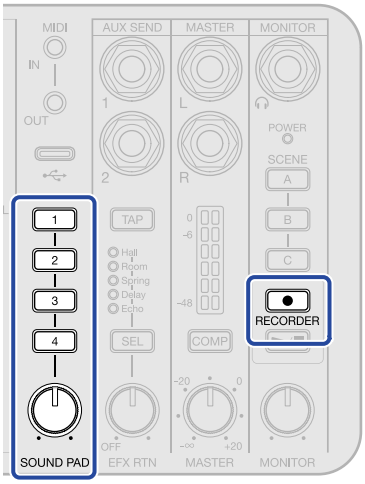
The selected audio files will be assigned to the [1] (1) to [4] (4) buttons and those buttons ([1] (1) – [4] (4)) will light.

HINT

If audio files are not assigned using ZOOM L6 Editor, the first file by name alphabetically in each folder will be assigned automatically.

Using the L6 to record audio files and assign them to sound pads

Stereo files mixed and recorded on the L6 can be assigned to sound pads.



1. Prepare to record.

Connect mics, instruments and audio devices, for example, to the L6, and input and mix their sounds to check the sound 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

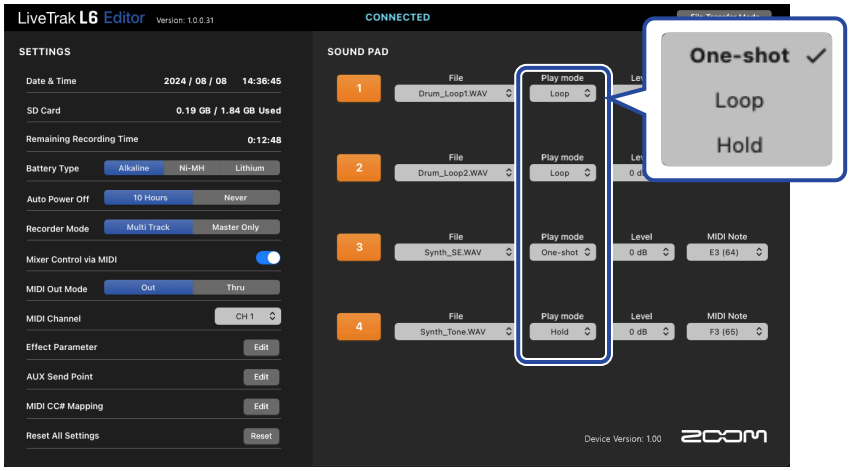
- In step 2, pushing a lit sound pad, which already has an audio file assigned, to record will not overwrite that audio file.
- Recorded audio files can be checked using a computer. (→ Managing files)

Setting sound pad play modes and levels

For every sound pad, the playback method used when it is pressed and its level can be changed.

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

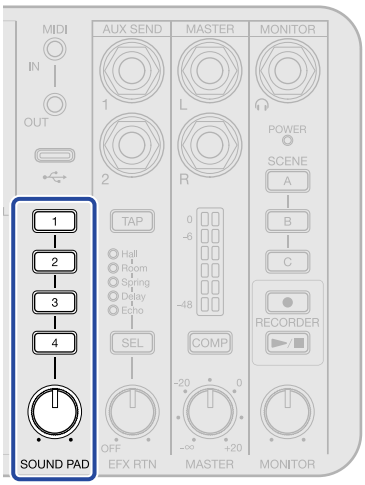
2. Use the “Play mode” pull-down menus to click and select the playback methods.
This can be set for each sound pad.



Setting	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 and levels)

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

2. Use the 

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

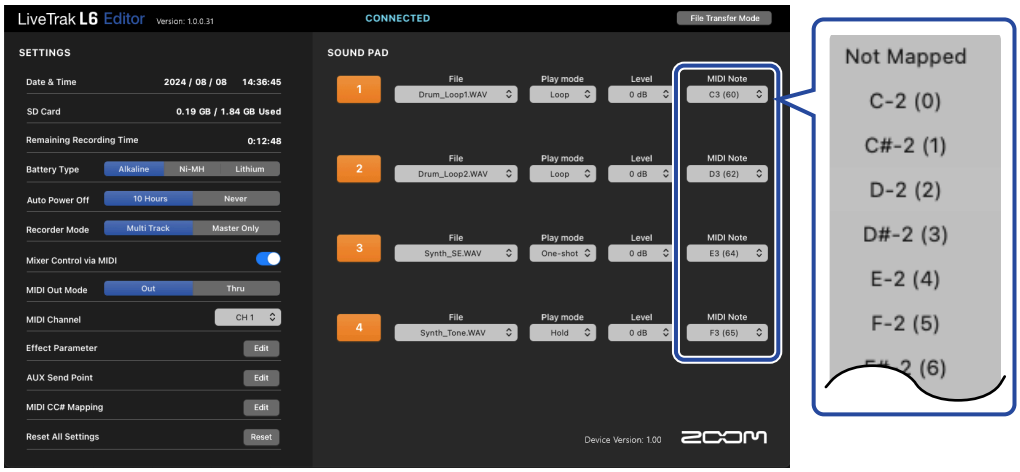
Levels can also be adjusted separately for each sound pad. (→ Setting sound pad play modes and levels)

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 L6 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 L6 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”.

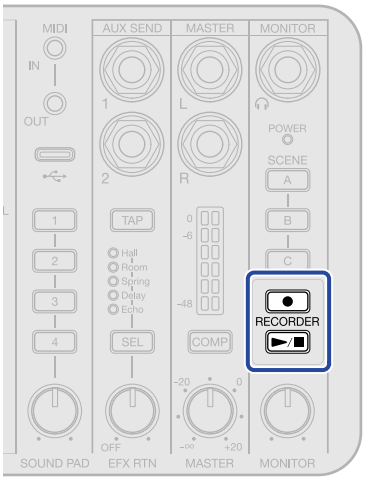
Recording and playing audio

By installing a microSD card in the L6, audio from every channel as well as a stereo mix of all channels can be recorded.
The most recently recorded file 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 1/2, stereo or two mono files for channels 3/4, stereo files for channels 5/6 and the MASTER output
- For details about recorded files, see "Managing files".

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

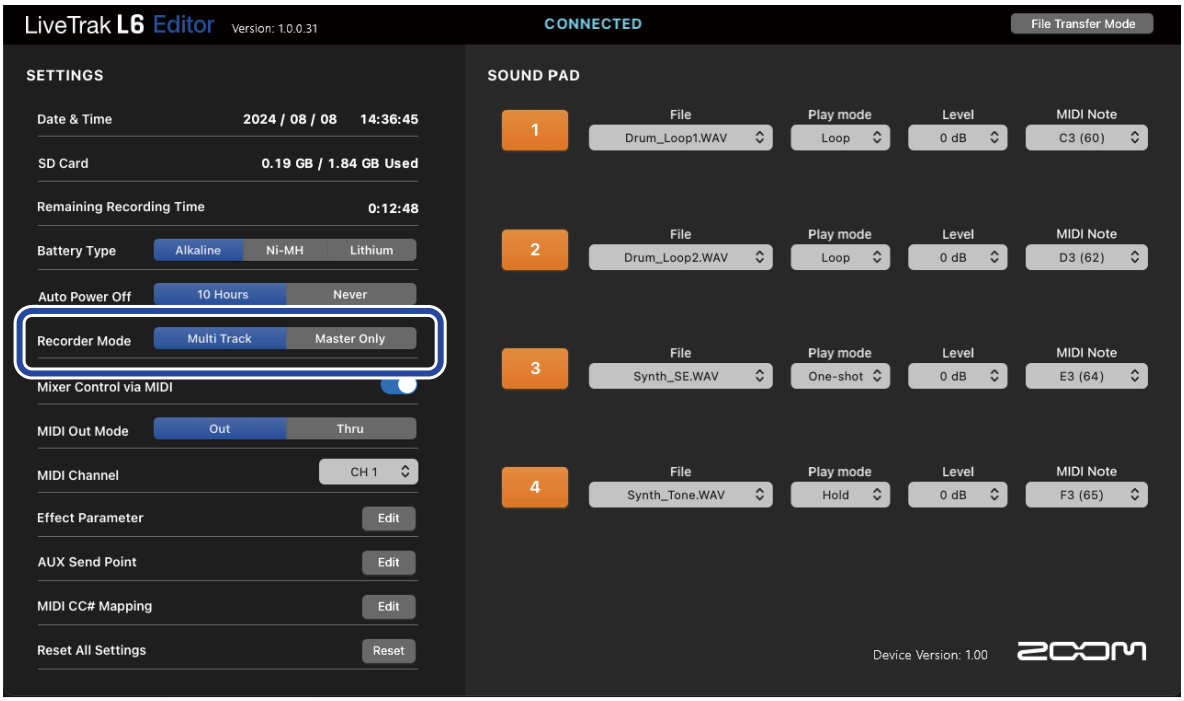
Files are automatically saved at regular intervals during recording. Even if the power is interrupted or another problem occurs during recording, an affected file can be restored to normal when the L6 power is turned on and the microSD card is recognized.

Selecting the type of files recorded

The files saved when recording can be selected.

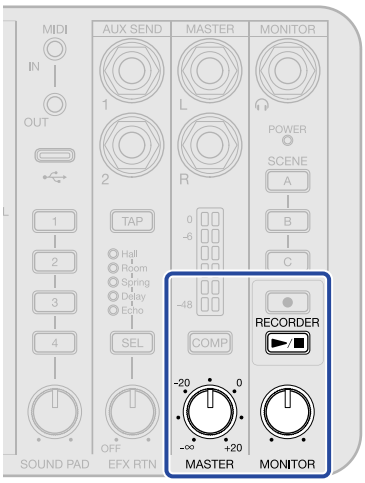
1. Connect the L6 with a computer using a USB cable (Type-C), and launch ZOOM L6 Editor on the computer. (→ Using the app)

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



Setting	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 most recently recorded file will start.

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.

2. Press the ▶/■ (play/stop) button.

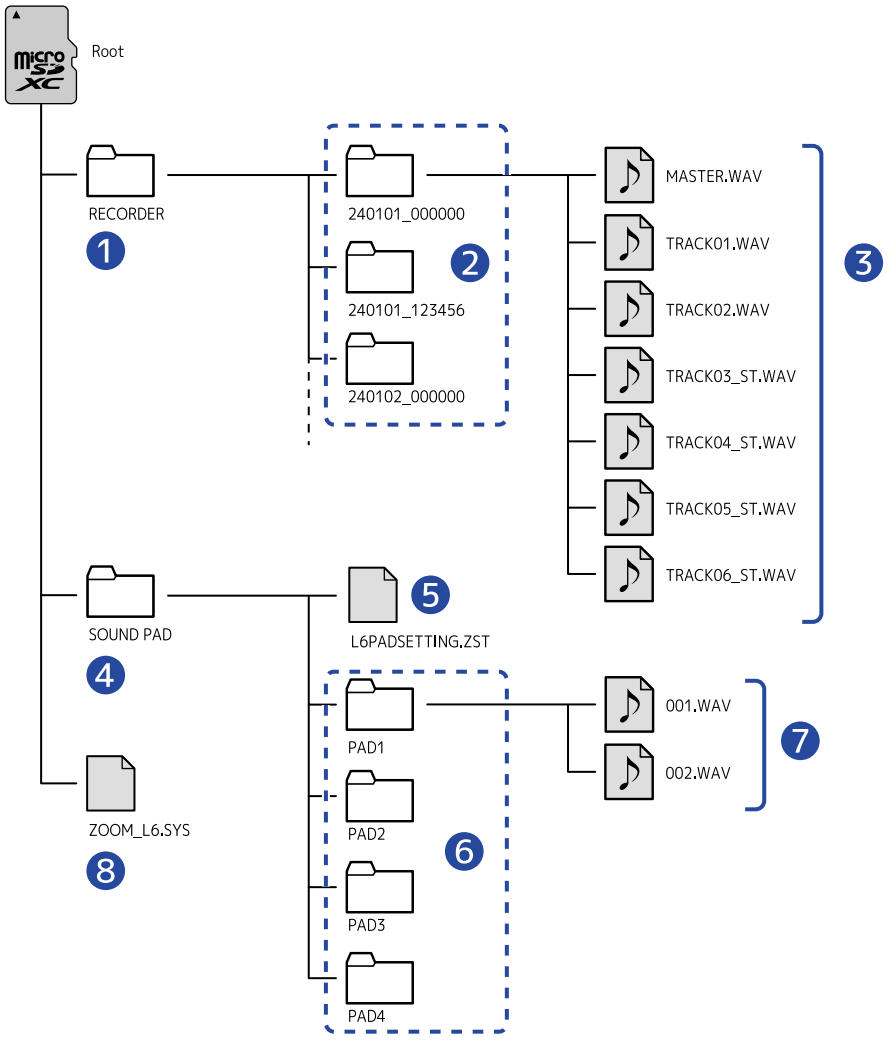
The ▶/■ (play/stop) button will become unlit and playback will stop.

Managing files

Files created by the L6 are saved on the microSD card.
Recording files on the microSD card can be checked and deleted.

L6 folder and file structure

The following types of files are created when recording with a microSD card that was formatted by the L6.



1 RECORDER folder

Files recorded by the L6 are saved here in folders.

2 Recording file folders

These are created every time recording occurs. These file folders are named with a “date_time” format. The mono/stereo files created are saved in these.

3 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 1/2: Mono files are saved for each channel.
- Channels 3/4: Stereo files are saved for each channel. When a MONO x2 (MONO) button is lit, 2 mono files will be created instead of a stereo file.
- Channels 5/6: 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.

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

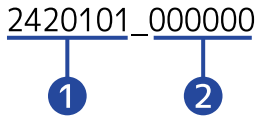
For details about the formats of audio files that can be assigned, see “Assigning audio files to SOUND PAD buttons”.

8 System file

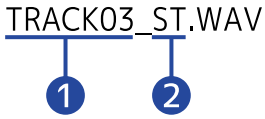
This is a system file used by the L6. Do not delete it.

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 numbers.

File names are given in the following format.

File name example	Explanation
	❶ Track name This shows the channel used when recording. • TRACK01 – 06: File recorded on channel 1 – 6 • MASTER: File that is a stereo mix of all channels ❷ File channel number • ST: Stereo channel • L/R: Mono channel (only when the MONO x2 (MONO) button was lit for channel 3/4) • This is not shown for channels 1 and 2.

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 "_001" – "_999" added to the ends of their names.

Using as an audio interface

Sounds input to the L6 can be sent to a computer, smartphone or tablet and playback signals from that device can be output from the L6.

- No driver is necessary for use with Mac computers, smartphones and tablets.
- To operate the L6 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 L6 with a computer, smartphone or tablet. (→ Connecting computers, smartphones and tablets)
2. Launch an application on the computer, smartphone or tablet and select the L6 as the “Audio” or “Input/Output” device.

NOTE

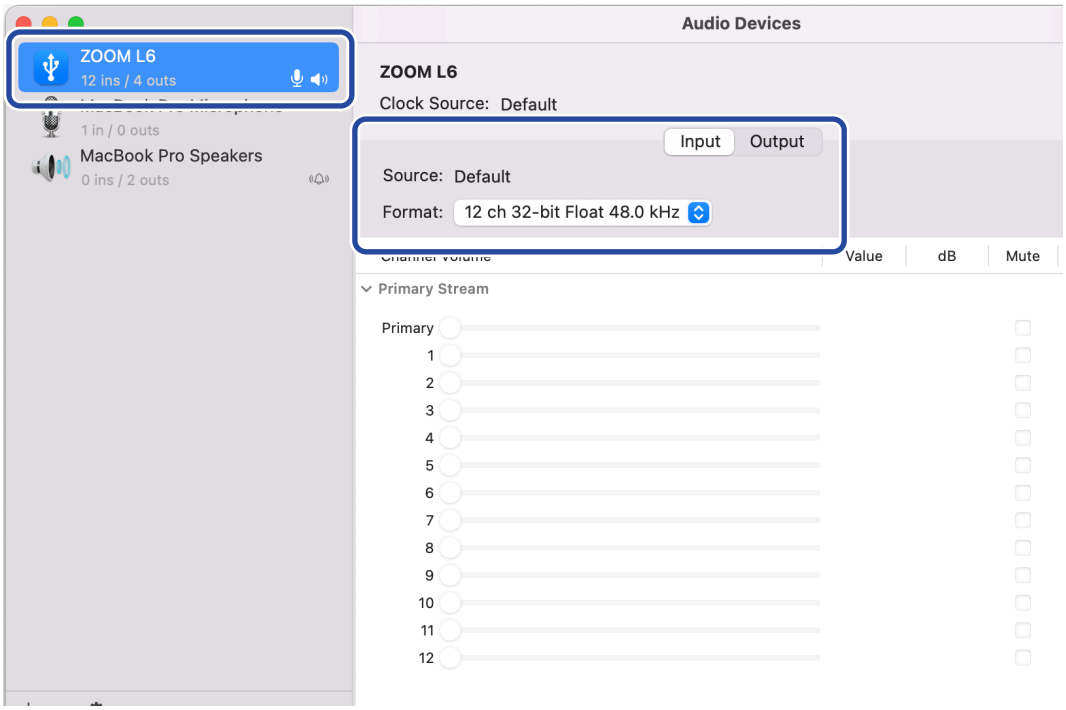
- The audio sample rate is 48 kHz when used as an audio interface.
- If issues occur with operation at 32-bit float format, try 24-bit format.
  - Using a Mac: → “Using with Mac computers”
  - Using a Windows computer: → “Using with Windows computers”
- See the operation manuals of applications for information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

Using with Mac computers

The format used by the L6 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 L6” 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 the “ZOOM L6 Driver” from zoomcorp.com/help/l6 to the computer.

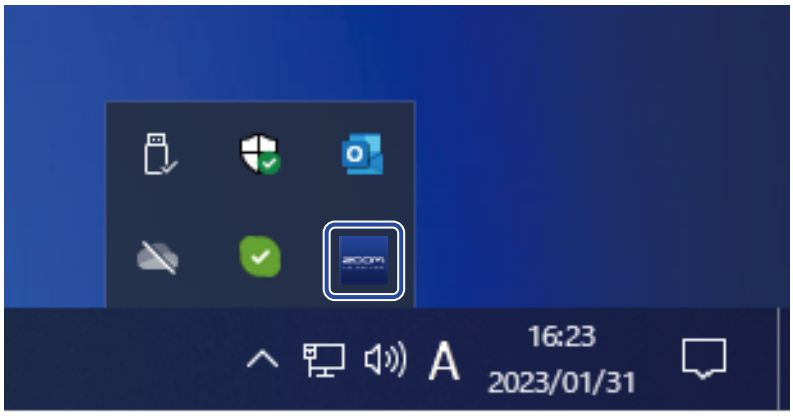
> **NOTE**
> The latest ZOOM L6 Driver can be downloaded from the above website.

2. Launch the installer and follow the instructions to install “ZOOM L6 Driver”.

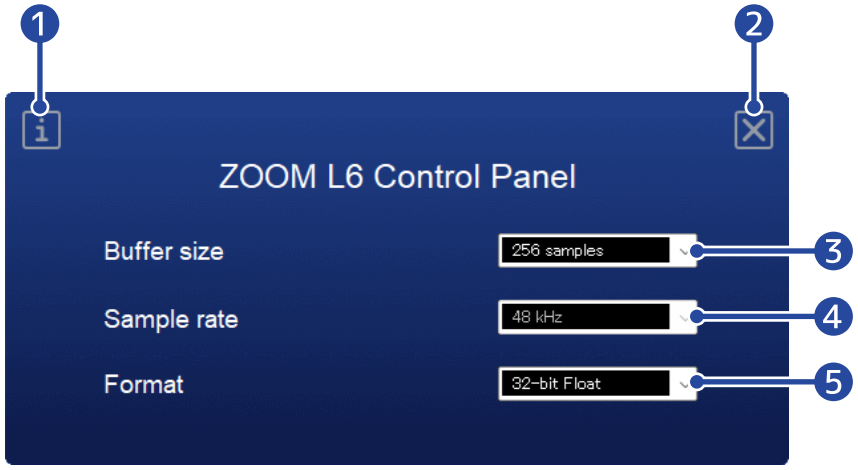
> **NOTE**
> - Do not connect the L6 to the computer during installation.
> - See the Installation Guide included in the driver package for detailed installation procedures.

Making driver control panel settings

1. Click the “ZOOM L6 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 L6 sampling frequency is fixed at 48 kHz.

5 Transmission format setting

This sets the format that the L6 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.

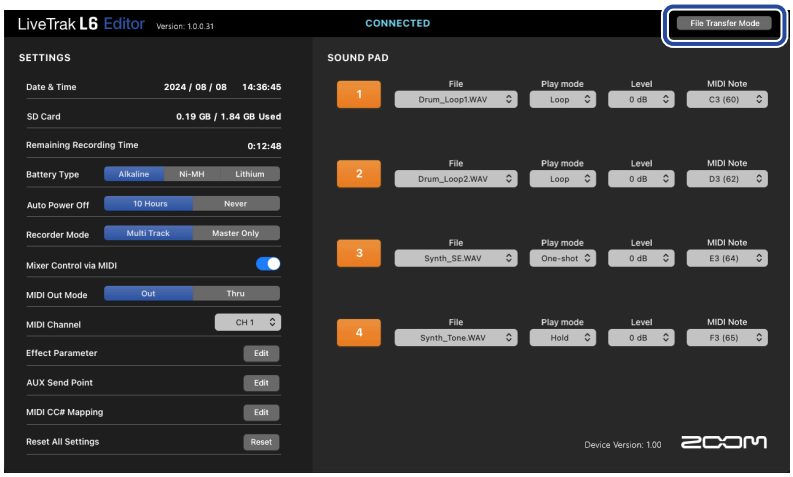
Transferring files to computers

By connecting the L6 to a computer, files on the microSD card can be checked and moved.

Connecting with a computer

1. Connect the L6 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 L6 into file transfer mode.



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

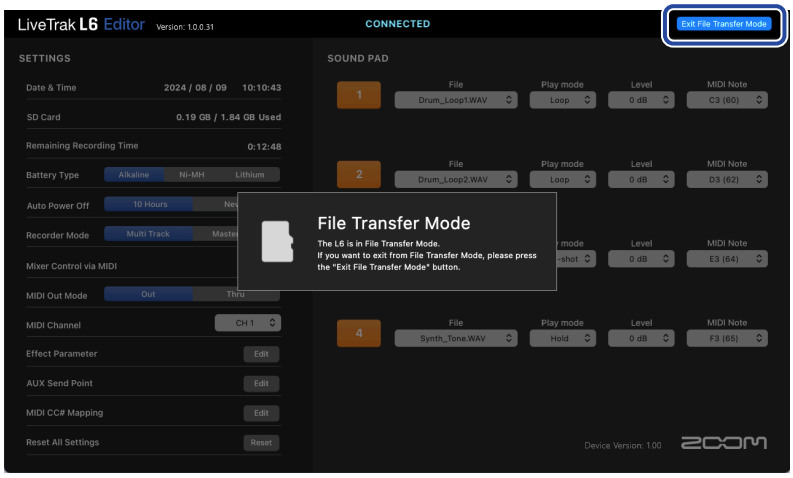
3. Use the computer to work with the files saved on the microSD card.

Disconnecting from a computer

1. Disconnect on the computer.

   - Windows:
     Select the L6 from “Safely Remove Hardware”.
   - macOS:
     Drag the L6 icon to the Trash and drop it.

2. Click “Exit File Transfer Mode”.

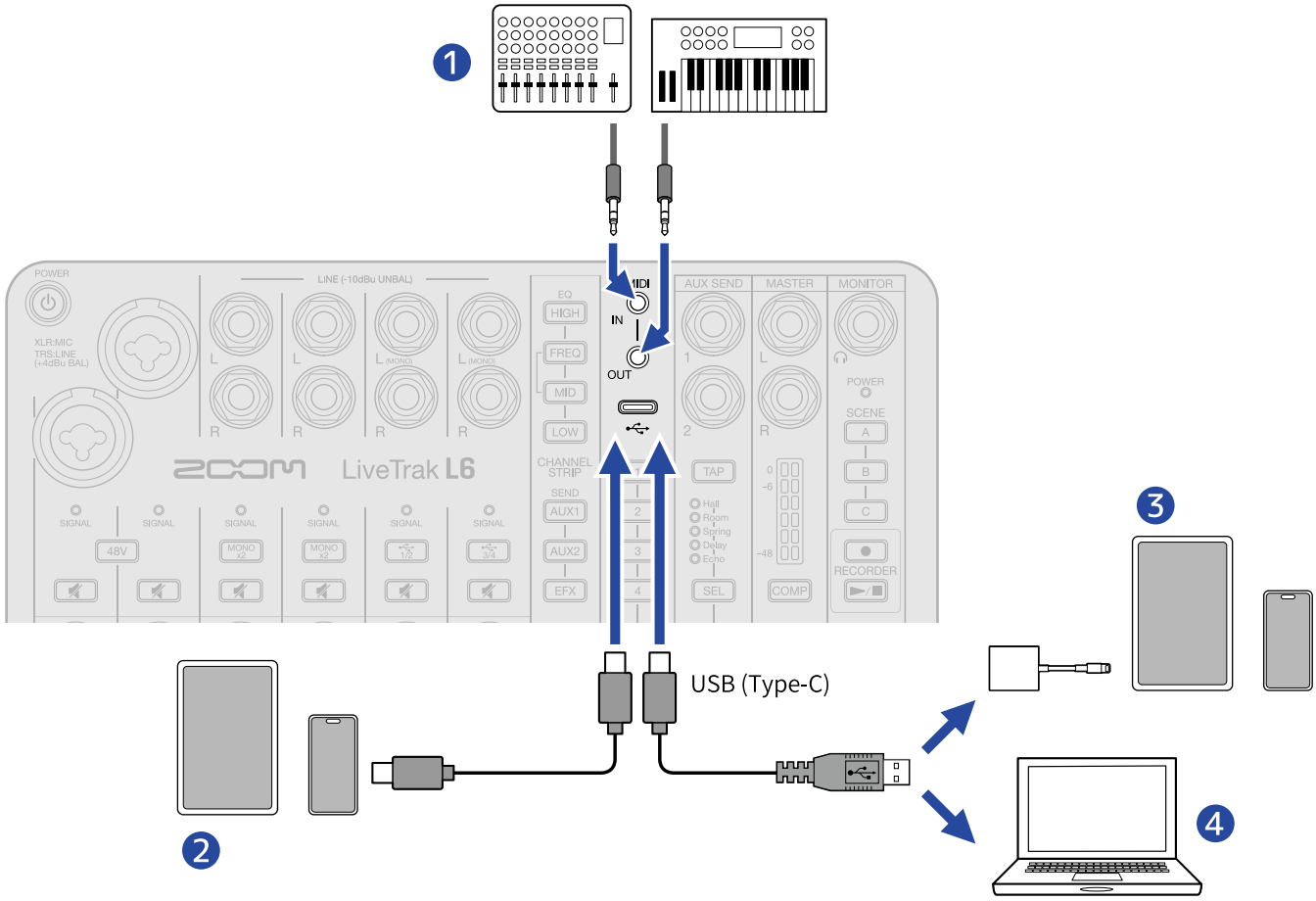


The ZOOM L6 Editor will return to normal.

Using MIDI devices

Connecting MIDI devices

Computers and MIDI devices can be connected to the L6.



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.

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 lighting connector.

USB MIDI port overview

When the L6 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 L6	L6 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 L6)	L6 Mixer Control Port	Select this port to control the L6. Using MIDI control numbers assigned with “MIDI CC# Mapping”, L6 parameters can be controlled and L6 operations can be recorded in a DAW or other software. (→ Assigning MIDI control numbers to L6 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 L6)	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 L6) ports.

Making MIDI settings

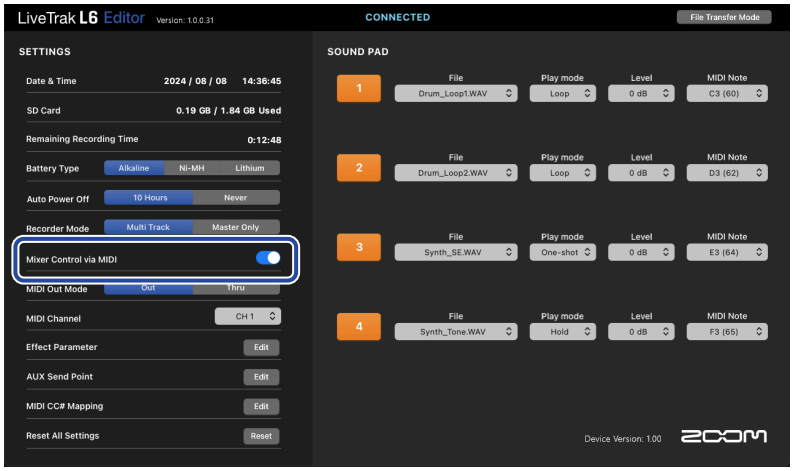
Various MIDI settings can be made.

Controlling the L6 with a MIDI device connected to the MIDI IN/OUT jacks.

To control the L6 with a MIDI controller, MIDI keyboard or other MIDI device connected to the MIDI IN/OUT jacks, turn on this setting.

1. Connect the L6 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: 

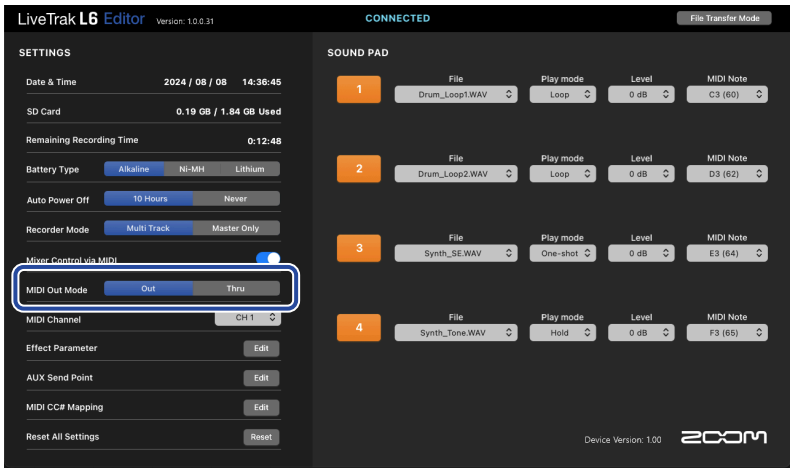
When on, MIDI devices connected to the MIDI IN/OUT jacks will be able to control the L6.

Setting the MIDI output mode

MIDI signals output from the L6 MIDI OUT can be set to either the MIDI signals generated by the L6 or MIDI signals input through the MIDI IN.

1. Connect the L6 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	Explanation
Out	MIDI signals generated by the L6 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 L6 MIDI channel

The MIDI channel that the L6 uses to send and receive data can be set.

1. Connect the L6 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.

CH 1 – CH 16 can be selected.

Assigning MIDI control numbers to L6 parameters.

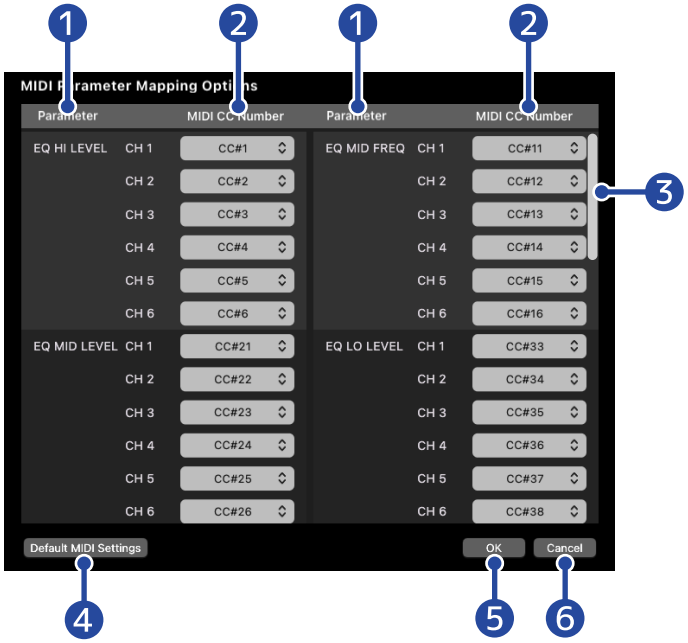
MIDI control numbers can be assigned to the L6 parameters.
The L6 can be controlled with operations using the corresponding MIDI control numbers on MIDI devices, including MIDI controllers and keyboards, and in DAWs and other software.

1. Connect the L6 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 Parameter

These are parameters used to control the L6. See the Parameter List below for details about parameters.

❷ 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.

❸ Scrollbar

Use this to scroll the parameters up and down.

❹ Default settings

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

❺ OK

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

❻ 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 – 6)	Boost/cut high frequencies. Each channel can be adjusted separately.	EQ MID FREQ (CH 1 – 6)	Adjust the middle frequency of the mid band that is boost/cut. Each channel can be adjusted separately.
EQ MID LEVEL (CH 1 – 6)	Boost/cut middle frequencies. Each channel can be adjusted separately.	EQ LO LEVEL (CH 1 – 6)	Boost/cut low frequencies. Each channel can be adjusted separately.
AUX 1 SEND (CH 1 – 6)	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 – 6)	Adjust the level sent to the device connected to the AUX SEND 2 jack. Each channel can be adjusted separately.
EFX SEND (CH 1 – 6)	Adjust the level sent to the internal effect. Each channel can be adjusted separately.	PAN (CH 1 – 6)	Adjust the left-right position. Each channel can be adjusted separately.
LEVEL (CH 1 – 6)	Adjust the level. Each channel can be adjusted separately.	MUTE (CH 1 – 6)	Mute/unmute the channel. Each channel can be adjusted separately.
MONO ×2 (CH 3 – 4)	Change the channel 3/4 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 L6 channels 5 or 6.
EFX TYPE	Select the internal effect.	COMPRESSOR	Turn on/off the compressor.

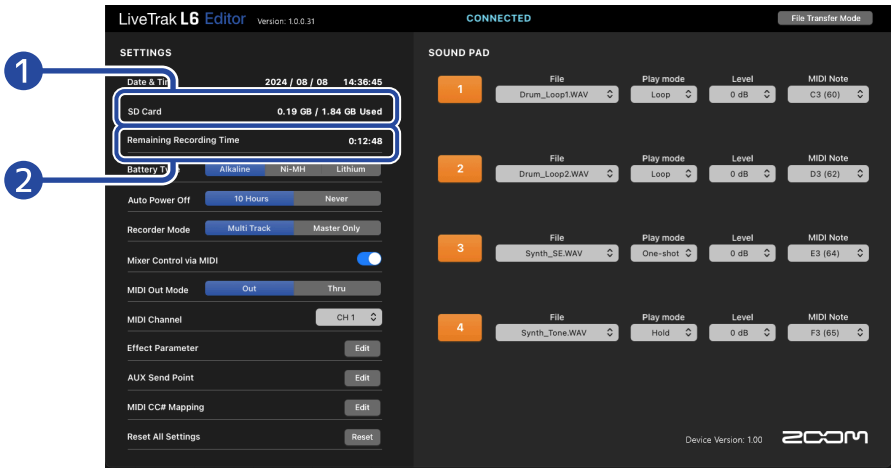
Managing microSD cards

Checking the microSD card state

The capacity and open space of the microSD card loaded in the L6 along with the available recording time can be checked.

1. Connect the L6 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 use/capacity
2. Recordable time

Formatting microSD cards

To maximize the performance of a microSD card, format it for use with the L6.

1. With the power off, insert the microSD card. (→ Inserting microSD cards)

2. While pressing the ● (record) button, press the ⏻ (power) button to turn on the L6 power.

The ▶/■ (play/stop) button will blink.

3. Press the ▶/■ (play/stop) button.

The microSD card will be formatted.

NOTE

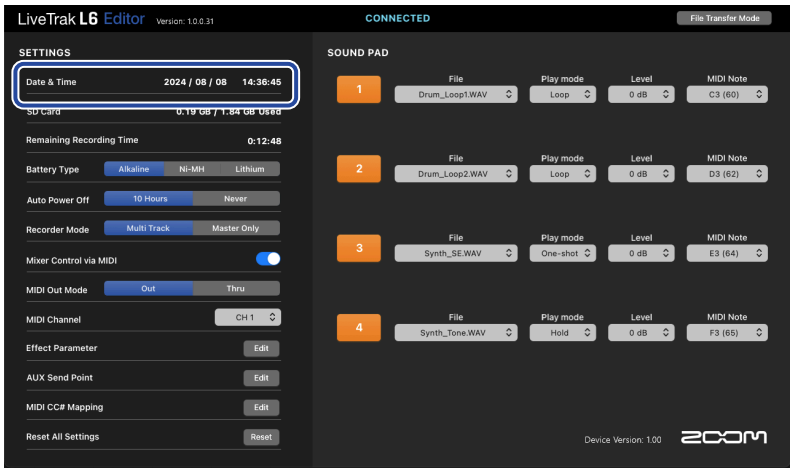
- Always format microSD cards in order to maximize their performance after purchasing them new or using them with a different device.
- Be aware that all data on the microSD card will be deleted when it is formatted.

Making various settings

Setting the date and time

The date and time can be set.

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



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

Setting date and time without using the app

The settings can be confirmed using sound output from the L6. Connect powered monitors or headphones to the L6. (→ Connecting headphones, powered monitors and mixers)

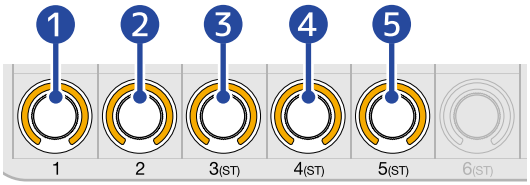
1. While pressing the HIGH (HIGH) and FREQ (FREQ) buttons, press the ⏻ (POWER) button to turn on the L6 power.

The L6 will start in setting mode, the POWER (POWER) indicator will light, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

2. Press the HIGH (HIGH) button.

The HIGH (HIGH) button and the channel 1 – 5  (encoders) will light and date and time setting mode will be enabled. (“Date time” will be output as audio guidance.)

3. Use the channel 1 – 5  (encoders) to set the date and time.



The setting values will be output as audio guidance.

1. **Year**
   This can be set from 0 to 99. (2000 – 2099 CE)
2. **Month**
   This can be set from 1 to 12. (January – December)
3. **Day**
   This can be set from 1 to 31. (1 – 31)
4. **Hour**
   0 – 23 (00:00 – 23:00)
5. **Minute**
   0 – 59 (00:00 – 00:59)

NOTE

Press the ►/■ (play/stop) button to output the current setting as audio.

4. After setting all items, press the blinking ● (record) button.

The date and time are confirmed, and the ● (record) button becomes unlit.

This returns to setting mode, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

5. Press the ⏻ (POWER) button until the POWER (POWER) indicator becomes unlit.

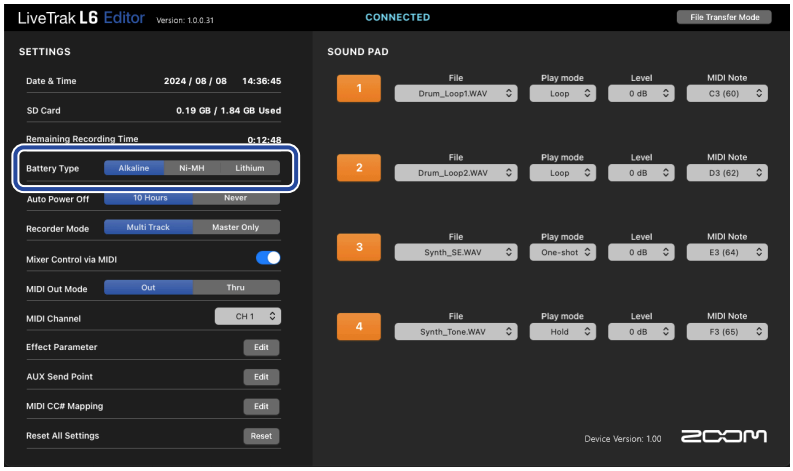
This exits setting mode and turns off the L6 power.

Setting the type of batteries used

Select the type of battery used by the L6 correctly so that the amount of remaining battery charge can be shown accurately.

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

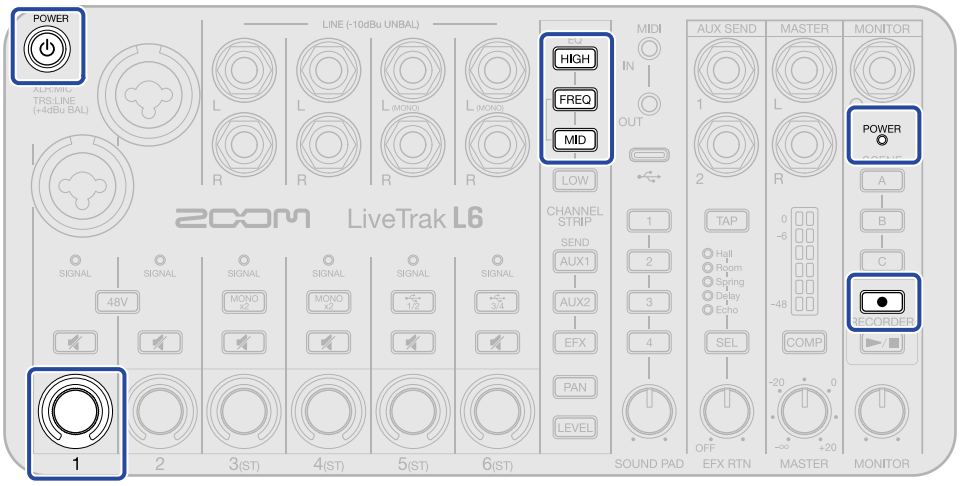
2. For “Battery Type”, click the type of batteries to select it.



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

Setting the battery type without using the app

The settings can be confirmed using sound output from the L6. Connect powered monitors or headphones to the L6. (→ Connecting headphones, powered monitors and mixers)



1. While pressing the HIGH (HIGH) and FREQ (FREQ) buttons, press the ⏻ (POWER) button to turn on the L6 power.

The L6 will start in setting mode, the POWER (POWER) indicator will light, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

2. Press the FREQ (FREQ) button.

The FREQ (FREQ) button and channel 1 (encoder) will light brightly and battery type setting mode will be enabled. (“Battery type” will be output as audio guidance.)

3. Use the channel 1 (encoder) to set the battery type.

The setting values will be output as audio guidance.

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

NOTE

Press the ▶/■ (play/stop) button to output the current setting as audio.

4. Press the blinking ● (record) button.

The battery type setting is confirmed, and the ● (record) button becomes unlit.

This returns to setting mode, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

5. Press the ⏻ (POWER) button until the POWER (POWER) indicator becomes unlit.

This exits setting mode and turns off the L6 power.

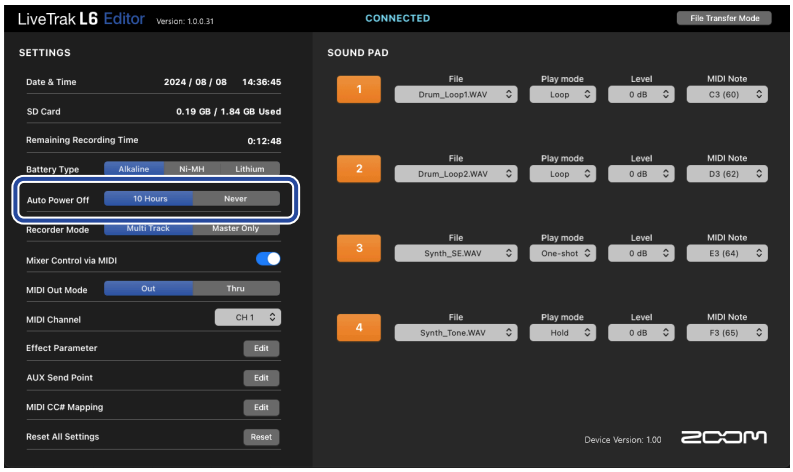
Turning the power off automatically (Auto Power Off)

The power will automatically turn off if the L6 is unused for 10 hours.
To keep the power on at all times, set Auto Power Off to Never.

1. Connect the L6 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	Explanation
10 Hours	The power will automatically turn off if it is unused for 10 hours.
Never	The power will not turn off automatically.

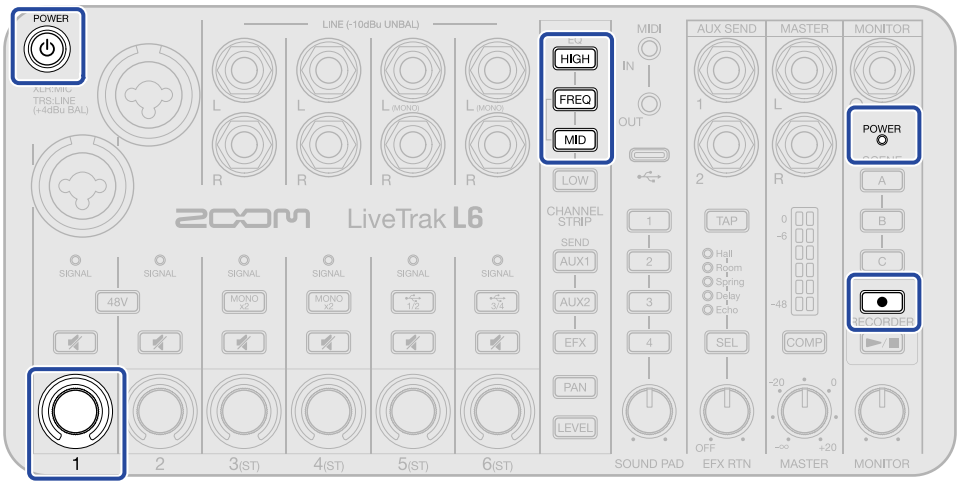


NOTE

- 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 L6 as an audio interface
  - When using the file transfer function
  - During execution of a firmware update
- Operating the L6 will reset the time until the Auto Power Off function activates.

Setting auto power off without using the app

The settings can be confirmed using sound output from the L6. Connect powered monitors or headphones to the L6. (→ Connecting headphones, powered monitors and mixers)



1. While pressing the HIGH (HIGH) and FREQ (FREQ) buttons, press the ⏻ (POWER) button to turn on the L6 power.

The L6 will start in setting mode, the POWER (POWER) indicator will light, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

2. Press the MID (MID) button.

The MID (MID) button and channel 1 (encoder) will light brightly and auto power off setting mode will be enabled. (“Auto power off” will be output as audio guidance.)

3. Use the channel 1 (encoder) to set the auto power off function.

The setting values will be output as audio guidance.

- On: The power will automatically turn off if it is unused for 10 hours.
- Off: The power will not turn off automatically.

NOTE

Press the ►/■ (play/stop) button to output the current setting as audio.

4. Press the blinking ● (record) button.

The Auto Power Off setting is confirmed, and the ● (record) button becomes unlit.

This returns to setting mode, and the HIGH (HIGH), FREQ (FREQ) and MID (MID) buttons will blink.

5. Press the ⏻ (POWER) button until the POWER (POWER) indicator becomes unlit.

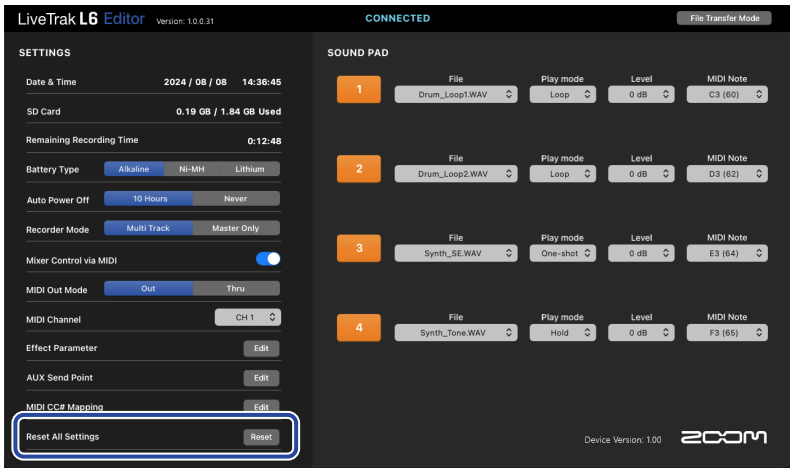
This exits setting mode and turns off the L6 power.

Restoring factory default settings

The L6 settings can be reset to their factory defaults.

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

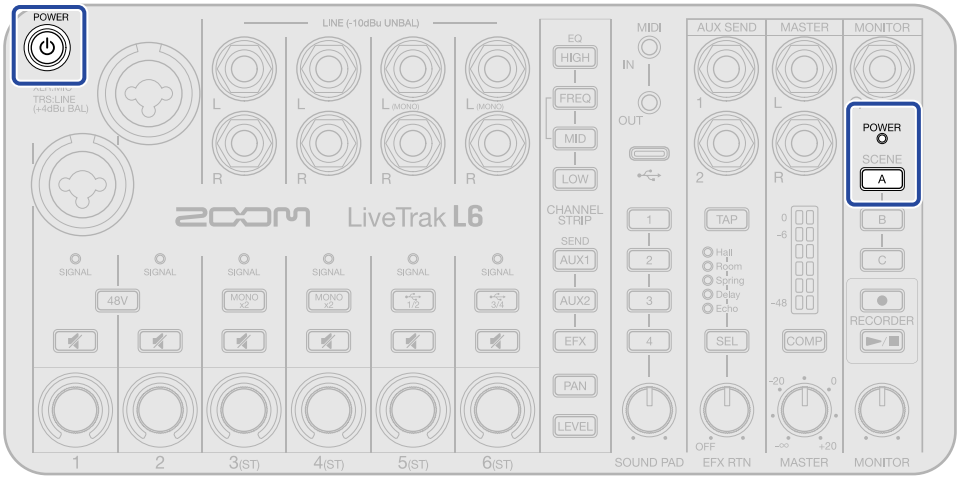
2. Click “Reset”.



The L6 will be restored to its factory default state.

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

Restoring factory default settings without using the app.



1. While pressing the A (A) button, press the ⏻ (power) button to turn on the L6 power.

The POWER (POWER) indicator will light and the A (A) button will blink.

2. Press the A (A) button.

The L6 will be restored to its factory default state.

NOTE

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

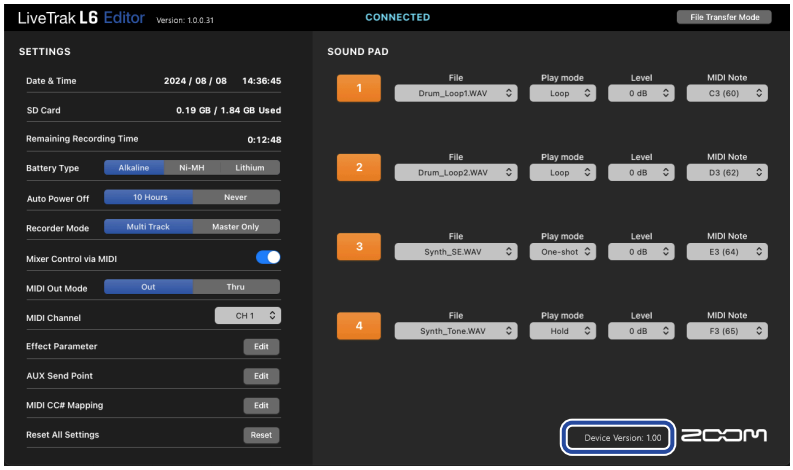
Managing the firmware

Checking the firmware version

The firmware version used by the L6 can be checked.

1. Connect the L6 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 L6 firmware can be updated to the latest version.
Files for the latest firmware updates can be downloaded from the ZOOM website (zoomcorp.com/help/l6).
Follow the instructions in the “L6 Firmware Update Guide” on the L6 download page.

Appendix

Troubleshooting

If you think that the L6 is operating strangely, check the following items first.

Mixing/recording/playback trouble

There is no sound or output is very quiet

- Confirm connections with all jacks. (→ Making connections)
- Check the orientations of mics and level settings of connected equipment.
- Confirm that the levels of the MASTER and MONITOR outputs are not too low. (→ Adjusting the overall and monitoring levels)
- Check the levels of each channel. (→ Adjusting channel levels)
- Check the phantom power setting. (→ Connecting to INPUT 1 – 2)
- Check the mute setting of each channel. (→ Muting channels)

Monitored sound is distorted

- Confirm that level meters are not lighting to their highest levels. If they are lighting, use the 

(MASTER) knob to adjust the MASTER output level.
- Use the 

(MONITOR) knob to adjust the MONITOR level.
- Confirm that 

(SIGNAL) indicators are not lighting red. If they are lighting, lower the levels from the connected devices and adjust the positions and orientations of mics.

Recording is not possible

- Confirm that the microSD card has open space. The available recording time can be checked on the ZOOM L6 Editor screen. (→ Checking the microSD card state)
- Confirm that a microSD card is loaded properly in the card slot. (→ Inserting microSD cards)

Audio files cannot be assigned to SOUND PAD buttons

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

SOUND PAD functions cannot be used

- Check the SOUND PAD level. (→ Setting sound pad play modes and levels, Playing sound pads)

- Confirm that audio files have been assigned to the sound pads. (→ Assigning audio files to SOUND PAD buttons)

Other trouble

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

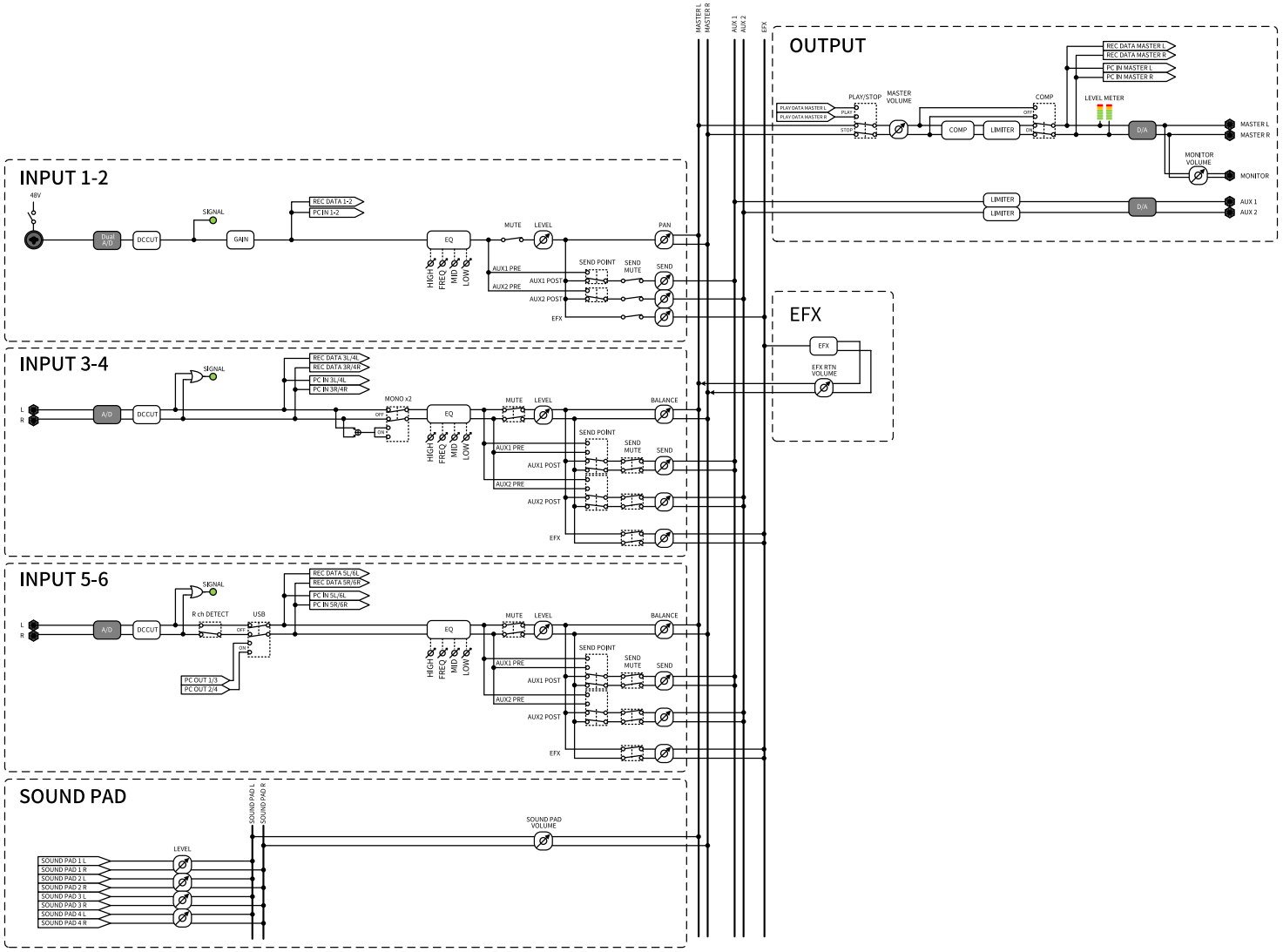
- Use the USB port on top of the L6 to connect a computer, smartphone or tablet.
- Use a USB cable that supports data transfer.
- The operation mode must be set on the L6 to allow the computer, smartphone or tablet to recognize it. (→ Transferring files to computers)
- Confirm that the computer, smartphone or tablet and the application being used support 32-bit float format.
- Even if the L6 cannot be selected in the computer “Sound” settings, it can be used as a 32-bit float audio interface by selecting the L6 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/l6).

Battery operation time is short

Making the following settings could increase the battery operation time.

- Set the type of battery 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	Recognized	Remarks
Basic channel	Default	1 – 16	1 – 16	
	Changed	1 – 16	1 – 16	
Mode	Default	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		○	○	
	True Number	0 – 2	0 – 2	SCENE A – C
System Exclusive		×	×	
System Common	Song Position	×	×	
	Song Select	×	×	
	Tune Request	×	×	
System Real Time	Clock	×	○	
	Commands	×	×	
Aux Messages	Local ON/OFF	×	×	
	All Notes OFF	×	×	
	Active Sense	×	×	
	System Reset	×	×	

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

Specifications

Input and output channels	Inputs	MIC/LINE (mono)	2
		LINE (stereo)	4
	Outputs	AUX SEND (mono)	2
		MASTER (stereo)	1
		MONITOR (stereo)	1
Inputs	MIC/LINE	Connectors	2 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: 39 kΩ or more
		Maximum input level	XLR: +4 dBu TRS: +24 dBu
		Phantom power	+48 V Channel total of 10 mA or less
	LINE	Connectors	8 TS phone jacks (balanced)
		Input impedance	10 kΩ
		Maximum input level	+9 dBu
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	Connector	TRS phone jack
		Maximum output level	50 mW + 50 mW (63 Ω load)
		Output impedance	14.7 Ω
Buses		MASTER	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		5 types
Recorder	Maximum simultaneous recording tracks	12
	Maximum simultaneous playback tracks	2
	Recording formats	48 kHz, 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/l6) for information about microSD cards that have been confirmed to work with this unit.
Audio interface	Input and output channels	Input: 12 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
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.	12-track recording, phantom power off, headphones used (63Ω load), no MASTER output connections	Alkaline batteries: about 3 hours NiMH batteries (1900 mAh): about 3.5 hours Lithium batteries: about 7 hours
Power consumption		5 W maximum

Dimensions	223 mm (W) × 114 mm (D) × 46.5 mm (H)
Weight (main unit only)	526 g
Weight (including batteries)	618 g

Note: 0 dBu = 0.775 Vrms

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