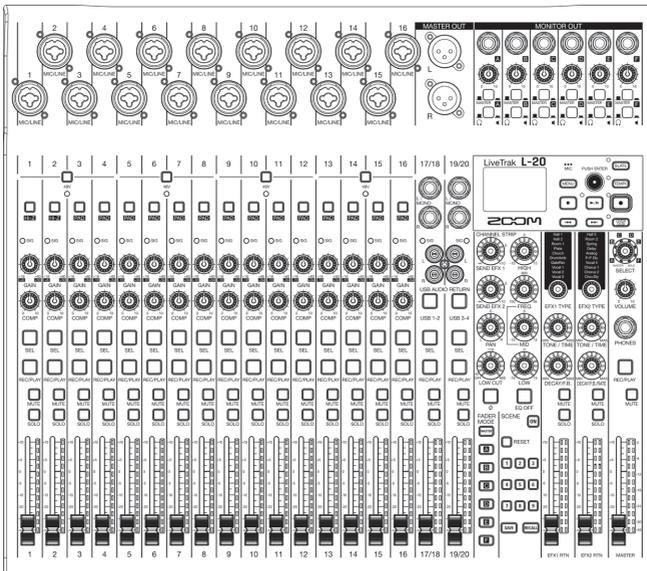# ZOOM®

L-20
LiveTrak

Quick Guide

You must read the Usage and Safety Precautions before use.

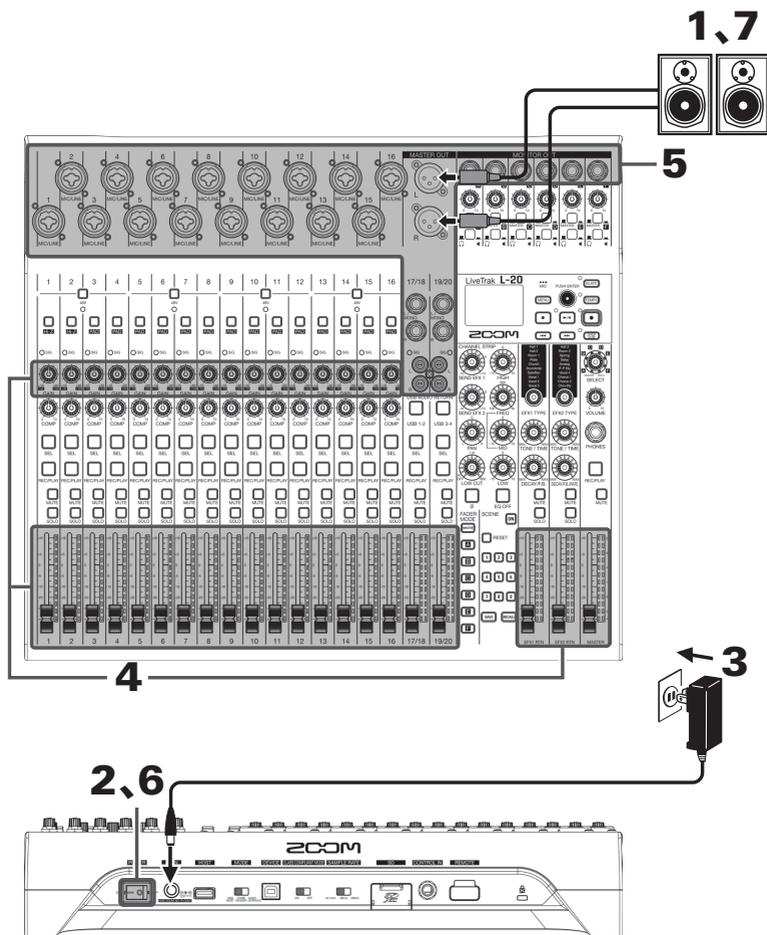**The Operation Manual can be downloaded from the ZOOM website (https://www.zoom.jp/docs/L-20).**

Turning the power on and off

Connecting equipment and turning the power on

1. Confirm that the output devices connected to the **L-20** are turned off.

2. Confirm that ON ⎓ OFF is set to OFF.

3. Plug the AD-19 adapter designed for this unit into an outlet.

4. Set all ⊙ GAIN knobs and faders to their minimum values.

5. Connect instruments, mics, speakers and other equipment.

> **HINT**
>
> See the Operation Manual for connection examples.

6. Set ON ⊡ OFF POWER to ON.

7. Turn on the output devices connected to the **L-20**.

> **NOTE**
>
> • When using a passive guitar or bass guitar, connect it to channel 1 or 2, and turn ▭ Hi-Z on.
> • When using a condenser mic, turn ▭ 48V on.
> • The power will automatically turn off if the **L-20** is unused for 10 hours. If you want the power to stay on always, you must disable the automatic power saving function See the Operation Manual for setting procedures.

Turning the power off

1. Minimize the volume of output devices connected to the **L-20**.

2. Turn off the power of output devices connected to the **L-20**.

3. Set ON ⊡ OFF POWER to OFF.

The following screens appear and the power turns off.

```
┌─────────────────────────┐
│ FOLDER01      ⇄ALL 🗡 SD │
│ ▀▀▀▀▀▀▀  ▀▀▀▀▀▀▀▀▀▀▀     │
│        MESSAGE          │
│                         │
│ Goodbye See You!        │
│                         │
│ 05h30:WAV44.1/16  05/12 14:12 │
└─────────────────────────┘
```
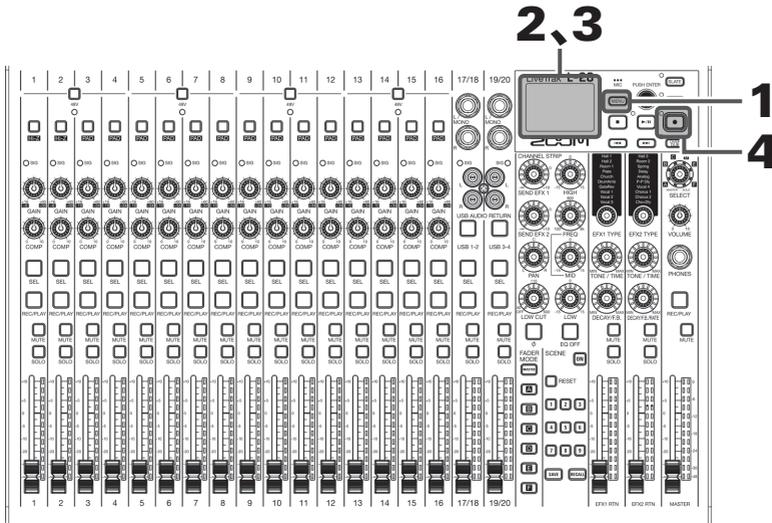
> **NOTE**
>
> When the power is turned off, the current mixer settings are saved in the project on the SD card. If they cannot be saved to the SD card, they will be saved in the unit.

Setting the date and time

The first time you turn the power on after purchase, you must set the date/time.

1. Press (MENU).

This opens the display MENU screen.

2. Select SYSTEM > DATE/TIME.

Move cursor: Turn

Confirm: Press

3. Set the date and time.
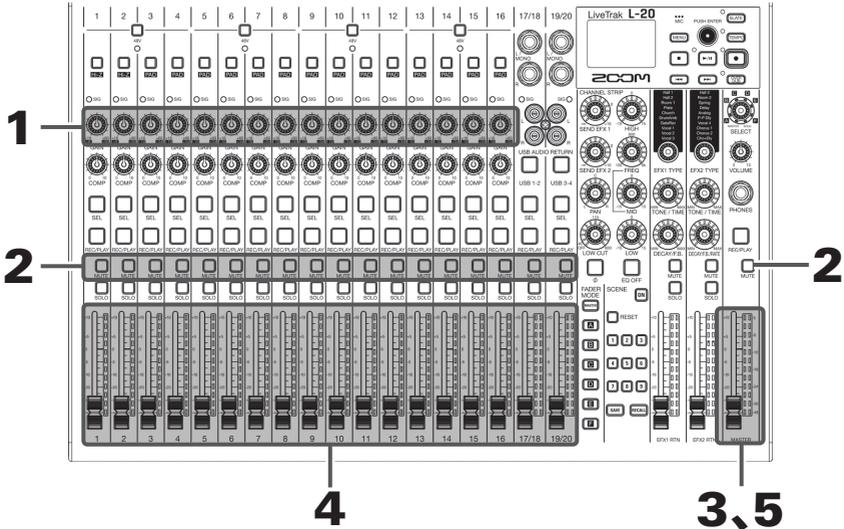
Move cursor or change value: Turn

Select item/confirm change: Press

```
      DATE/TIME
  YEAR  MONTH  DAY
  2018  01    01  (MON)

      00 : 00 : 00

REC:SET            MENU:CANCEL
```

4. Press.

Outputting input sounds from output devices

Outputting sound from speakers

1. Use to adjust the input signals while inputting sound from instruments and mics.

> **NOTE**
>
> Set them so that SIG indicators do not light red.
>
>
>
> SIG indicator
>
> SIG
>
> GAIN

2. Turn off (unlit) for the MASTER and the channels with sound you want to output.

MUTE

3. Set the MASTER fader to 0.

4. Use the channel faders to adjust the volumes.

5. Use the MASTER fader to adjust the overall volume.

5

Outputting sound from headphones
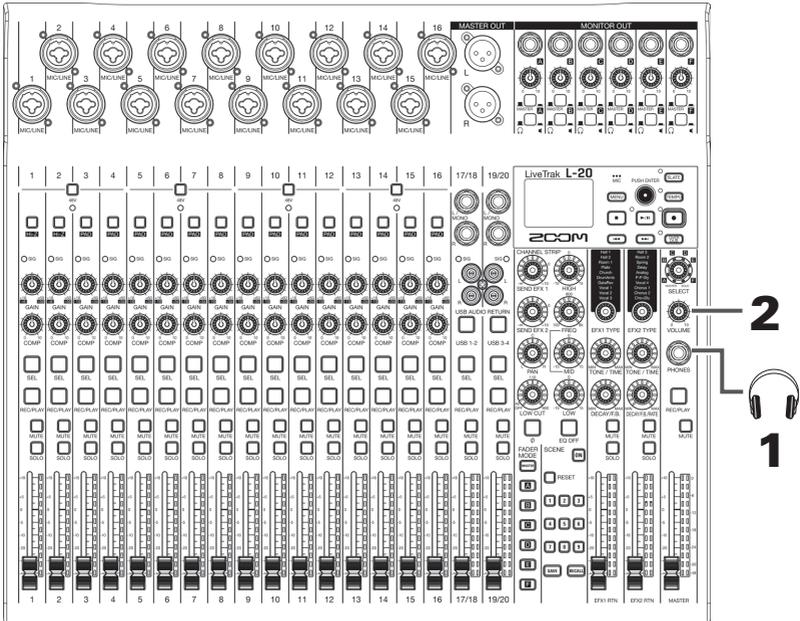
1. Connect headphones to the PHONES jack.
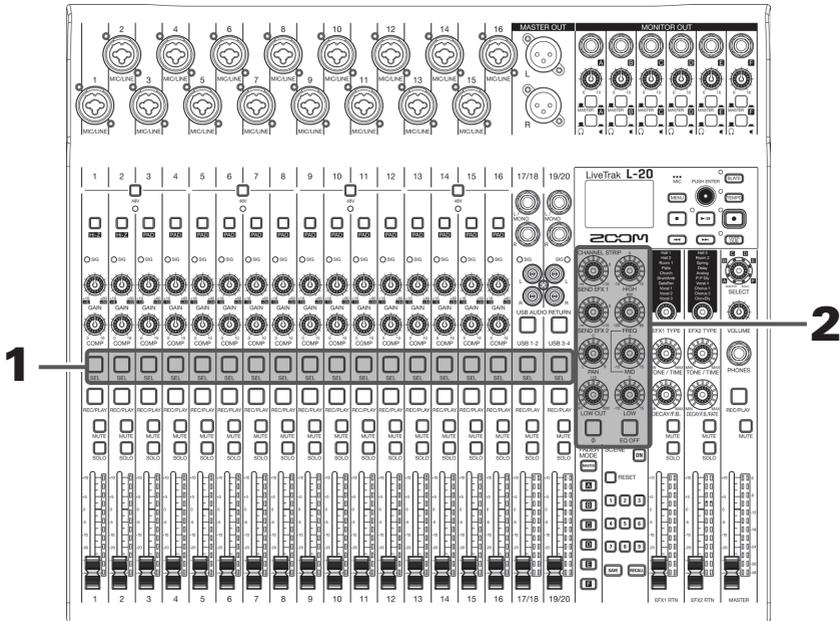
2. Use ⊙ to adjust the volume.

VOLUME

HINT

The signal output from the PHONES jack can be set to MASTER, SOLO or MONITOR OUT A–F.

Status	Explanation
MASTER	The same signals as the MASTER OUT are output.
A-F	The signals set in the FADER MODE section are output.
SOLO	The signals of SOLO enabled channels are output.

Adjusting the tone and panning

1. Press [ ] to light it for the channel for which you want to adjust tone and panning.
SEL

2. Use the knobs and buttons to adjust the tone and panning.

Adjusting the tone: ,
HIGH   MID   FREQ   LOW   LOW CUT

Adjusting the panning:
PAN

Reversing the polarity: [ ]
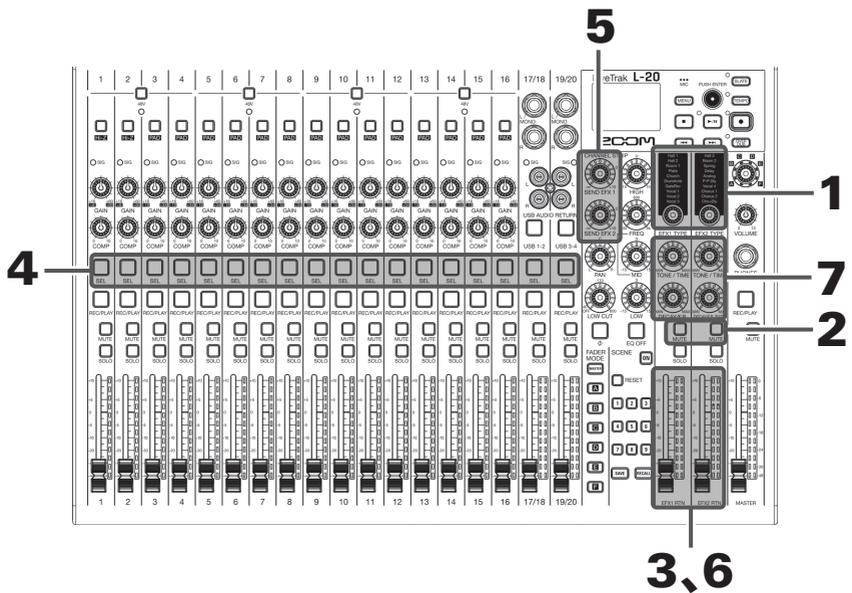φ

NOTE

To turn off all equalization at once, press [ ] to light it. This will bypass HIGH, MID, LOW and LOW CUT settings.
EQ OFF

HINT

See the Operation Manual for details about how to use the compressor and the knobs and buttons.

Using the built-in effects

The **L-20** has 20 types of send effects in 2 banks.

1. Turn ⊙ / ⊙ to select the effect type, and press ⊙ / ⊙
EFX1 TYPE EFX2 TYPE   EFX1 TYPE EFX2 TYPE

to confirm.

Hall 1	Hall 3
Hall 2	Room 2
Room 1	Spring
Plate	Delay
Church	Analog
DrumAmb	P-P Dly
GateRev	Vocal 4
Vocal 1	Chorus 1
Vocal 2	Chorus 2
Vocal 3	Cho+Dly

Lit: Effect selected

EFX1 TYPE   EFX2 TYPE

2. Press ☐ to turn it off, unmuting EFX1/EFX2 RTN.
MUTE

3. Set the EFX1/EFX2 RTN fader to 0.

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4. Press ☐ for a channel that you want to use the effect on to light it.

SEL

5. Use ⊚ / ⊚ to adjust the amount for each channel.

SEND EFX 1   SEND EFX 2

6. Use the EFX1/EFX2 RTN fader to adjust the overall effect amount.

7. Use ⊚ and ⊚ to adjust the send effect parameters for EFX1/

TONE / TIME   DECAY/F.B.

EFX2 RTN.

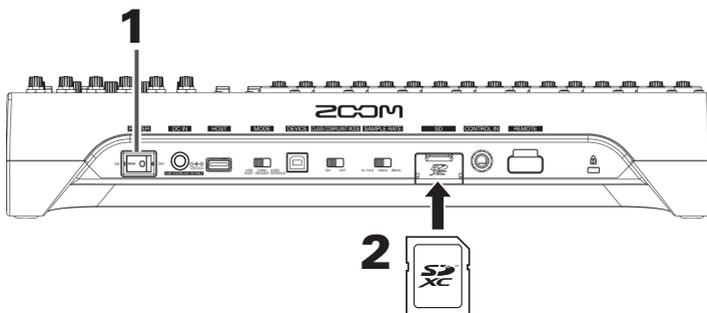**NOTE**

See the Operation Manual for detailed information about the effect types and parameters that can be adjusted with ⊚ / ⊚ .

TONE / TIME   DECAY/F.B.

Preparing to record

Inserting SD cards

1. Set ON ⊡ OFF to OFF.

2. Open the SD card slot cover, and insert an SD card all the way into the slot.

To remove an SD card, push it further into the slot and then pull it out.

> **NOTE**
> - Disable write-protection on the SD card before inserting it.
> - Always set ON ⊡ OFF to OFF before inserting or removing an SD card.
>   Inserting or removing a card while the power is on could result in data loss.
> - When inserting an SD card, be sure to insert the correct end with the top side up as shown.
> - If an SD card is not loaded, recording and playback are not possible.
> - See the Operation Manual for information about formatting SD cards.
> - Use an SD card that is Class 10 or higher.
> - Format an SD card before recording to it at 96 kHz. If you record without formatting first, skipping could occur.

Creating new projects

The **L-20** manages recording and playback data in units called projects.

1. Press (MENU).

This opens the display MENU screen.

2. Select PROJECT > NEW PROJECT.

Move cursor: Turn

Confirm: Press

3. Use to select YES, and press .

```
NEW PROJECT
Are you sure?

YES
NO
MENU:RETURN
```

NOTE

When a new project is created, it will start with the current mixer settings.

HINT

When the **L-20** power is turned on, it will automatically load the last used project.

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Recording/overdubbing and playing tracks

The **L-20** has recorder functions that enable simultaneous recording of up to 22 tracks and simultaneous playback of up to 20 tracks.
The input signals of every channel and from the master fader output can be recorded. These recordings can also be played back.

Recording
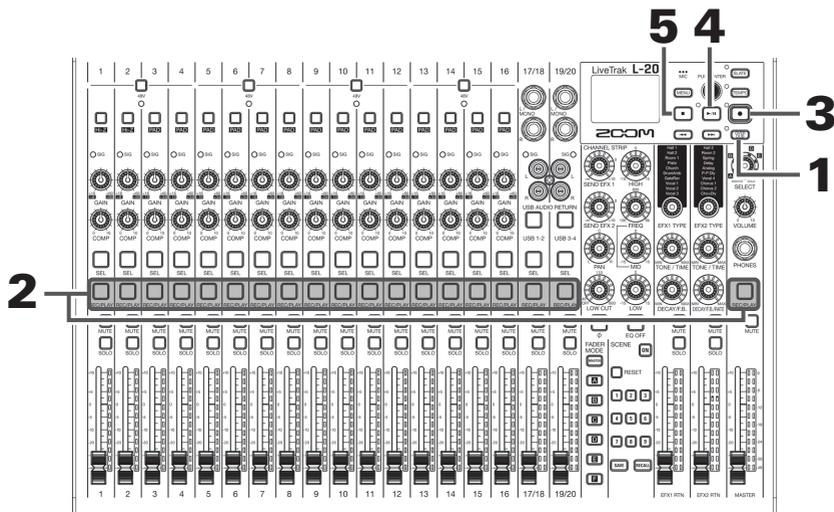
1. Use the `OVER DUB` button to turn overdubbing on or off.

○ ——— OVER DUB indicator
`OVER DUB` Lit (on): Overwrite current project
Unlit (off): Create and record to new project

2. Press ▢ for the channels you want to record, lighting these buttons red.
REC/PLAY

3. Press ⏺ to start recording standby.

> **HINT**
> If a recorded file already exists, and `OVER DUB` is off, pressing ⏺ will create a new project and then start recording standby.

4. Press ▶/❚❚ to start recording.

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5. Press [■] to stop recording.

> **NOTE**
> • The signals recorded on each channel can be set to either before or after the compressor.
> • See the Operation Manual for information about punching in/out, automatic recording and pre-recording.
> • When recording stops, "Please Wait" appears on the display. Do not turn the power off or remove the SD card while this message appears. Doing so could cause data loss or malfunction.

Playing recordings
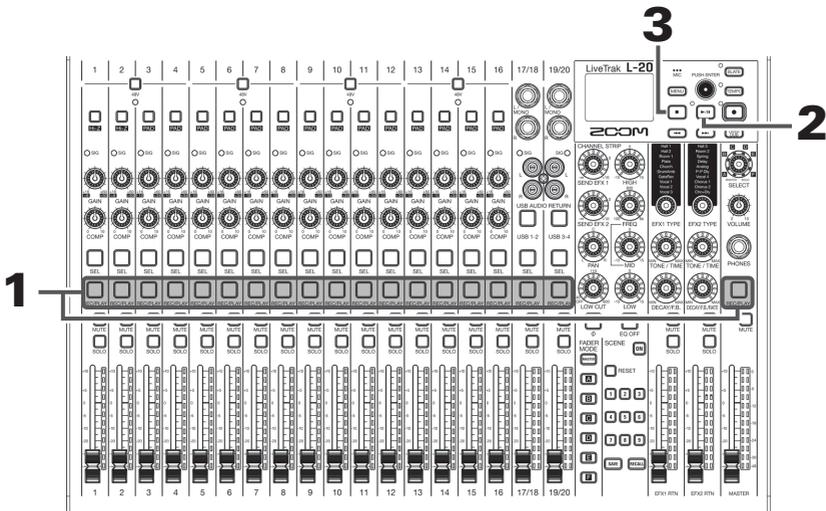
1. Press [ ] for the channels you want to play, lighting these buttons green.
REC/PLAY

2. Press [▶/Ⅱ] to start playback.

○————— PLAY/PAUSE indicator
Lit: Playing back
Blinking: Paused

3. Press [■] to stop playback.

> **NOTE**
> • Playback signals are added before the equalizer section, so their EQ and panning settings can be adjusted during playback.
> • See the Operation Manual for information about changing playback modes and selecting the playback project.
> • Other channels cannot be played back when the MASTER channel is playing back.

Mixer

Mixer		The mono channels have high-quality mic preamps and compressors. Each channel can also have 3-band EQ, LOW CUT, PAN, polarity reversal, and send amounts for 2 effects set. You can also set the bus monitored through the PHONES jack to MASTER, A–F or SOLO.
	Effects	The mixer includes 20 types of send-return effects in 2 groups. Parameters for each effect can be adjusted.
	Scenes	This function can be used to save up to nine sets of current mixer settings as scenes and to recall these saved settings at any time. The mixer settings can also be reset.
	MONITOR OUT	The MONITOR OUT jacks can output 6 different monitor mixes, allowing different performers to receive mixes as they like. Each MONITOR OUT has its own switch to set whether it is connected to headphones or a speaker.
Recorder		The recorder can simultaneously record 22 tracks, including each channel and the master track, and simultaneously play 20 tracks. Recorded data is saved in 16/24-bit, 44.1/48/96 kHz WAV format and managed in units called projects. The following functions can be used with the recorder. • Recording, overdubbing and playing tracks • Adding marks and moving between them • Punching in/out • Mixing down (master track recording and playback) • Automatically starting recording when a set volume is exceeded. • Pre-recording before recording starts
	Projects	The following operations can be used with projects. • Selecting the folder where projects are saved • Selecting projects for playback • Changing project names • Deleting projects • Protecting projects • Checking project information • Saving projects to and loading them from USB flash drives • Checking, deleting and moving between marks
	Audio files	The following operations can be used on audio files. • Deleting audio files • Exporting audio files to and loading them from USB flash drives
Metronome		The volume, sound and pattern can be changed and the metronome includes a precount function. The volume of each output jack can be set.
Slate mic		The built-in slate mic is useful for adding comments and talk-back during recording. You can set the mic volume and routing.
Audio interface		When used as a USB audio interface, it supports 22 ins and 4 outs when the sampling rate is 44.1/48 kHz.
Card reader		Use as a card reader is possible when connected to a computer.
Settings		Settings related to the recorder and SD cards can be made using the MENU key.
	Recorder	Recording format settings Automatic recording settings Showing recording levels on level meters Latency adjustment setting Settings related to playback Settings related to input signal recording sources
	SD cards	Checking open space Resetting to factory settings Testing card performance
	Other settings	Date and time setting Footswitch setting Changing the sampling rate Disabling the automatic power saving function Adjusting the display contrast
Restoring factory defaults		You can restore the unit to its factory default settings.
Firmware		You can check the firmware version and update it to the latest version.
Operation from an iPad		By connecting a BTA-1 or other dedicated wireless adapter (sold separately) and using the dedicated controller app, the **L-20** can be operated from an iPad.

See the Operation Manual for details.

Specifications

Number of in-put and output channels	Inputs	Mono (MIC/LINE)	16
		Stereo (LINE)	2
	Outputs	MASTER OUT	1
		MONITOR OUT	6
		PHONES	1
Inputs	Mono (MIC/LINE)	Type	XLR/TRS combo jacks (XLR: 2 HOT, TRS: TIP HOT)
		Input gain	PAD OFF: +16 – +60 dB PAD ON: –10 – +34 dB Hi-Z ON: +6 – +50 dB
		Input impedance	XLR: 3 kΩ TRS: 10 kΩ/1 MΩ (when Hi-Z ON)
		Maximum input level	PAD OFF: 0 dBu (at 0 dBFS) PAD ON: +26 dBu (at 0 dBFS)
		Phantom power	+48 V
	Stereo (LINE)	Type	TS phone/RCA pin (unbalanced) jacks
		Maximum input level	+14 dBu
Outputs	MASTER OUT	Type	XLR jacks (balanced)
		Maximum output level	+14.5 dBu
		Output impedance	100 Ω
	MONITOR OUT A-F (with balanced output) connected to monitor speakers	Type	TRS phone jacks (balanced)
		Maximum output level	+14.5 dBu
		Output impedance	100 Ω
	MONITOR OUT A-F (with unbalanced output) connected to headphones	Type	Standard stereo phone jacks
		Maximum output level	42 mW + 42 mW at 60 Ω
		Output impedance	100 Ω
	PHONES	Type	Standard stereo phone jack
		Maximum output level	42 mW + 42 mW at 60 Ω
		Output impedance	100 Ω
Buses		MASTER	1
		MONITOR	6
		SEND EFX	2
Channel strip		COMP	
		LOW CUT	40–600 Hz, 12 dB/OCT
		EQ	HIGH: 10 kHz, ±15 dB, shelving MID: 100 Hz – 8 kHz, ±15 dB, peaking LOW: 100 Hz, ±15 dB, shelving
		PHASE	
Level meters			12 segments
Send effects			20 types
Recorder		Maximum simultaneous recording tracks	22 at 44.1/48/96 kHz
		Maximum simultaneous playback tracks	20
		Recording format	WAV 44.1/48/96 kHz, 16/24-bit, mono/stereo
		Recording media	4GB–32GB SDHC cards (Class 10 or higher) 64GB–512GB SDXC cards (Class 10 or higher)
Audio interface		44.1/48 kHz	Recording: 22 channels Playback: 4 channels
		Bit depth	24-bit
		Interface	USB 2.0
Card reader		Class	Mass storage USB 2.0 High Speed
USB HOST		Class	USB 2.0 High Speed
Sampling frequency			44.1/48/96 kHz
Frequency characteristics			44.1 kHz: –1.0 dB, 20 Hz – 20 kHz 96 kHz: –3.0 dB, 20 Hz – 40 kHz
Equivalent input noise			Actual measurements: –128dB EIN (IHF-A) at +60dB/150Ω input
Display			LCD with backlight (128×64 resolution)
Power			AD-19 AC adapter (DC12V 2A)
Power consumption			24 W maximum
External dimensions			445 mm (W) × 388.4 mm (D) × 82.6 mm (H)
Weight (main unit only)			3.71 kg

ZOOM