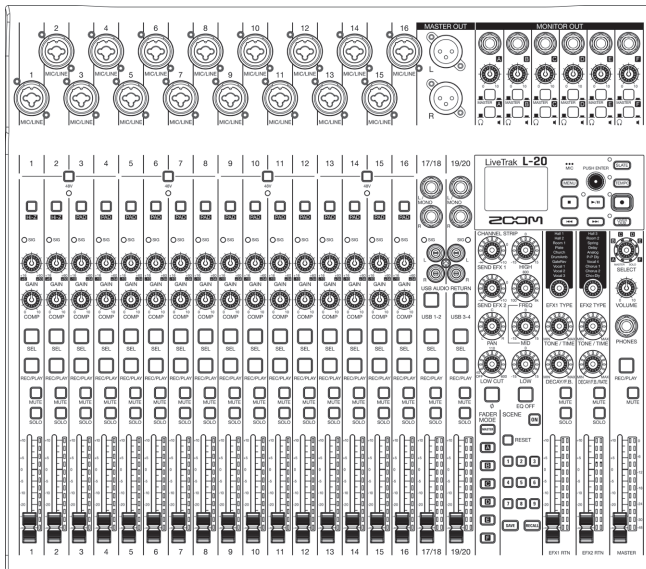


zoom®

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>).

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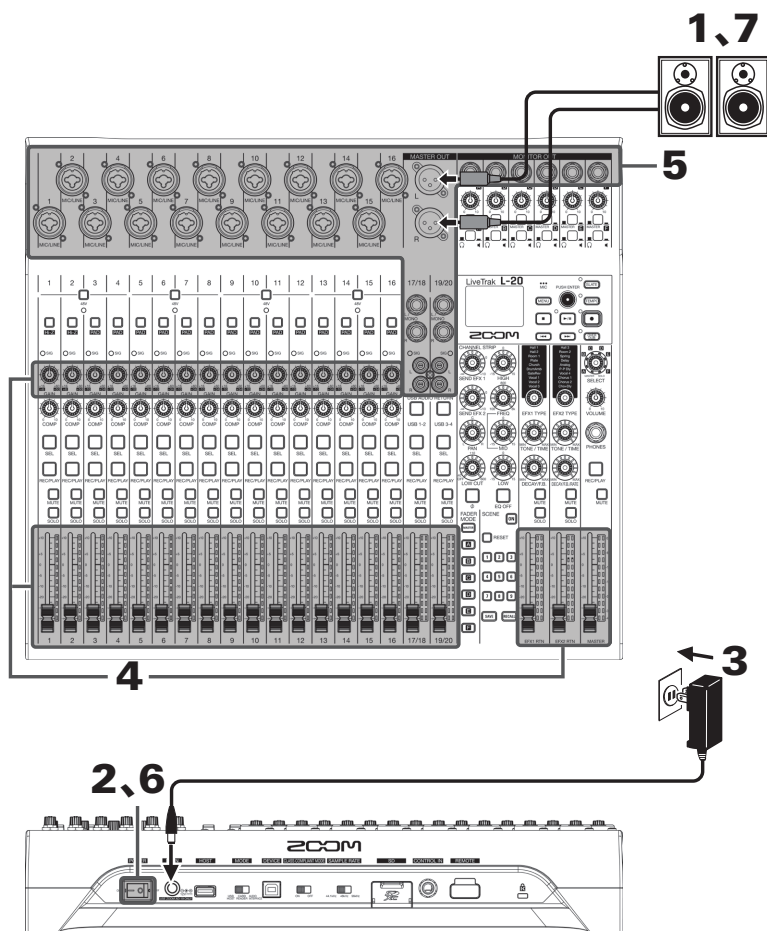
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You might need this manual in the future. Always keep it in a place where you can access it easily.
The contents of this manual and the specifications of the product could be changed without notice.

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  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 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  on.
- When using a condenser mic, turn  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 to OFF.

The following screens appear and the power turns off.

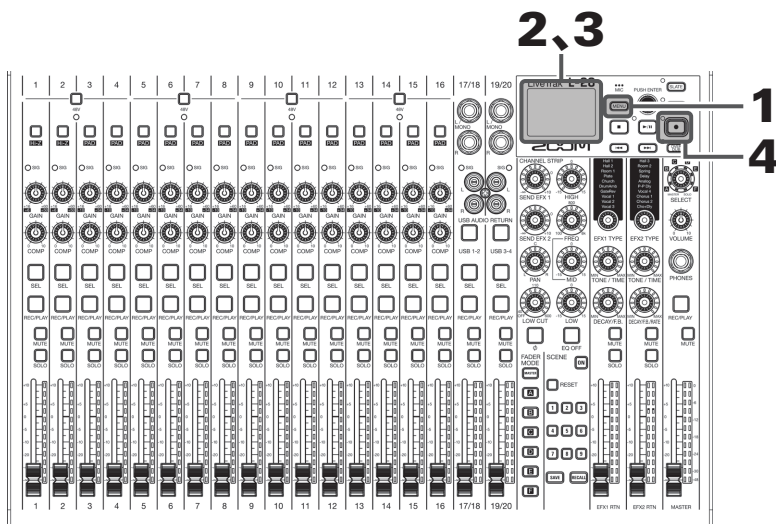


NOTE

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 .


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 

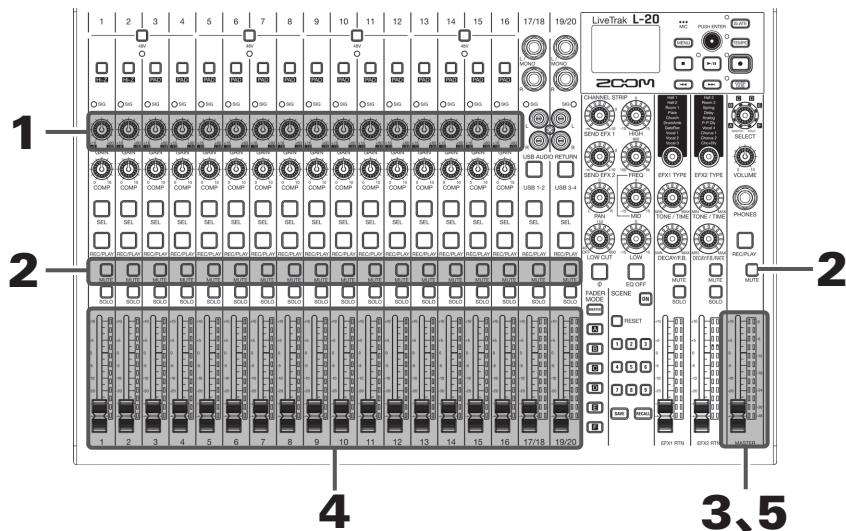
Select item/confirm change: Press 



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.

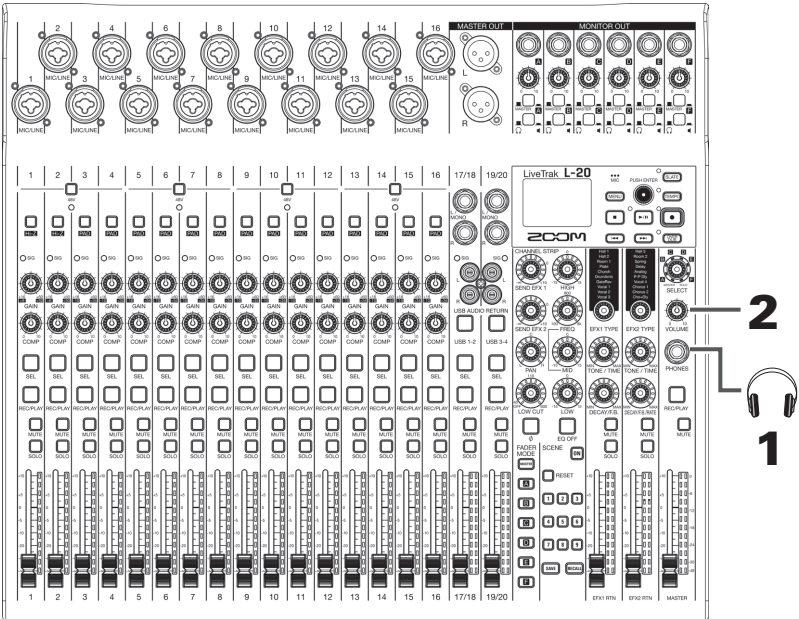
NOTE

Set them so that SIG indicators do not light red.



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

Outputting sound from headphones



1. Connect headphones to the PHONES jack.

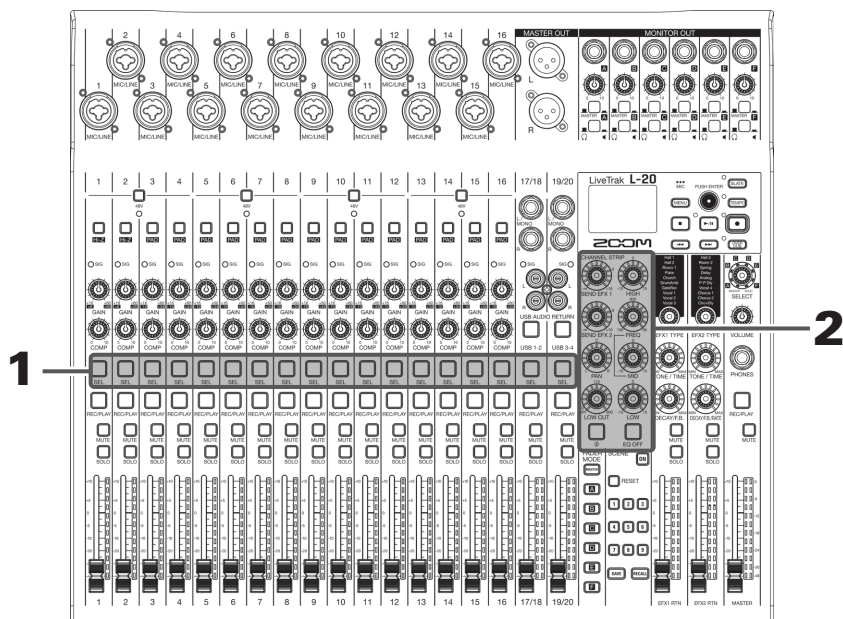
2. Use  to adjust the volume.

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.
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.

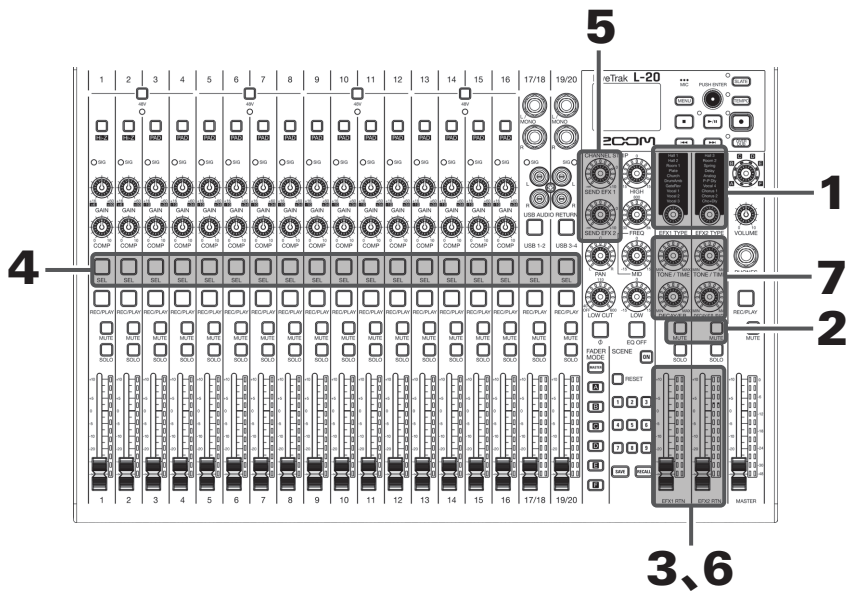
EQ OFF





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  /  to confirm.

Hall 1

Hall 2

Room 1

Plate

Church

DrumAmb

GateRev

Vocal 1

Vocal 2

Vocal 3

Hall 3

Room 2

Spring

Delay

Analog

P-P Dly


Vocal 4


Chorus 1

Chorus 2


Cho+Dly

— Lit: Effect selected












EFX1 TYPE EFX2 TYPE

- 2.** Press  to turn it off, unmuting EFX1/EFX2 RTN.

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

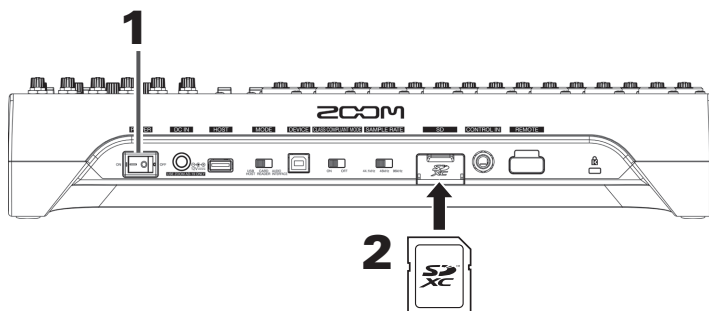
4. Press  for a channel that you want to use the effect on to light it.
5. Use  /  to adjust the amount for each channel.
SEND EFX 1 SEND EFX 2
6. Use the EFX1/EFX2 RTN fader to adjust the overall effect amount.
7. Use  and  to adjust the send effect parameters for EFX1/
EFX2 RTN.
MIN TONE / TIME MAX MIN DECAY / F.B. MAX


NOTE

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

Preparing to record


Inserting SD cards



1. Set **POWER**  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 **POWER**  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 .

This opens the display MENU screen.

2. Select **PROJECT** > **NEW PROJECT**.

Move cursor: Turn 

Confirm: Press 

3. Use  to select **YES**, and press .



NOTE

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

HINT

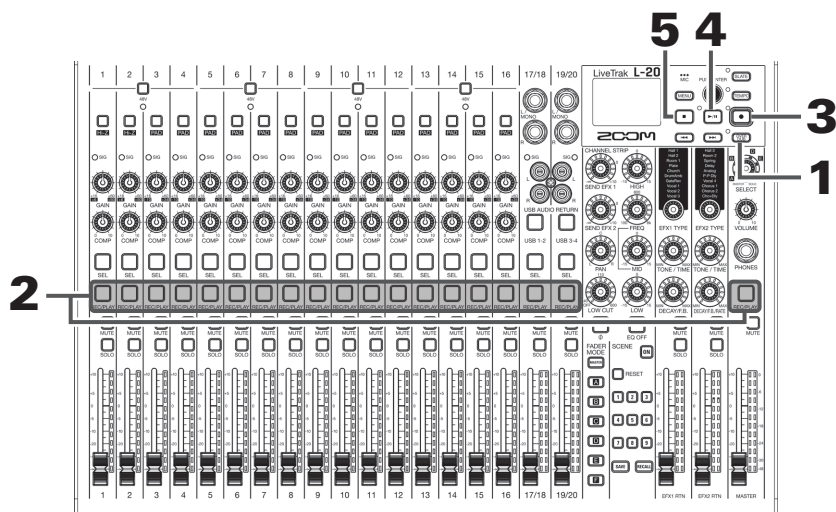
When the **L-20** power is turned on, it will automatically load the last used project.

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 **OVER DUB** to turn overdubbing on or off.

☐ — OVER DUB indicator



Lit (on): Overwrite current project

Unlit (off): Create and record to new project

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

3. Press **RECORD** to start recording standby.

HINT

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

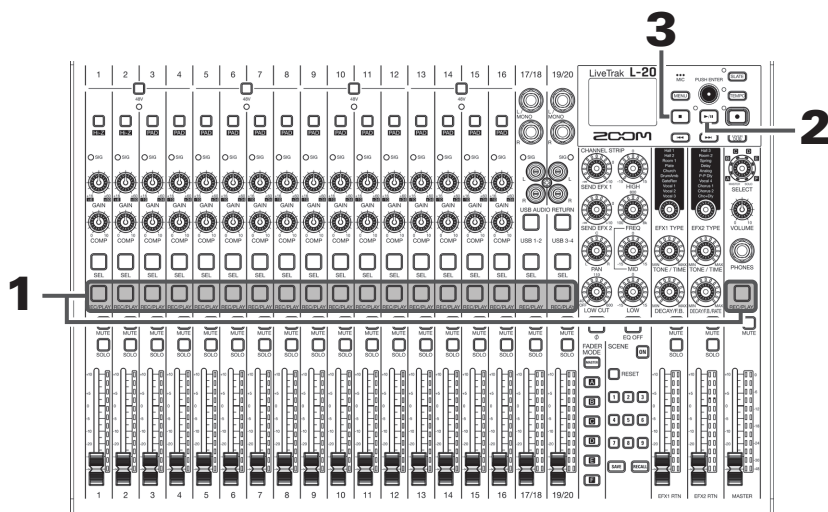
4. Press **PLAY/PAUSE** to start recording.




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.
2. Press  to start playback.
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	<p>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.</p> <p>The following functions can be used with the recorder.</p> <ul style="list-style-type: none"> • 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	<p>The following operations can be used with projects.</p> <ul style="list-style-type: none"> • 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	<p>The following operations can be used on audio files.</p> <ul style="list-style-type: none"> • 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	<p>Recording format settings</p> <p>Automatic recording settings</p> <p>Showing recording levels on level meters</p> <p>Latency adjustment setting</p> <p>Settings related to playback</p> <p>Settings related to input signal recording sources</p>
SD cards	<p>Checking open space</p> <p>Resetting to factory settings</p> <p>Testing card performance</p>
Other settings	<p>Date and time setting</p> <p>Footswitch setting</p> <p>Changing the sampling rate</p> <p>Disabling the automatic power saving function</p> <p>Adjusting the display contrast</p>
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 (128x64 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		



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