



MIXING CONSOLE

USER'S MANUAL

GM-12F/18F SERIES

Please keep this manual properly.

Please make sure to read the relevant materials of this product first, and then install and use this product according to the requirements therein.

This manual is for reference only and is subject to change without notice.

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Features

12/16 input Chs, 4/8 mono input Chs, 4 stereo input Chs

1-8 Chs/1-12Chs with DC +48V phantom power supply

1-4Chs/1-8Chs with INSERT i/O jack for independent connection to the external effector

1-4Chs/1-6Chs with compression control

GM-12F 1-8 Chs 3 bands EQ(H/M/L),9-12Chs 2 bands EQ

GM-18F 1-8 Chs 3 bands EQ with Mid swept function,9-16 Chs 3 bands EQ

2 AUXs (AUX pre function/FX),3AUXs (AUX1/AUX2 pre function/FX)

GM-12F with 2 Groups(G1-2),GM-18F 4 Groups(G1-2,G3-4)

Channel quick mute with Translucent rubber pad

60mm channel faders and 100mm Group faders

32 kinds of DSP effects

Multifunctional USB system (with mp3 player, FXs display, bluetooth, U-disk driver, PC or Mobile soundcard to mixer , monitor/master/AUX etc. signal display)

Installation instructions

It is recommended that you keep this manual for future reference.

Common safety symbols and warnings:

The safety symbols and warnings shown in this manual are to prevent personal injury and property damage caused by improper operation.

Please read this manual carefully before using this product, and be sure to understand various safety symbols and warning signs, so as to know the potential dangers.



WARNING

Always follow the warning or caution to avoid the possibility of serious injury or even death from un proper operation

Installing Warning:

- . Do not expose the device to rain, use it near water or in damp or wet conditions, to avoid the electric shock or fire, etc.
- . Use the voltage specified as correct for the device, it is printed on the place of the device
- . Never trim, twist, damage or replace the wires of the inner device.
- . Do not use the device near heat sources, do not place heavy objects, including wire cable on device, to avoid electric shock or fire.
- . Make sure stable rackmounting
- . When unplugging the plug, do please keep the hand dry, to avoid electric shock or damage.
- . Close the power before unplugging the plug.
- . Keep the right way to pull out the plug, avoid to damage the cable.
- . Before moving the device, keep closing the power supply.
- . Do not cover the vent of the device, to avoid overheating inside the machine and fire.
- . Avoid installing the device in places with much dust or direct contact with sunlight or black smoke and steam condition, to prevent fire or electric shock.

Caution:

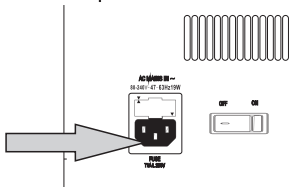
- . Following abnormal conditions are found during use, please turn off the power immediately, unplug the power plug, and contact your nearest dealer immediately. Do not continue to use it to avoid fire or electric shock.
- . The device emits smoke or strange smell. When water or metal objects fall into the device. The device falls or the casing is damaged.
- . Wire damage (exposed wire core, broken wire, etc.)
- . Fault found (no sound or noise, etc.).
- . To avoid fire or electric shock, never open the housing because it contains high-voltage parts. Do not place cups, bowls, vases, metal vessels and other objects containing water on the machine.
- . If the liquid is accidentally spilled into the device, it will burn the machine and even cause fire or electric shock.
- . Do not put metal objects or inflammable materials through the vent on the machine cover, nor coins, otherwise it will cause fire or electric shock.
- . Do not place heavy objects on the machine to avoid personal injury or property damage caused by the device slipping.
- . Turn the volume to the lowest level before starting the device. High volume may cause hearing damage when starting the machine.
- . Do not extend the use of the horn when the sound is distorted. This is a sign of failure, which is easy to cause the machine to overheat and cause a fire.
- . Please clean the dust on the device and power plugs and sockets regularly. Long time dust accumulates, the device may be damaged or cause a fire.. When cleaning the dust or stopping the device for more than ten days, please unplug the power plug to avoid electric shock or fire.

Introduction

Thank you for purchasing our mixing console. Please read this manual thoroughly to get the most out of the product and ensure long-term, trouble-free use. After reading this manual, please keep it available for future reference.

Connecting to power

1. Be sure that the mixer's power switch is off.
2. Connect the socket end of the power cord to the AC IN connector on the rear of the mixer



3. Plug the other end of the power cord into a standard household power outlet
Be sure to unplug the adaptor from the outlet when not using the mixer, or when there are lightning storms in the area.

4. Turning the power On/Off

Press the mixer's power switch to the ON position. When you are ready to turn the power off, press the power switch to the STANDBY position.

Note that trace current continues to flow while the switch is in the STANDBY position. If you do not plan to use the mixer again for a long while, please be sure

Digital Effect Program table list

NO	PROGRAM	NO	PROGRAM
1	REVB HALL	17	REVB HALL2
2	REVB ROOM	18	REVB ROOM2
3	REVB PLATE	19	REVB PLATE2
4	REVB VOCAL1	20	REVB VOCAL3
5	REVB VOCAL2	21	REVB VOCAL4
6	VOCAL ECHO1	22	VOCAL ECHO3
7	VOCAL ECHO2	23	VOCAL ECHO4
8	DELAY1	24	DELAY3
9	DELAY2	25	DELAY4
10	MOD. DELAY	26	EARLY REF
11	REVB GATE	27	GATE REVERB
12	PITCH CHANGE	28	VOCAL DOUBLER
13	CHORUS	29	FLANGE
14	PHASER	30	SYMPHONIC
15	FLANGE	31	DISTORTION
16	TREMOLO	32	TAP DELAY

Input channel block

MONO INPUT CHANNELS

1-8 (GM-18F)

MONO INPUT CHANNELS

9/10-11/12

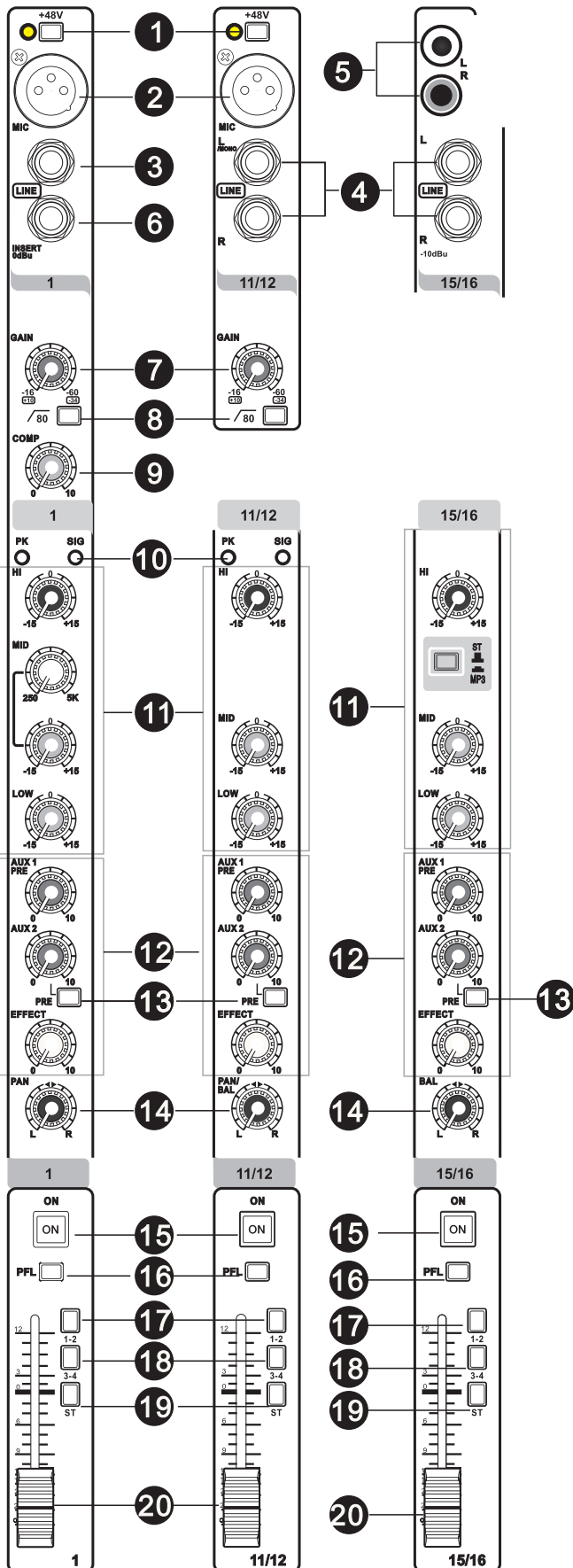
MONO INPUT CHANNELS

13/14-15/16

1-4 (GM-12F)

5/6-7/8

9/10-11/12



1. PHANTOM +48V Switch

Switch toggles phantom power on and off. When the switch is on the channel supplies +48V phantom power to all channels that have XLR mic input jacks. Turn the channel switches on when using one or more phantom-powered condenser microphones.

-Be sure to leave this switch off if you do not use phantom power.

-When turning the switch on, be sure that only condenser microphones are connected to the XLR input jacks. Devices other than condenser mics may be damaged if connected to the phantom power supply.

2. MIC Input jacks

These are balanced XLR-type microphone input jacks. (1: Ground; 2: Hot; 3: Cold)

3. LINE Input Jacks (monaural channels)

These are balanced TRS phone-jack line inputs. (T: Hot; R: Cold; S: Ground). You can connect either balanced or unbalanced phone plugs to these jacks.

4. LINE Input Jacks (stereo channels)

These are unbalanced phone-jack stereo line inputs.

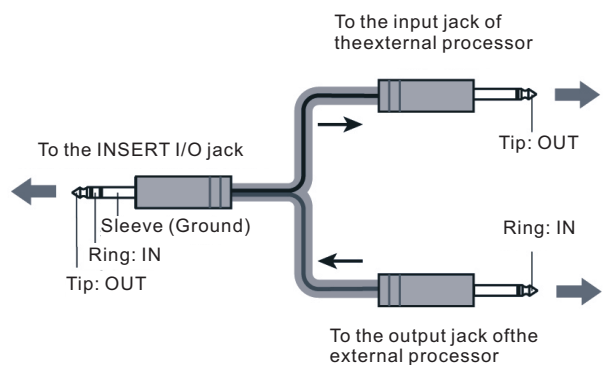
5. LINE Input Jacks (stereo channels)

These are unbalanced stereo RCA pin jacks.

NOTE: On channels that provide multiple input jack options only one type of jack can be used at a time.

6. INSERT Jacks

These jacks can be used to insert an external signal-processing device between the equalizer and fader of the corresponding monaural input channel. The INSERT jacks are ideal for connecting devices such as graphic equalizers, compressors, or noise filters into the corresponding channels.



The signal output from the INSERT jacks is reverse-phased. This should not be a problem when connecting to an effect unit, but please be aware of the possibility of phase conflict when connecting to other types of device. A reversed-phased signal may result in degraded sound quality or even complete sound cancellation.

7. GAIN Control

Adjusts the input signal level. To get the best balance between the S/N ratio and the dynamic range, adjust the gain so that the PEAK indicator lights only occasionally and briefly on the highest input transients. The -60 to -16 scale is the MIC input adjustment range. The -34 to +10 scale is the LINE input adjustment range.

8. $\sqrt{80}$ Switch (High-Pass Filter)

This switch toggles the HPF on or off. To turn the HPF on, press the switch in (■). The HPF cuts frequencies below 80 Hz (the HPF does not apply to the line inputs of stereo input channels ④).

9. COMP

Adjusts the amount of compression applied to the channel. As the knob is turned to the right the compression ratio increases while the output gain is automatically adjusted accordingly. The result is smoother, more even dynamics because louder signals are attenuated while the overall level is boosted.

10. [PEAK] indicators

The peak level of the post-EQ signal is detected, and the PEAK indicator lights red when the level reaches 3 dB below clipping. When signal input, SIG indicator light.

11. Equalizer([HIGH]/[MID]/[LOW])

The equalizer shapes the high, mid, and low audio frequencies. Turning the knob to the right amplifies (boosts) the corresponding frequency band, while turning it to the left attenuates (cuts) the band. Setting the knob to the middle “▼” position produces a flat response in the corresponding band. The upper knob sets the variable mid frequency, while the lower knob sets the amount of attenuation or boost (counter-clockwise/clockwise) for the range.

The following table shows the EQ type, frequency, and cut/boost range for each of the three bands.

Band	Type	Frequency	Cut/Boost range
HIGH	Shelving	10 kHz	±15 dB
MID	Peaking	2.5 kHz*	
LOW	Shelving	100 Hz	

*The monaural channel MID frequency can be adjusted from 250 Hz to 5 kHz. The MID frequency is 2.5 kHz when the MID frequency control is set at the center position.

12. AUX, EFFECT Control

Adjusts the level of the signal sent from the channel to the AUX and EFFECT buses. These knobs should generally be set close to the “▼” position. These controls send either the signal from immediately prior to the channel fader (pre-fader signal) or the signal after the channel fader (post-fader signal) to the corresponding buses. channel fader (post-fader signal) to the corresponding buses. The types of signals sent by the AUX and EFFECT controls on each mixer model are as follows:

GM-12F

AUX1: Pre or post fader (determined by the PRE switch)

AUX2/EFFECT: Post-fader

GM-18F

AUX1: Pre-fader

AUX2: Pre or post fader (determined by the PRE switch)

AUX3/Effect: Post-fader

13. AUX PRE Switch

Selects whether the pre-fader or the post-fader signal is fed to the AUX buses. If the switch is on (■), the mixer sends the pre-fader signal to the AUX buses, so that AUX outputs are not affected by the channel fader. If the switch is off (■) the mixer sends the post-fader signal to the AUX buses.

14. PAN Control PAN/BAL Control BAL Control

The PAN control determines the stereo positioning of the channel signal on the GROUP 1/2 and GROUP 3/4 buses or on the STEREO L/R bus. The BAL control knob sets the balance between left and right channels. Signals input to the L input (odd channel) go to the GROUP 1 or 3 buses or to the STEREO L bus; signals input to the R input (even channel) go to the GROUP 2 or 4 buses or the STEREO R bus.

NOTE: On channels where this knob provides both PAN and BAL control, the knob operates as a PAN control when input is received via the MIC jack or L (MONO) input only, and as a BAL control when input is received via both L and R inputs.

15. ON Switch

Turn this switch on to send the signal to the buses. The switch lights orange when on.

16. PFL (Pre-Fader Listen) Switch

This switch lets you monitor the channel's pre-fader signal. Press the switch in (■) so that it lights to turn it on. When the switch is on the channel pre-fader signal is output to the PHONES and MONITOR OUT jacks for monitoring.

17. 1-2 Switch

This switch assigns the channel's signal to the GROUP 1/2 bus.

NOTE: To send the signal to the GROUP 1/2 bus turn the ON switch on (■).

18. 3-4 Switch

This switch assigns the channel's signal to the GROUP 3/4 bus.

NOTE: To send the signal to the GROUP 3/4 bus turn the ON switch on (■).

19. ST Switch

This switch assigns the channel's signal to the STEREO L/R bus.

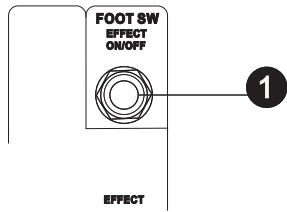
NOTE: To send the signal to the STEREO bus turn the ON switch on (■).

20. Channel Fader

Adjusts the level of the channel signal. Use these faders to adjust the balance between the various channels.

NOTE: Set the fader sliders for unused channels all the way down to minimize noise.

Digital effector & USB system



1.FOOT SWITCH

A foot switch (sold separately) can be connected to this jack and used to toggle the digital effects ON and OFF

Digital audio processing system

2.32 types of digital Fxs table list

Built-in the Fxs table list, please check the page of the table list.

3.LCD display.

Effect types & detail display, U-disk play list display, play order control, whole list automatic cycle, Bluetooth, Stereo output/ AUX out/Group output/PFL

4.USB and effects program control

Input the U-disk or USB cable to PC, can play multi-format audio file (such as: MP3/WAV/WMA/FLAC etc.)

Control Table

REC/Pause/Play	REC	Pause/Play	
Previous		MENU	MENU
Next		Program control	

NOTE:

* Short-press the MENU switch, enter the menu page, press it again to active the playlist, then scan and choose the whole list with program switch. & can choose the previous and next one directly.

* Long-press the MENU switch, enter or exit the bluetooth page

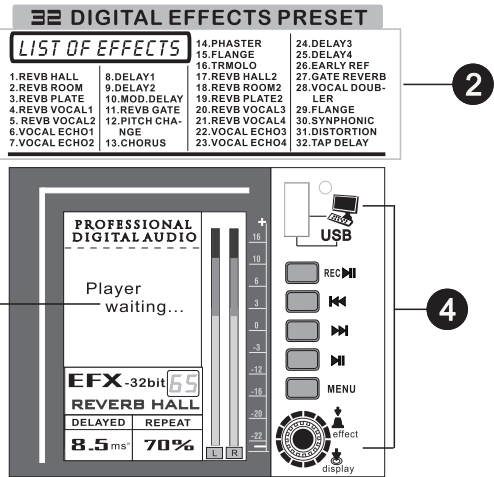
* Bluetooth name: LAX-MIX

Program control



* press the program switch to choose FX type/time/FX percentage.

* Rotate the switch to adjust FX type/time/ percentage



5.AUX Control

Adjusts the level of the signal sent from the internal digital effect unit to the AUX buses. EFF-AUX effect signal to AUX buses.

6.ON Switch

Switches the internal effect on or off. The internal effect is applied only if this switch is turned on. The switch lights orange when on.

NOTE: The ON switch lights and the internal effect unit is active when the power is initially turned on.

7.PFL Switch

Turn this switch on to send the effect signal to PFL bus.

8.GROUP 1-2

This switch assigns the effect signal to the GROUP1-2 bus.

9.GROUP 3-4 Switch

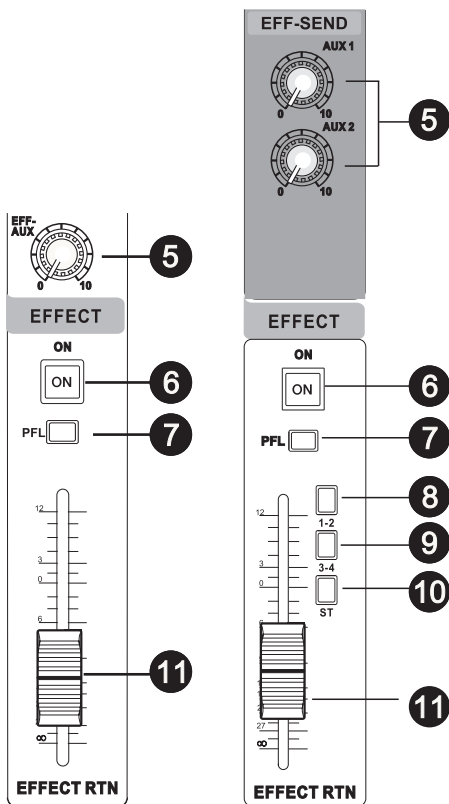
This switch assigns the effect signal to the GROUP3-4 bus.

10.GROUP 3-4 Switch

This switch assigns the effect signal to the STEREO L/R bus.

11.EFFECT RTN

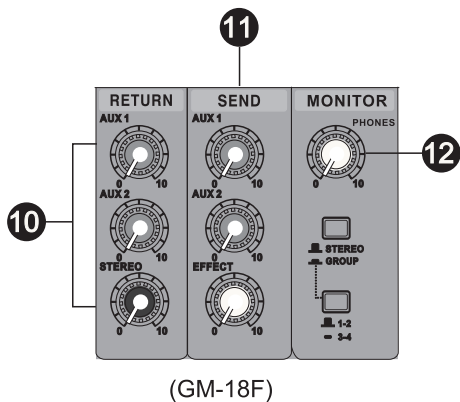
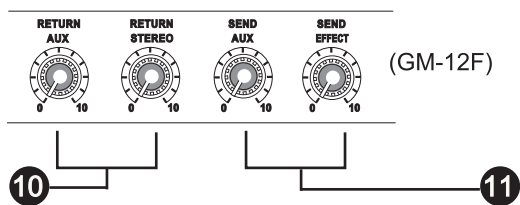
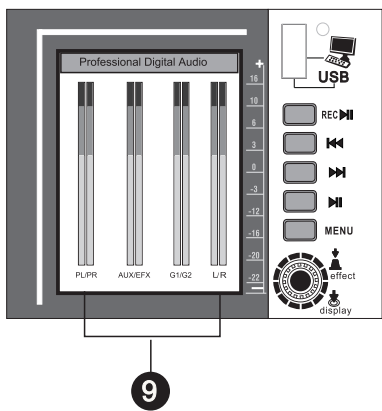
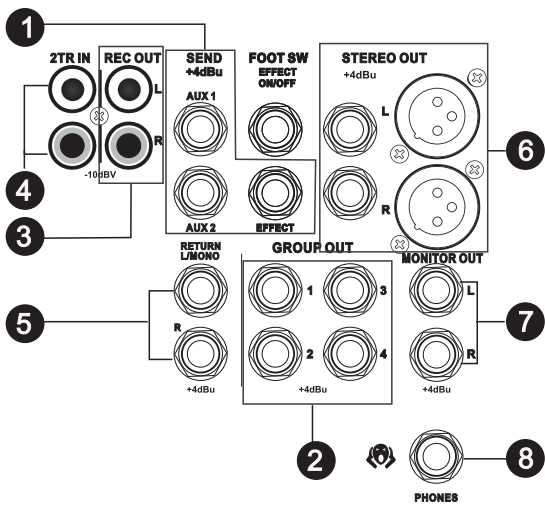
Adjusts the signal level sent from the internal digital effect unit to STEREO bus



(GM-12F)

(GM-18F)

Master control



1. SEND Jacks (AUX, EFFECT)

These impedance balanced* TRS phone jacks output the signals from the AUX/EFFECT buses. The pre-fader send option should be selected if you are connecting to a monitor system, while the post-fader send option is the best choice when connecting to external signal processors (e.g. effects units).

2. GROUP OUT(1-4) Jacks

These impedance- balanced* TRS phone jacks output the GROUP 1-2 and 3-4 signals. Use these jacks to connect to the input jacks of a multi-track recorder, external mixer, or other such device.

3. REC OUT (L, R) Jacks

These RCA pin jacks can be connected to an external recorder such as an MD recorder in order to record the same signal that is being output via the STEREO OUT jacks.

NOTE: The mixer's STEREO OUT Master fader has no affect on the signal output via these jacks. Be sure to make appropriate level adjustments at the recording device.

4.2TR IN Jacks

These RCA pin jacks input a stereo sound source. Use these jacks when you want to connect a CD player directly to the mixer.

5.RETURN L (MONO), R Jacks

These are unbalanced phone-jack type line inputs. The signal received by these jacks can be sent to the STEREO LR bus as well as the AUX1 and AUX2 buses. When a stereo signal is returned a mono mix of the signal is sent to the AUX1 and AUX2 buses. These jacks are typically used to receive the signal returned from an external etc. device(reverb, delay, etc.).

6.STEREO OUT(L,R) Jacks

These jacks deliver the mixer's stereo output. You use these jacks, for example, to connect to the power amplifier driving your main speakers. You can also connect these jacks to a recording device when you wish to record mixer's stereo output while using the STEREO OUT Master fader for level control.

- .XLR jacks
- XLR-type balanced output jacks.
- .LINE jacks
- TRS phone-type balanced output jacks.

7.STEREO OUT(L,R) Jacks

These are impedance- balanced* TRS phone- type output jacks.

NOTE:

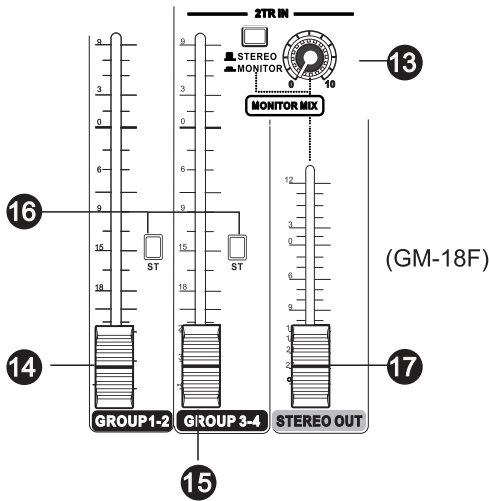
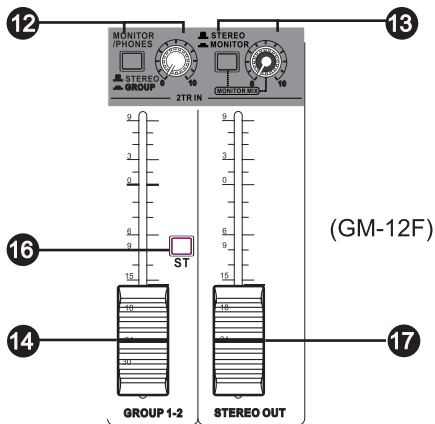
The signal output by these jacks is determined by the MONITOR switch, the 2TR IN USB switch, and the PFL switches on the input channels.

8.PHONES Jack

Connect a pair of headphones to this TRS phone-type output jack. The PHONES jack outputs the same signal as the MONITOR OUT jacks.

9.Output signal level display

- PL/PR Signal monitor
- AUX/EFX/EFX signal monitor
- G1/G2 signal level monitor
- L/R signal level monitor



10.RETURN

.AUX1,AUX2 Control

Adjusts the level at which the LR signal received at the RETURN jacks (L (MONO) and R) is sent to the AUX1 and AUX2 buses.

.STEREO Control

Adjusts the level at which the signal received at the RETURN jacks (L (MONO) and R) is sent to the STEREO L/R bus.

NOTE: If you supply a signal to the RETURN L (MONO)jack only, the mixer sends the same signal to both the L and R STEREO buses.

11.MASTER SEND

Adjusts the signal level sent to the SEND (AUX, EFFECT)jacks.

NOTE:If you are using the Master SEND control (EFFECT) does not affect the level of the signal sent from the EFFECT bus to the internal digital effect processor.

12. MONITOR /PHONES

.MONITOR switches

These switches select the signal sent to the MONITOR OUT jacks, PHONES jack and the level meter from STEREO L R bus, GROUP1-2 bus or GROUP 3-4 bus.

STEREO LR bus: STEREO()

GROUP1-2bus:GROUP(), 1-2()

GROUP 3-4 bus: GROUP(), 3-4()

.2TR IN/USB Control

Adjusts the level of the signal sent from the 2TR IN jack sand the USB connector.

13.TR IN

.2TR IN Switch

If this switch is set to TO MONITOR (), the signals input via the 2TR IN jacks are sent to the MONITOR OUT jacks, the PHONES jack, and the level meter. If it is set to TO STEREO(), the signals are sent to the STEREO L/R bus.

.2TR IN Control

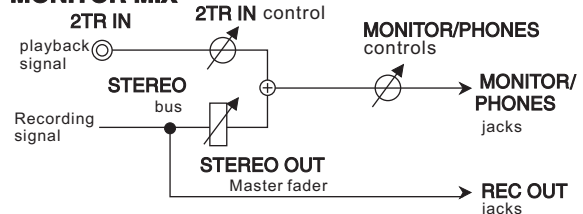
Adjusts the level of the signal sent from the 2TR IN jacks .

The following illustration shows how the switch settings cor-respond to the signal selection.

SWITCHES			Signals output via the MONITOR/PHONES jacks
PFL	MONITOR/PHONES	2TR IN	
ON <input checked="" type="checkbox"/>	—	—	PFL
OFF <input checked="" type="checkbox"/>	STEREO <input checked="" type="checkbox"/>	TO STEREO <input checked="" type="checkbox"/>	STEREO (+ 2TR IN)
		TO MONITOR <input checked="" type="checkbox"/>	STEREO + 2TR IN MONITOR MIX *
	GROUP <input checked="" type="checkbox"/>	TO STEREO <input checked="" type="checkbox"/>	GROUP
		TO MONITOR <input checked="" type="checkbox"/>	GROUP 1-2 (+ 2TR IN)

MONITOR MIX: When overdubbing, you can adjust the levels of the monitor playback signal and the signal being recorded separately.

MONITOR MIX



NOTE: If the input channel PFL switch is on(), then only he PFL output from that channel is sent to the MON-ITOR OUT jacks, PHONES jack, and level meter.

14.Group 1-2 Fader

Adjusts the signal level sent to the GROUP OUT 1-2 jacks.

15.Group 3-4 Fader

Adjusts the signal level sent to the GROUP OUT 3-4 jacks.

16.ST Switch

If this switch is on, the signals are sent to the STEREO L R bus via the GROUP 1-2 fader or GROUP 3-4 fader. The GROUP 1 and 3 signals go to STEREO L and the GROUP 2 and 4 signals go to STEREO R.

17.STEREO OUT Master Fader

Adjusts the signal level sent to the STEREO OUT jacks.

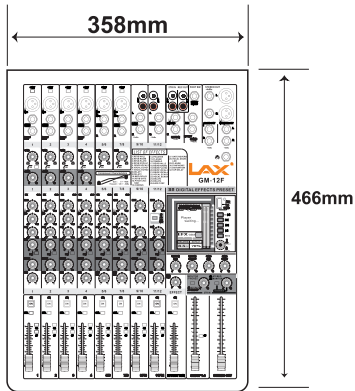
General Specifications

		GM-12F	GM-18F
Input channels	Mono: MIC/LINE	4	8
	Mono/Stereo: MIC/LINE	2	2
	Stereo: LINE	2	2
Output channels	STEREO OUT	2	2
	MONITOR OUT	1	1
	PHONES	1	1
	AUX SEND	2	3
	GROUP OUT	2	4
Bus	STEREO	1	1
	GROUP	2	4
	AUX	2	3
Input Channel Function	PAD	26dB	
	HPF	80 Hz, 12 dB/oct (Mono/Stereo: MIC only)	
	COMP	1 knob compressor (Gain/Threshold/Ratio) Threshold: +22 dBu to -8 dBu, Ratio: 1:1 to 4:1, Output level: 0 dB to 7 dB Attack time: approx. 25 msec, Release time: approx. 300 msec	
	EQ	HIGH: Gain: +15 dB/-15 dB, Frequency: 10 kHz shelving	
		MID: Gain: +15 dB/-15 dB Frequency: 2.5 kHz peaking	MID: Gain: +15 dB/-15 dB Frequency: Mono 250 Hz – 5 kHz peaking Stereo 2.5 kHz peaking
		LOW: Gain: +15 dB/-15 dB, Frequency: 100 Hz shelving	
PEAK LED	LCD display turns on when post EQ signal reaches 3 dB below clipping level		
Level Meter	GROUP	2 × 16 -segment LCD meter [PEAK, +10, 0, -3, -15, -35 dB]	
	MASTER	2 × 16 -segment LCD meter [PEAK, +10, 0, -3, -15, -35 dB]	
	MONITOR OUT	2 × 16 -segment LCD meter [PEAK, +10, 0, -3, -15, -35 dB]	
Built-in Effect	Dsp 32 types of effects		
Phantom Power Voltage	48V		
USB Audio/BT/Soundcard	2in/2out		
Dimensions (W × H × D) & N.W	47.5*36*11.8cm N.W:5.62kg	50.8*44*11.8cm N.W: 7.6kg	
Power Requirements	AC100-240V, 50/60Hz		
Power Consumption	30W	33W	
Included Accessory	Owner's Manual, Technical Specifications, Rack-mount Kit, power cable, USB cable		
Operating Temperature	0-40°C		

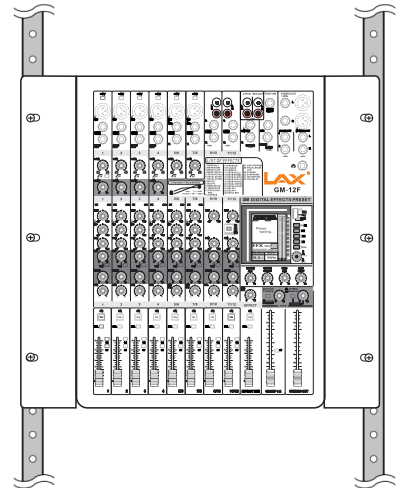
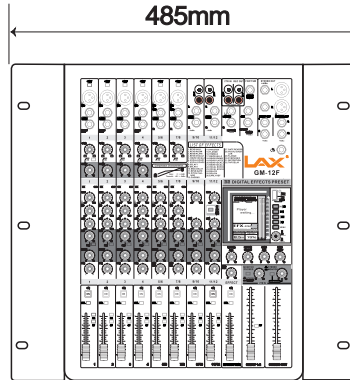
0 dBu = 0.775 Vrms, Output impedance of signal generator (Rs) = 150 Ω
All level controls are nominal if not specified.

Dimensional Diagrams

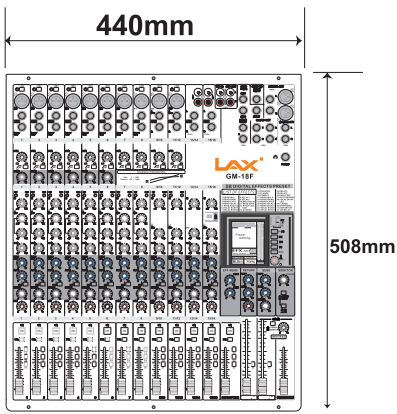
GM-12F Size



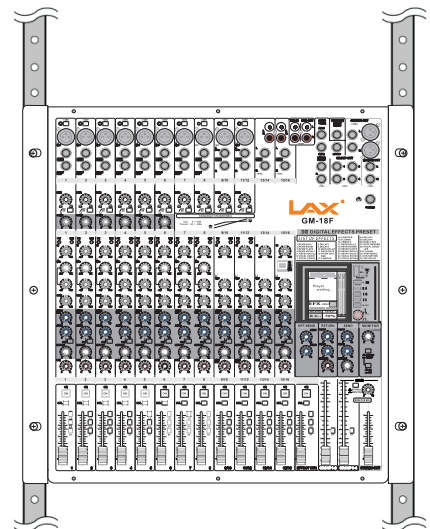
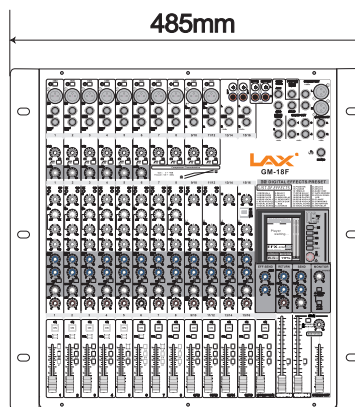
Rack mounting size



GM-18F Size

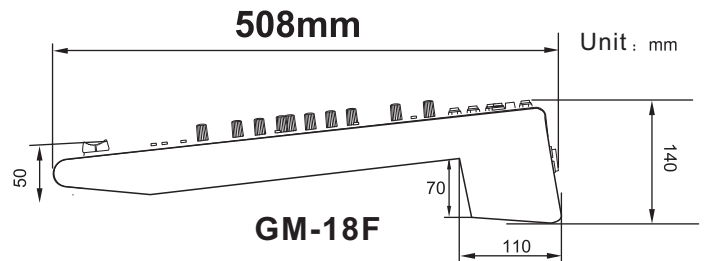
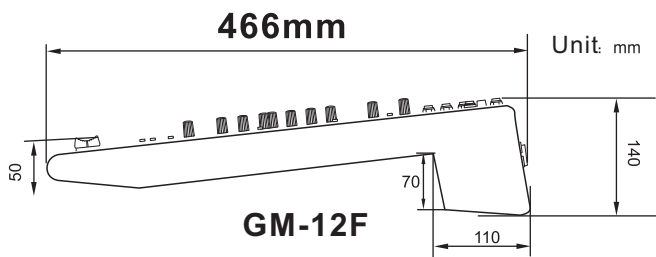


Rack mounting size



■ Rack Mounting

Note: If the mixer is to be mounted with device that tend to generate heat, such as power amplifiers, be sure to install ventilation panels to prevent high temperatures from developing inside the mixer



LAX SOUNDS, THE WORLD LISTENS



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