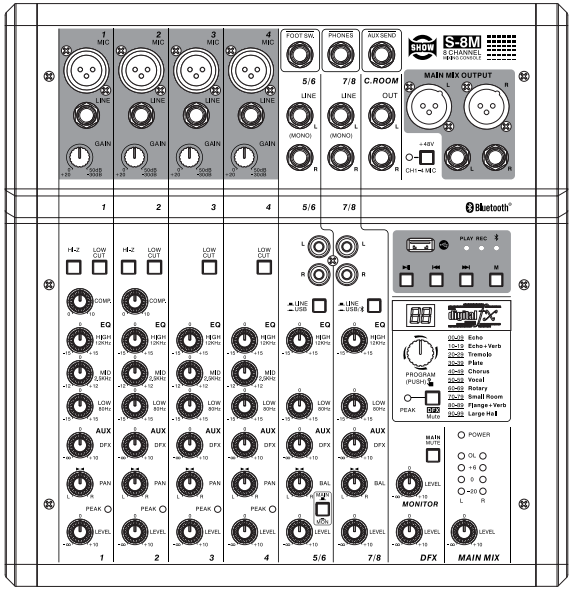
THE UNIVERSE OF INSTALLATION

User's Manual



S-8M

NF05989-1.0

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FCC Part 15 Statement

NOTE: This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the Federal Communications Commission (FCC) rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not
installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

Changes or modifications to this equipment not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

This device complies with Part 15 of the FCC rules. Operation is subject to the following two conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation. Privacy of communications may not be ensured when using this device.

TECHNICAL SPECIFICATIONS

MODEL	**S-8M**	
Mono channels		
Microphone input	XLR with balanced	
Frequency response	22Hz ~ 22KHz, ±2dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Gain range	0dB to 50dB	
Max Input	+20 dB	
LOW CUT	120Hz	
SNR	>108dB A-weighted	
Phantom power	+48V with switch control	
Line input	1/4" TRS with balanced	
Frequency response	22Hz ~ 22KHz, ±2dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Sensitivity range	+20dB~ -30dB	
COMPRESSOR	GAIN:0~9dB	
	THRESHOLD:20dB--->5dB	
Stereo input channels		
Mic input	XLR with balanced	
Line input	1/4' TRS with balanced	
Frequency response	22Hz ~ 22KHz, ±2dB	
Distortion(THD+N)	<0.03% at +0dB ,22Hz~22KHz A-weighted	
Sensitivity range	+20dBu~ -30dBu	
SNR	>108dB A-weighted	
Channels EQ		
	Mono Channel	Stereo Channel
High	+/-15dB @12KHz	+/-15dB @12KHz
Mid	+/-15dB @2.5KHz	
Low	+/-15dB @80Hz	+/-15dB @80Hz
Impedances		
Microphone input	1.8K Ω	
All other input	10K Ω or greater	
All other output	120 Ω	
DSP section (options)		
A/D and D/A converters	24bit	
Controls	100 position preset selector(10 preseter * 10 variation)	
	Mute switch & Foot-switching with LED indicator	
FOOT-SW	TIP: FX	SLEEV: GND
Frequency range	Bluetooth: 2402-2480MHz	
Maximum EIRP	Bluetooth: 4.24 dBm	
Main mix section		
Max. MAIN MIX output	+20dBu XLR balanced (+14dBu un-balanced)	
AUX range	OFF to +10dB	
Fader range	OFF to +10dB	
PHONES/CONTROL-ROOM range	OFF to +10dB	
Hum & Noise	<-88dB @ 20Hz~22KHz A-weighted, 1 channel & MAIN level:0dB, the other: Minimum	
Crosstalk	<-80dB @0dB 20Hz~22KHz A-weighted, MAIN level:0dB, the other: minimum	
Power supply		
Adapter	15V ⎓ 800mA	

SAFETY RELATED SYMBOLS

The symbol is used to indicate that some hazardous live terminals are involved within this apparatus, even under the normal operating conditions.

The symbol is used in the service documentation to indicate that specific component shall be only replaced by the component specified in that Documentation for safety reasons.

⏚ Protective grounding terminal.

~ Alternating current /voltage.

Hazardous live terminal .

ON: Denotes the apparatus turns on.

OFF: Denotes the apparatus turns off, because of using the single pole switch, be sure to unplug the AC power to prevent any electric shock before you proceed your service.

WARNING: Describes precautions that should be observed to prevent the danger of injury or death to the user.

Disposing of this product should not be placed in municipal waste and should be separate collection.

CAUTION: Describes precautions that should be observed to prevent danger of the apparatus.

WARNING

- **Power Supply**

Ensure the source voltage matches the voltage of the power supply before turning ON the apparatus.

Unplug this apparatus during lightning storms or when unused for long periods of time.

- **External Connection**

The external wiring connected to the output hazardous live terminals requires installation by an instructed person, or the use of ready-made leads or cords.

- **Do not Remove any Cover**

There are maybe some areas with high voltages inside, to reduce the risk of electric shock, do not remove any cover if the power supply is connected.

The cover should be removed by the qualified personnel only.

No user serviceable parts inside.

- **Fuse**

To prevent a fire, make sure to use fuses with specified standard (current, voltage, type). Do not use a different fuse or short circuit the fuse holder.

Before replacing the fuse, turn OFF the apparatus and disconnected the power source.

- **Protective Grounding**

Make sure to connect the protective grounding to prevent any electric shock before turning ON the apparatus.

Never cut off the internal or external protective grounding wire or disconnect the wiring of protective grounding terminal.

- **Operating Conditions**

This apparatus shall not be exposed to dripping or splashing and that no objects filled with liquids, such as vases, shall be placed on this apparatus.

To reduce the risk of fire or electric shock, do not expose this apparatus to rain or moisture.

Do not use this apparatus near water. Install in accordance with the manufacture-r's instructions. Do not install near any heat sources such as radiators, heat registers, stoves, or other apparatus (including amplifiers) that produce heat. Do not block any ventilation openings.

No naked flame sources, such as lighted candles, should be placed on the apparatus.

IMPORTANT SAFETY INSTRUCTIONS

- Read these instructions.
- Follow all instructions.
- Keep these instructions.
- Heed all warnings.
- Only use attachments/accessories specified by the manufacturer.

- **Power Cord and Plug**

Do not defeat the safety purpose of the polarized or grounding type plug.

A polarized plug has two blades with one wider than the other. A grounding type plug has two blades and a third grounding prong. The wide blade or the third prong are provided for your safety. If the provided plug does not fit into your outlet, consult an electrician for replacement of the obsolete outlet.

Protect the power cord from being walked on or pinched particularly at plugs, convenience receptacles, and the point where they exit from the apparatus.

- **Cleaning**

When the apparatus needs a cleaning, you can blow off dust from the apparatus with a blower or clean with rag etc.

Don't use solvents such as benzol, alcohol, or other fluids with very strong volatility and flammability for cleaning the apparatus body. Clean only with dry cloth.

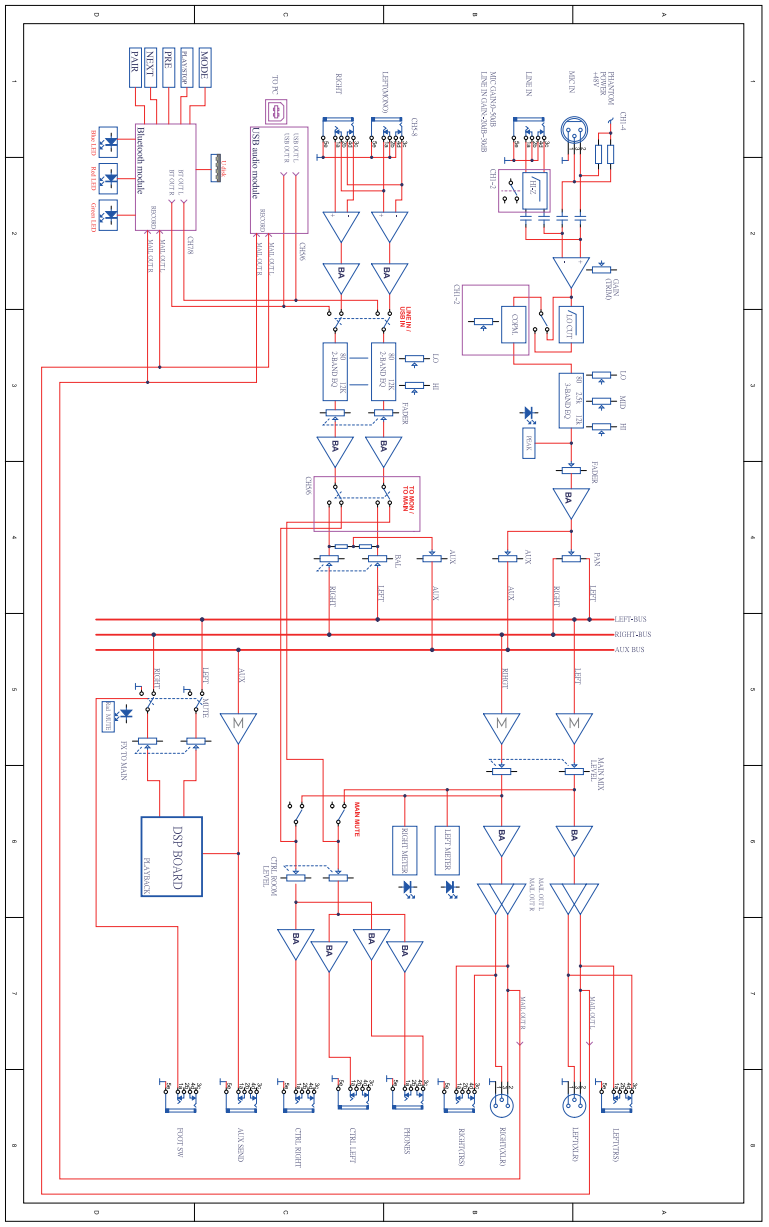
- **Servicing**

Refer all servicing to qualified personnel. To reduce the risk of electric shock, do not perform any servicing other than that contained in the operating instructions unless you are qualified to do so .

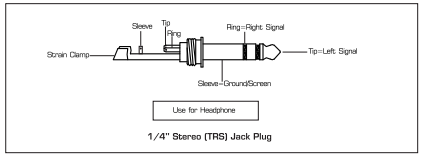
Servicing is required when the apparatus has been damaged in any way , such as power supply cord or plug is damaged , liquid has been spilled or objects have fallen into the apparatus, the apparatus has been exposed to rain or moisture , does not operate normally, or has been dropped.

The mains plug is used as the disconnect device, the disconnect device shall remain readily operable.

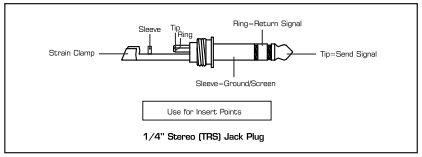
BLOCK DIAGRAM



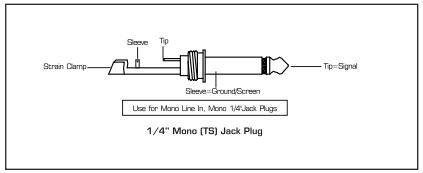
INSTALLATION AND CONNECTION



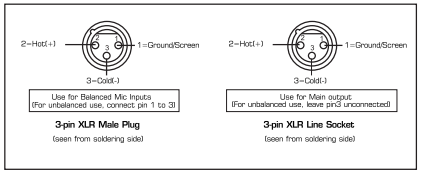
1/4" Stereo (TRS) Jack Plug



1/4" Stereo (TRS) Jack Plug

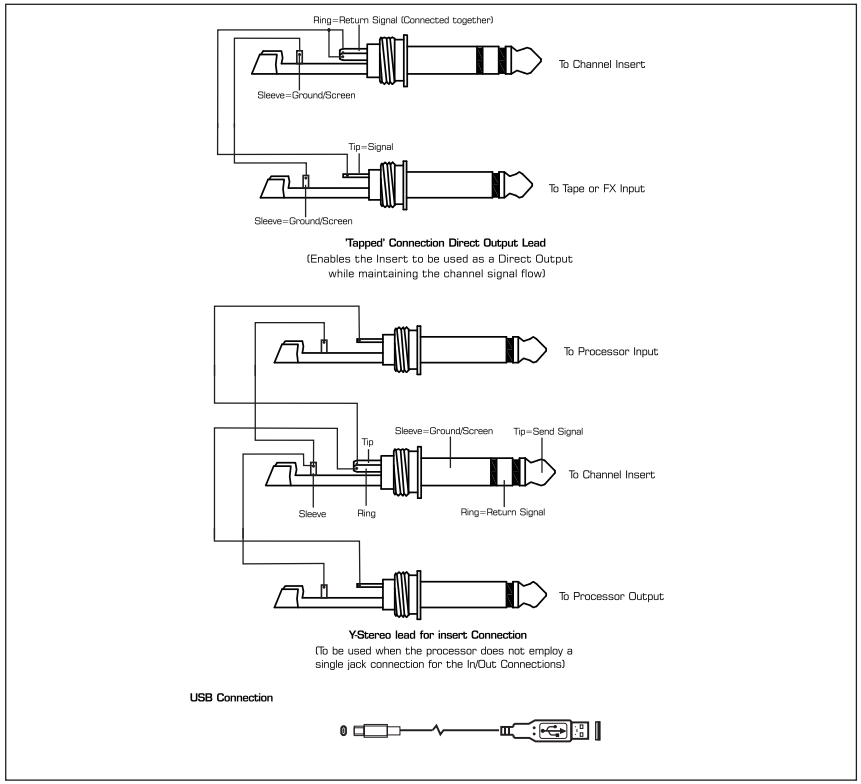


1/4" Mono (TS) Jack Plug



3-pin XLR Male Plug
(seen from soldering side)

3-pin XLR Line Socket
(seen from soldering side)



'Tapped' Connection Direct Output Lead
(Enables the Insert to be used as a Direct Output
while maintaining the channel signal flow)

Y-Stereo lead for insert Connection
(To be used when the processor does not employ a
single jack connection for the In/Out Connections)

USB Connection

INTRODUCTION

Thank you choosing to purchase S-8M.As a professional compact mixer, it can bring you great quality and better reliability than ever before. It easy for you to get smooth,accurate, natural and open sound by using it and regarded as an ideal apparatus for gigs, recording and fixed PA installations.

This unit is very easy to operate but we advise you to go through each section of this manual carefully. In this way you will get the best out of your Mixing Console.

FEATURES

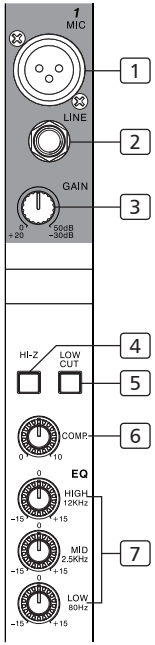
- 4 mono inputs with gold plated XLR and Balanced TRS jack.
- 4 stereo inputs with Balanced TRS jack.
- GAIN control and +48V phantom power for mono inputs .
- 3-band EQ on all mono channels and 2-band EQ on stereo channels plus 120Hz low cut filter on all mono channels.
- 1 POST-fader AUX send for effect sends.
- Peak LED in mono channel.
- Built-in stereo USB Audio interface.
- Built-in effects processor.
- Built-in Bluetooth V5.3 player
- Support U disk player/recorder

CONTROL ELEMENTS

1. MIC INPUT JACKS
These are balanced XLR-type microphone input jacks.

2. LINE INPUT JACKS
These are balanced TRS phone-jack line inputs.
You can connect either balanced or unbalanced phone plugs to these jacks.

3. GAIN CONTROL
Adjusts the input signal level. To achieve the best balance between S / N and dynamic range, adjust the level so that the peak LED indicator lights occasionally only on the highest input transients. For each channel the MIC input adjustment range of the Gain is 0 to 50dB and the sensitivity of line input is +20 to -30dB.



4. HI-Z
To change to a high impedance input, push the appropriate HI-Z switch.

5. LOW CUT
By pressing this button you will activate a 120Hz low frequency filter with a slope of 18dB per octave. You can use this facility to reduce the hum noise infected by the mains power supply, or the stage rumble while using a microphone.

6. COMP CONTROL
Adjust the amount of compression applied to the channel. Turn the knob to the right to increase the compression ration and the output gain will automatically adjusted. The result is smoother, more even dynamics because louder signals are attenuated which the overall level is boosted.

7. EQUALISER CONTROLS
There are 3-band EQ on all mono input channel HI, MID and LOW band. There are 2-band EQ on the stereo channel HI, LOW band. All bands provide up to 15 dB of boost or cut.

-- HIGH
If you turn this control up, you will boost all the frequencies above 12 kHz (shelving filter). You will add transparency to vocals and guitar and also make cymbals crispier. Turn the control down to cut all frequencies above 12 kHz In such way, you can reduce sibilances of human voice or reduce the hiss of a Tape player.

-- MID
This control gives you from -15dB to +15dB boost or cut at 2.5KHz. It is useful for controlling voice. It can accurately polish your performance via adjusting this knob.

PRESET LIST

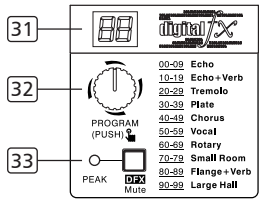
No.	Preset	Description	Parameter
00~09	Echo	Echo/Delay effect	Delay time: 145~205ms
10~19	Echo+Verb	Echo & Reverb combination	Delay time: 208~650ms Decay time: 1.7~2.7s
20~29	Tremolo+GTR	Guitar Effect: Tremolo	Rate : 0.6Hz~5Hz
30~39	Plate	Simulate classic bright vocal plate	Decay time: 0.9s~3.6s
40~49	Chorus+GTR	Guitar Effect: Chorus	Rate:0.92Hz~1.72Hz
50~59	Vocal	Simulate a small space with slight	Rev.delay time: 0.8~0.9s Pre-delay: 10~45ms
60~69	Rotary+GTR	Guitar Effect: Rotary	Modulation depth: 20%~80%
70~79	Small Room	Simulate a bright studio room	Decay time: 0.7~2.1s Pre-delay: 20~45ms
80~89	Flanger+Verb	Flanger effect & Reverb combination	Decay time: 1.5~2.9ms Rate: 0.8Hz~2.52Hz
90~99	Large Hall	Simulate a large acoustic space	Decay time: 3.6~5.4s Pre-delay: 23~55ms

d). "⏯" button
Press the button to play or stop the playback/recording of current music audio.

e)." ⏮ ⏭ "button
Shortly press the each of two buttons to play previous or next songs. Or press and hold the each of two buttons for about 3 seconds to decrease or increase current volume.

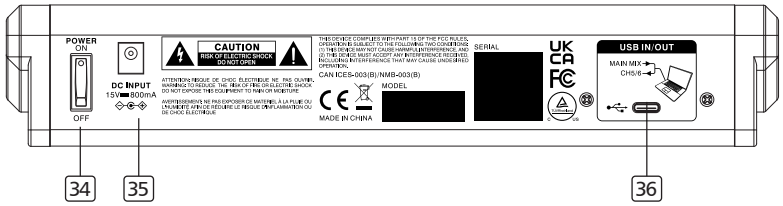
f). "M" button
Press the button to switch to play/REC /BT as current mode, Switched to the "play" mode with corresponding solid green will light on. Switched to the "REC" mode with corresponding solid red will light on. Switched to the "BT" mode with corresponding solid blue will light on.

31. DIGITAL EFFECTS
It displays the selected presets.



32. PROGRAM(PUSH)
Adjust this knob to select the right effect you wish to perform. There are totally 100 options for you: Echo, Tremolo, Plate, Chorus, Vocal, Rotary, Large Hall and versatile two-effect combination.
When you are satisfied the right preset, please push this knob to store this preset you want.

33. DFX/MUTE
Disables the internal effects processor; in this case the red "PEAK" LED will be lit permanently.



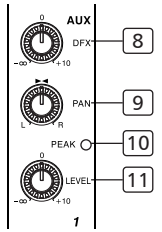
34. POWER SWITCH
This switch is used to turn the main power on or off.

35. DC Input
Connect the supplied power adapter here. WARNING: Do not use any other kind of power adapter as alternatives. Doing so can cause severe damage to the mixer and will void your warranty.

36. USB PORT
This USB port is used to connect the unit to PC with a transmission line. When it is in RECORD mode, it can connect with the MAIN MIX output; in the PLAYBACK mode, it can connect with the stereo channel 5/6.

-- LOW
If you turn this control up, you will boost all frequencies below 80 Hz. You will give more punch to bass drum and bass guitar and make the vocalist more "macho". Turn it down, you will cut all the frequencies below 80 Hz. In this way, you can avoid low frequency vibrations and resonance thus preserving the life of your woofers.

8. AUX SEND CONTROLS
This controls is used to adjust the level of the respective signal sent to AUX bus and the adjustable range is from -∞ to +10 dB .

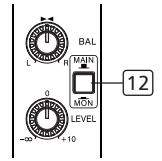


9. PAN / BAL CONTROL
The PAN control determines the stereo positioning of the channel signal on the stereo L and R buses.The BAL control knob sets the balance between left and right channels. Signal input through the stereo L/R bus.

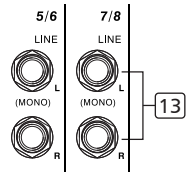
10. PEAK LED
When this LED blinks, it warns you that you are reaching signal saturation and possible distortion. From this LED you can adjust the correct level, not too strong to cause distortion and not too weak to be lost in noise.

11. LEVEL
This control will adjust the overall level of this channel. If you set the LEVEL control in max, it's usually a sign that your GAIN is too low. If set the LEVEL control in min, your GAIN may be too high.

12. SIGNAL ASSIGN
Through this button, the CH5/6 channel signal can be assigned to the MAIN or MONITOR channel.

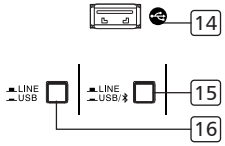


13. LINE INPUT JACKS
There are two groups of input jacks arranged on the front panel.They are organized in stereo pair and provided with 1/4" TRS sockets. It is used to connect the stereo device, plug both the left input and the right input. Using the left input if connect a mono input signal to the stereo channel, the output signal will appear on both sides.



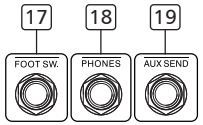
14. USB PORT
For connecting with USB memory.

15. LINE/Media Player
When the button sinks by pressing it,it will switch to the USB player mode, then the singal of USB PLAYER module sent to this channel. When the button rises by pressing it again, it will switch to the LINE mode, then the signal of LINE IN will be sent to this channel.



16. LINE/USB (PC)
When the button sinks by pressing it,it will switch to the USB mode, then the USB singal can be sent to this channel. When the button rises by pressing it again, the LINE IN input singal will be sent to this channel.

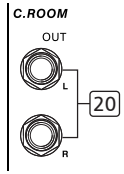
17. FOOT SW.
This socket is used to connect external footswitch for your convenient operation, it has the same function as DFX MUTE button.



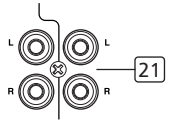
18. PHONES
This socket will be used to send out the mix signal to a pair of headphones.

19. AUX SENDS
This 1/4" phone sockets is used to send out the signal from the AUX bus to external devices such as effects.

20. CTRL-ROOM
These 1/4" phone sockets will be used to send the signal to studio monitor speakers or to a second set of PA.



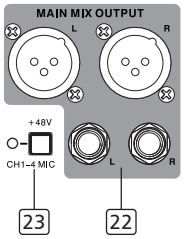
21. RCA INPUT JACKS
They are organized in stereo pair and provided with RCA sockets. It is used to connect the stereo device, plug both the left input and the right input.



22. MAIN MIX OUTPUT
These stereo outputs are supplied with both the XLR and 1/4" phone jacks and it is controlled by the Main Mix Level.

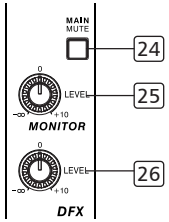
23. +48 Volt Phantom
It is available only to the XLR MIC sockets. Never plug in a microphone when phantom power is already on. Before turning phantom power on, make sure that all faders are totally down. In this way, you will protect your stage monitors and main loudspeakers.

24. Main Mute
The button can be used to mute the main signal of monitor, so that user can monitor the signal of CH5/6 channel only.



25. MONITOR LEVEL
This control is used to adjust the signal present at the monitor output, which can be varied from -∞ to +10 dB.

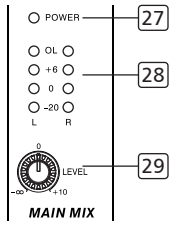
26. DFX LEVEL
This control is used to assign the signal from FX to L-R.



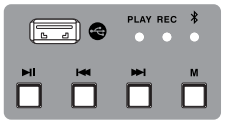
27. POWER LED
This LED indicates when your mixer is powered.

28. OUTPUT LEVEL
This stereo 4 segments LED meter will indicate the level of overall output signal.

29. MAIN MIX LEVEL
This fader is used to set the amount of signal sent to the main mix output.



30. BT FUNCTION
a). USB port
*Insert your U-disk into the port and then switch to the "play mode" or "REC mode" by pressing the “M” button, If under the "play mode"with solid green lighting, the music memorized in your U-disk will play. Selecting "USB/BT" mode for 7/8 channel and then it can connect to 7/8 stereo channel and the MAIN MIX output.



*Pressing the "M" button to choose the "REC mode" with corresponding solid red lighting, then press the"⏯" button with the red flashing, the audio from the main mix output will be recorded in your U-disk.

b). Bluetooth connection
*Press the M button to choose the "BT mode" with solid blue lighting. it will connect with your cell-phone with the name "S-BT" automatically. Then press the " ⏯ " button to play the music memorized in your phone.Selecting "USB/BT" mode for 7/8 channel and then It can connect with 7/8 stereo input channel and the MAIN MIX output.
*Each time when the unit powers on, it will search and connect with the latest BT device used automatically. The blue will keep flashing quickly during searching and the solid blue lights up once sucessful connection. It will stop searching if none BT device found within 60 seconds. Then please hold and press the " ⏯ " button for 3 seconds to restart searching BT device.

c). LED Indicator
-- The Green LED
If it enters the "Play mode" or the U-disk found and waiting for playing, the solid blue will light up and it will flash slowly (each every 1 second) if playing the audio files of U-disk.
-- The Red LED
If it enters the "REC" mode or the U-disk found and waiting for recording, the solid red will light up and it will flash slowly (each every 1 second) when playing the audio files in U-disk.
-- The Blue LED
If it enters the "BT"mode and under searching the BT devices, The blue will quickly flash(each every 0.5 second); If the BT sucessful connection but waiting for playback,the solid blue will light up; If the audio files is playing via BT, the blue will slowly flash(each every 1 second).