

User Manual



Mixer TCI-12MX

1. SAFETY FIRST!

1.1. Safety first

CAUTION: to reduce the risk of electric shock, do not remove bottom cover. No user-serviceable parts inside. refer servicing to qualified personnel

WARNING: to reduce risk of fire or electric shock, do not expose this appliance to rain or moisture.

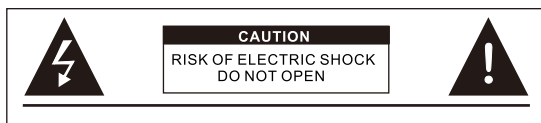
WATER AND ELECTRICITY DO NOT MIX, Keep this unit away from water. If water or other liquids are spilled on or into this unit, unplug the power cord immediately from the wall socket (with DRY HANDS) and get a qualified service technician to check it out before using.

Disconnect the equipment during storms to prevent damage.

Keep this unit away from heaters, radiators and other heat-producing devices.

There are no user serviceable parts inside the unit. Do not attempt to service this unit, Only a qualified service technician should open this unit for servicing. refer all servicing to qualified personnel. Opening the chassis for any reason will void the manufacturer's warranty.

1.2. The symbol



The lighting fash with arrowhead symbol, within an equilateral triangle, is intended to alert the user to the presence of uninsulated dangerous voltage within the product's enclosure that may be of sufficient magnitude to constitute a risk of electric shock.



The exclamation point within an equilateral triangle is intended to alert the user to the presence of important operating and maintenance (servicing) instructions in the literature accompanying the appliance.

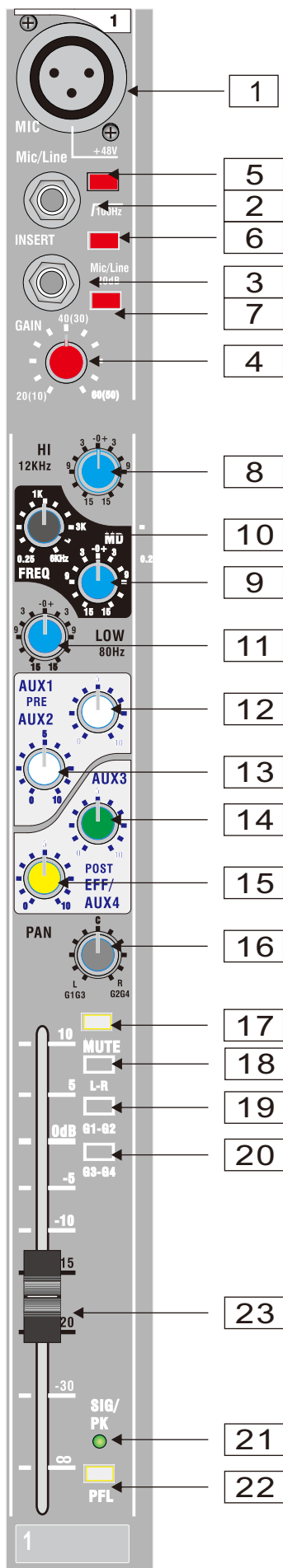
CAUTION: to reduce the risk of electric shock, do not remove cover (or back) no user-servicing to qualified service personnel.

1.3. Keep it clean

Dust, dirt and debris can interfere with the performance of this product. Make a special effort to keep this unit away from dusty, dirty environments. Cover the unit when it is not in use. Dust it regularly with a soft, clean brush. Careful attention to these details will be time well spent and this product will reward you with years of trouble-free operation.

2. 2 FUNCTIONS

- 1) Multiple input and output modes;
- 2) Single channel input with independent 48V power switch;
- 3) Each channel of single channel input has 100Hz low switching function
- 4) Single channel input with pad attenuation button (can attenuate signal 20dB)
- 5) Single channel input with XLR and 6.35 for each channel;
- 6) Each channel of single channel is provided with breakpoint function (i.e. insert function), which is convenient for single channel external equipment;
- 7) Single channel input, high, middle and low 3-segment equalization, intermediate frequency sweep frequency, stereo high-low two-stage equalization;
- 8) AUX1 and aux2 are the signals before pushing, aux3 and aux4 are the signals behind the leg, aux4 and the effect transmitting knob are shared;
- 9) Each channel is equipped with left and right audio-visual knobs, and each channel is equipped with mute switch. The combination of mute indicator light and exclusive transparent key makes the indication more intuitive;
- Each input circuit is equipped with main output main switch, group g1g2 switch and group g3g4 switch, which is more convenient to select and can combine multiple modes;
- 10) Each channel with signal indicator and peak indicator, one LED with two functions, unique two-color indicator design;
- 11) Each channel of input channel is equipped with PFL monitoring button. PFL key is transparent and built-in LED indicator light, which is intuitive and compact;
- 12) The first group of stereo input has 6.35 and RCA (Lotus) interfaces, and has a switching switch, which makes wiring and operation more flexible;
- 13) The second group of stereo input and USB play module share, with switch, flexible operation;
- 14) The USB player module supports wav and other audio formats, and can display song names and lyrics; the playback module has Bluetooth function and USB recording function; it can also customize the open FM function according to the special requirements of customers;
- 15) It has the function of USB sound card, which can be directly connected with other devices (such as computer) through USB cable. It can realize the input and output transmission of digital audio signal, and carry out recording and live broadcast;
- 16) Built in DSP digital effect device, 32 kinds of effects can be selected, which can be used in different places. Separate LCD display screen, real-time display effect types, and Bluetooth play module form dual screen display;
- 17) 4-channel auxiliary output, each channel with AFL pusher monitoring switch, signal monitoring is more convenient;
- 18) The real output of four groups is a balanced Canon interface. Each marshalling is equipped with PFL monitoring switch. The transparent button and indicator light are used together to observe the signal before pushing in real time;
- 19) The signals of each group can be added to the left of main output or main output with independent selection switch;
- 20) The output signal is controlled by a double connected 100 mm pusher, so the operation is more convenient;
- 21) it has RCA (Lotus) recording input and output interface. The recording input is switched by the selection switch whether the signal is added to the main output, and the recording output signal is synchronized with the main output;
- 22) two groups of stereo return input, and the return volume is controlled by the knob. The first group of return can be added to group 1, 2 or main output, and the second group can be added to group 3.4 or main output;
- 23) stereo monitoring output can be monitored by earphone or external active speaker. The monitoring output size is controlled by independent knob, which can monitor PFL, AFL or main output signal;
- 24) powerful level indicator, composed of 4 groups of 12 Segment LED light columns, with switch; it can display PFL, AFL and main output signal, and also display output signal of group 1 to 4 after switching;
- 25) unique mono input interface, the main output signal is output to mono balance interface after left and right superposition, and the volume is controlled by independent knob, which is convenient for external connection of bass power amplifier or other equipment; mono has PFL monitoring switch, which is convenient for understanding the signal size in front;
- 26) the push rod of input and output channel is designed with 100 mm long stroke, which makes the adjustment more precise;
- 27) built in high-power switching power supply, wide voltage range, external universal power line, easy to use;
- 28) unique appearance design, SMT surface mounting technology, stable and reliable performance.



3. Mono input channel

Each channel is equipped with a balanced 1 / 4 "input socket and an XLR microphone (MIC) input socket. Note: if phantom power is used, the XLR input must be balanced. Note: when using MIC input, make sure there is no other line input signal on the same channel, The gain circuit has a very large adjustment range, so there is no need for a microphone / line selector switch.

The following describes the functions and operation precautions of each part of the mono input channel

1. Microphone XLR input socket

Each channel has an XLR input socket for low impedance microphones.

2. Line in socket

Connect the synthesized music signal or other large signal to the 1 / 4 "socket input. Note that if there is microphone input in this channel, please do not use the line input of this channel at the same time. Customers who are not allowed to input the microphone signal from this jack, but be careful not to plug and plug the cable with hot line, which is easy to damage your speaker.

3. INSERT input

For more professional occasions, if you need to add a special processing in this channel, such as graphic equalization, through the insert breakpoint insertion, this problem can be solved very well. Pay attention to the special "Y" type connection line, and the connection diagram of this line is shown at the back.

4. Gain control button

This button is used to set the input amplification gain of microphone line input. Proper gain setting is necessary to control the noise and performance. The reasonable gain setting can be adjusted in a large range according to the input size. For example, the output of keyboard, drum, guitar and other instruments changes greatly, from very weak to very strong, so it is easy to cause signal distortion if the signal is not adjusted properly.

5. 48V phantom power switch

Press this key, the light will be on and the + 48V phantom power supply will be turned on. Pay attention to the microphone wiring to reduce the impact;

6. 100Hz low frequency cutting button

This button can cut off low-frequency signals below 100Hz, which is more useful for human voice, because the voice below 100Hz is basically some panting sound.

7. Pad signal attenuation button

Set value attenuation key, press this button, the input sound signal will be attenuated by 20dB. When the line input signal is relatively large, press pad key to reduce the volume. When pad key has been pressed and the equipment has been working

8. High frequency tone adjustment button

The high frequency tone is integrated in the range of + / - 15dB with 12kHz as the center frequency point. If the signal is not good, it is easy to cause the output signal distortion. It can make music very pleasant. All harmonies above 12 kHz can be continuously adjusted to maintain the

original musical features. High frequency equalization is very important to enhance the details of musical guitar and piano as well as the hissing of singing.

9. Medium frequency tone adjustment button

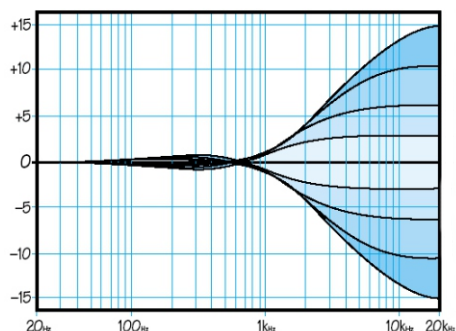
The octave frequency can be adjusted within the range of 2 kHz. Within this range, ascension can increase the fullness and spatial sense of language or instrument sound. For some sound, through attenuation in this range, the clarity of sound can be increased by reducing the box sound and rumble sound.

10. MID equalization center frequency adjustment button

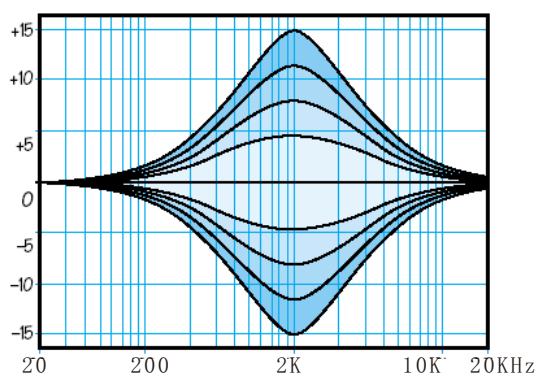
By adjusting the knob, the center frequency of if equalization can be adjusted in the range of 250Hz to 6KHz. When the knob is placed at the center point, the center frequency of if equalization is at 1kHz.

11. Low frequency tone adjustment button

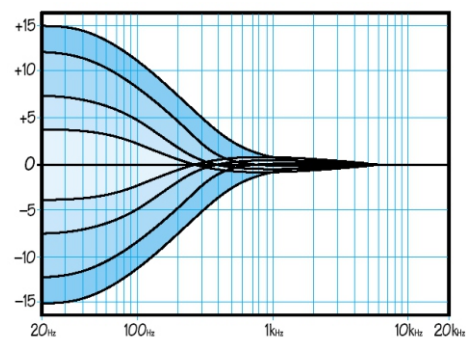
Low frequency equalization is adjusted in the range of + / - 15dB with 80Hz as the center frequency point, which can control the bass part well. Low frequency equalization can smooth and pleasing to the bass part of the promotion or attenuation. The bass drum or bass guitar can be well adjusted to enhance the fullness or clarity of the piano, and even can be used to modify the whole mixing part.



Schematic diagram of high frequency tone control



Schematic diagram of MID frequency tone control



Schematic diagram of low frequency tone control

12. Aux1 transmit volume control button

This button is an auxiliary transmission level control button, which is generally used to listen back or connect with other devices to send and return. This signal source

13. Aux2 transmit volume control button

This button is an auxiliary transmission level control button, which is generally used to listen back or connect with other devices to send and return. This signal source is before the push button.

14. Aux3 transmit volume control button

This control button is the auxiliary transmission 1 volume control button. After the signal source is taken

15. Aux4 / effect transmit volume control button

This control button is the auxiliary transmit 2 (FX) volume control button. It is also used as the sending button of the built-in effector. The signal source is taken after the push button. It can be used for both internal and external effectors.

16. PAN control button

The sound image control directly above the pusher can distribute the signal between the left and right of the main output or between group 1 and group 2. The distribution of the specific control group depends on the main output and group selection switch. When both switches are not pressed, the sound and image control

17. Channel mute switch

When the switch is pressed, the sound of the channel will be silenced. When the switch is pressed, the mute indicator light will be on at the same time.

18. Left and right main output selection button

If you want to output the signal of this channel through the main output, please press this switch and be controlled by the main output volume control pusher.

19. Group 1-2 channel selection button

Press this switch to add the signal to group 1-2 channel and operate through group 1-2 channel at the same time.

20. Group 3-4 channel selection button

Press this switch to add the signal to the group 3-4 channel and operate through the group 3-4 channel at the same time.

21. Signal indicator / peak indicator

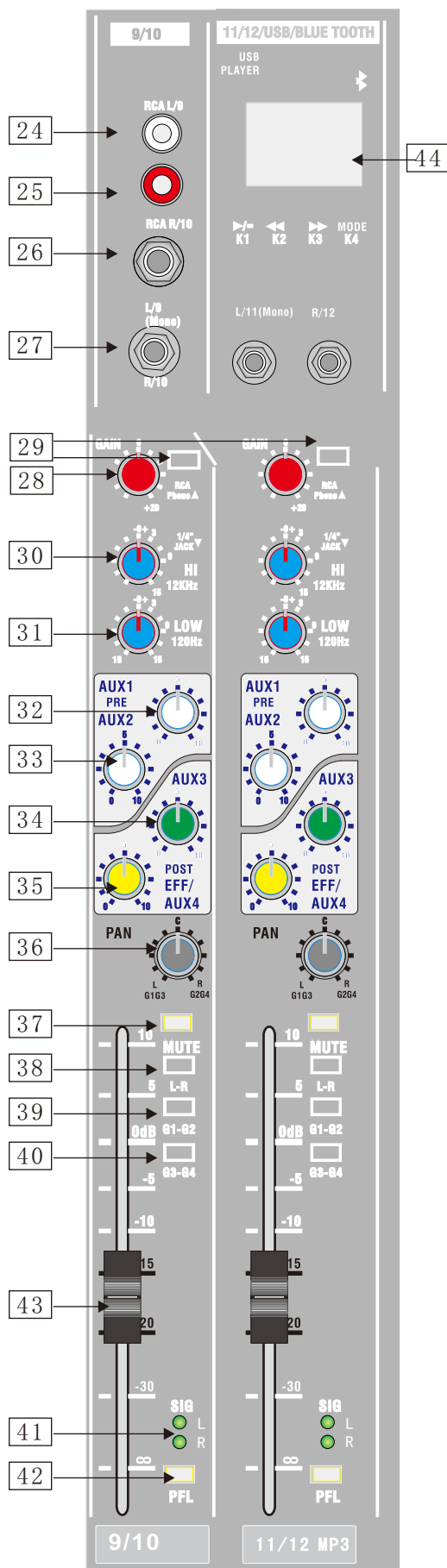
This indicator has two functions. When the channel has a signal input, the indicator light will be on, showing a green light. When the signal before the pusher reaches the peak value, it will occasionally flash red. At this time, the gain size should be adjusted so that it is in normal state and cannot be in the state of constant red light.

22. PFL pre monitoring button

When you press the pfl-22 button, the level indicator on the front side of the PFL is on. When you press the PFL button, the level indicator on the front side of the PFL is on. If you press more than one PFL / AFL key, you are listening to multiple mixed signals;

23. Channel volume control FADER

It is used to control the input signal volume of each channel, and to control the total output volume with the total pusher. Usually put the push at 0dB. If necessary, it has a 4dB gain to choose from.



4. Stereo input channel

The series has two groups (four channels) of stereo input channels. The functions of the two groups and single channel input are basically similar, but there are also obvious differences. For example, the input gain is not as large as that of a single channel, there is no phantom power supply, low cut and break point functions, only two-stage equalization, etc.

24. RCA left channel input socket

The input signal of the channel is added to the left output;

25. RCA right channel input socket

The input signal of the channel is added to the right output;

26. Line L / mono line input socket

As a mono line input or as a stereo input channel left channel input.

27. Line r line input socket

Only when this channel is used as stereo input, do not plug in the channel for other uses, even if there is no signal;

28. Gain control

Please refer to "4" for details

29. RCA / line input switch

Press down to select line interface input signal and pop up to select RCA input signal; for the second set of stereo, the switch is used to select the signal of USB player module and line signal.

30. High frequency tone adjusting button, same as "8"

31. Low frequency tone adjustment button

Low frequency equalization is adjusted in the range of $+/- 15\text{dB}$ with 120Hz as the center frequency point, which can control the bass part well. Low frequency equalization can smooth and pleasing to the bass part of the promotion or attenuation. Degree or clarity can even be used to modify the entire mix.

32. Aux1 transmit volume control button is the same as "12"

33. Aux2 sending volume control button is the same as "13"

34. Send volume control button of au3 is the same as "14"

35. Aux sending 4 / effect sending volume control button is the same as "15"

36. The sound and image control button is the same as "16"

37. Channel mute switch is the same as "17"

38. The left and right main output selection buttons are the same as "18"

39. Group 1-2 channel selection button is the same as "19"

40. Group 1-2 channel selection button is the same as "19" 40. Group 3-4 channel selection button is the same as "20"

41. Signal indicator

Stereo channel signal indicator needs to indicate the signal of two channels, so two green LED lights are used to indicate the signal, respectively indicating the signal of left channel and right channel, which is the difference of single channel.

42. PFL pre monitoring button is the same as "22"

43. Channel volume control push button is the same as "23"

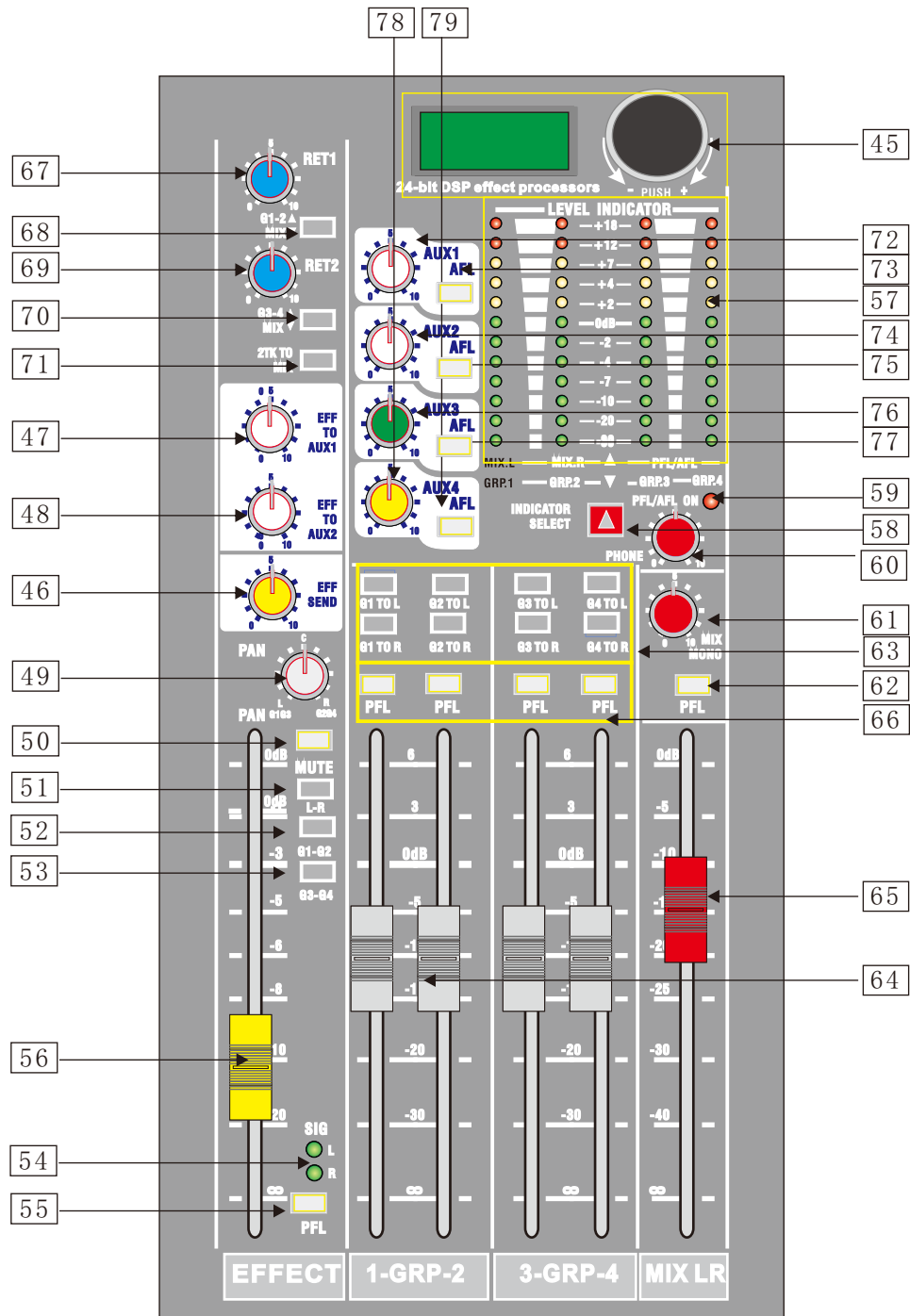
5. USB playback / Bluetooth / recording module



44. The USB module of this series mixer has powerful functions: 1. It can directly play audio files of U disk, support mp3, WAV and other formats; 2. It can connect Bluetooth device for audio transmission; 3. It has USB recording function; 4. It can be used as USB sound card to connect computer for audio input and output. When the audio is played or input, the audio signal of the module will be added to the second set of stereo (note that there is a switch control).

6. Main mixing section

There are 12 buses in this series of mixer. In this part, mixed output includes 2 left and right mixed buses, 4 marshalling buses, 4 auxiliary and effect transmitting buses, 1 monitoring bus and 1 monitoring control bus. There are also built-in DSP effectors, which are described here because the functions of each part are different. However, due to the panel layout, our description may be out of order. Please refer to the corresponding areas shown in the following figure:



45. DSP effector

Through the selection of effect selection button, the LCD display is as follows:

EFFECT1	CHURCH1	EFFECT17	ECHO2
EFFECT2	CHURCH2	EFFECT18	ECHO3
EFFECT3	midPLATE	EFFECT19	ECHO4
EFFECT4	bigPLATE	EFFECT20	ECH/REV1
EFFECT5	smallHALL	EFFECT21	ECH/REV2
EFFECT6	midHALL	EFFECT22	ECH/REV3
EFFECT7	ROOM	EFFECT23	ECH/REV4
EFFECT8	miSTUDIO	EFFECT24	CHORUS1
EFFECT9	biSTUDIO	EFFECT25	CHORUS2
EFFECT10	miCONSER	EFFECT26	CHORUS3
EFFECT11	biCONSER	EFFECT27	REV/CHRS
EFFECT12	shortREV	EFFECT28	FLANGE1
EFFECT13	midREV	EFFECT29	FLANGE2
EFFECT14	longREV1	EFFECT30	FLAN/REV
EFFECT15	longREV2	EFFECT31	CARTOON1
EFFECT16	ECHO1	EFFECT32	CARTOON2

First of all, the function of the built-in effector is explained: the built-in effector is processed by DSP, so the effect should be relatively ideal, and it can meet the requirements for general sound reinforcement occasions; 32 kinds of DSP effects can be selected by the knob next to the display screen. Rotate the knob to see the effect types displayed on the LCD screen, and the characters are flashing. Press the middle of the knob lightly to stop flashing, indicating that the current effect type is selected. If the character is flashing, do not press the knob within 3-4 seconds, and after the flashing stops, it will return to the original effect. When you press the knob, you can select The effect will also be saved automatically, and the last saved effect will be called in automatically next time.

46. Effect sending button "eff send"

The mixed signal on the effect sending bus of each channel is sent to the built-in DSP effector. Since the input range of the DSP effector is not high, it is necessary to pay attention to not too large sending signal, so as to avoid input overload and sound breaking;

47. Effect assistant sending button "eff to AUX1"

The output signal of the built-in effector (before the pusher) is sent to auxiliary output AUX1 to facilitate listening back.

48. Effect assistant transmitting button "eff to aux2"

The output signal of the built-in effector (before the pusher) is sent to auxiliary output AUX1 to facilitate listening back.

49. Effect audio-visual control (or balance) "eff pan"

For mono effect, the output signal mainly plays the role of sound and image control, and for stereo effect output, its balance function.

50. Mute switch for effector channel

Press this switch, the output signal of the effector will be muted. When the switch is pressed, the mute indicator light will be on at the same time.

51. Effect added to main output selection button

If you want to add the effect output to the main output, press this switch.

52. Effect added to group 1-2 selection button

By pressing this switch, you can add DSP effect output to group output 1-2.

53. Effect added to group 3-4 selection key

By pressing this switch, you can add DSP effect output to group output 1-2.

54. Effector signal indicator

This indicator has two functions. When the effector has a signal output, the indicator light will be on, showing a green light. There are two indicators in total, which will display the left and right signals before the effector is pushed.

55. Effect monitoring button

Monitor the output effect (before the push), press the button, the built-in indicator is always on;

56. Effect to output pusher

Control the output volume of the effect;

57. Level indicator

The mixer has four groups of 12 section level meters and a switch, which can be extended to eight groups of level meters. When the switch pops up, the following level signals are displayed from left to right: main output left, main output right, PFL / AFL signal; when the switch is pressed, the output signals of group 1, group 2, group 3, group 4 are displayed from left to right.

58. Level meter switch

When the switch is in different states, the level meter displays different information, see "57".

59. PFL / AFL on indicator

As long as the "PFL" or "AFL" button of one channel is pressed, this light will be on. At this time, the signal displayed by the level meter and the signal heard by the headset come from the channel that pressed the switch. It is possible to press several such buttons at the same time, and what you hear and see is the recorded mixed signal; when it is not on, what you hear and see is the final output signal of the left and right hybrid bus.

60. Headphone monitor volume knob

Control the volume from the monitor bus to the headset.

61. Mono output signal volume knob

The main output signal is superimposed on the mono output channel to control the output size through this knob.

62. Mono output signal PFL button (monitoring button before pushing)
Press this button to display the signal size before the mono output channel knob, which is convenient to know whether the signal in front is enough or too large, and carry out reasonable debugging. The earphone monitors and outputs the same signal source.

63. Group output to main output selector switch

By pressing this switch, you can add the group output signal to the left / right main hybrid bus respectively. When using these two sets of switches, attention should be paid to the problem of repeated signal superposition. For example, when the "main mix" and "1-2" selection switches of a certain channel are pressed at the same time, and this group of switches is pressed here, the superposition will occur.

64. Volume control pusher for group 1-group 4

Group 1 to group 4 bus output volume control push. Each pusher can control the size of the corresponding output signal, and there is an accurate DB scale on it.

65. Main output volume control pusher

The main output control pusher is on the far right side of the mixer. These two pushers control the output volume of the left and right main hybrid buses, with precise DB scale on them.

66. Grouping output signal PFL key (monitoring key before pushing)

Press this button to display the signal size of the group before pushing it up, which is convenient for the tuner to make reasonable adjustment before sending out signals to the marshalling output, so as to meet the use requirements.

67. Aux return 1 control button "ret1"

Auxiliary return provides the mixer with 2 additional inputs from external effects or reverberation equipment. A control knob with large adjustment range is designed for auxiliary return, which can be adjusted according to the scale in the range of 15dB.

68. Aux return 1 switch

The auxiliary return signal can be added to the main output or group 1-2 output. When the switch is popped up, the return signal is added to the group 1-2. When the switch is pressed, the return signal is added to the main output.

69. Aux return 2 control button "ret2"

Auxiliary return provides the mixer with 2 additional inputs from external effects or reverberation equipment. A control knob with large adjustment range is designed for auxiliary return, which can be adjusted according to the scale in the range of 15dB.

70. Aux return 2 switch

The auxiliary return signal can be added to the main output or group 3-4 output. When the switch is popped up, the return signal is added to the group 3-4. When the switch is pressed, the return signal is added to the main output.

71. Recording return control button

The recording feedback signal can be directly added to the mixed bus output to test the recording sound effect. It can also be used as a set of additional non processed signal input channels;

72. Aux1 transmit output level control button

The total transmitting level of AUX1 auxiliary output can be controlled by adjusting the button.

73. Aux1 monitor switch / Monitor Indicator "AFL"

AFL: it literally means after fader listen. The auxiliary output is to mix the auxiliary signals of the previous input channel, so the signal size should be monitored to avoid out of control, so the signal after the push (actually in the form of a knob) is used to monitor.

74. Aux2 transmit output level control button

The total transmitting level of aux2 auxiliary output can be controlled by adjusting the button.

75. Aux2 monitor switch / monitor indicator light "AFL"

AFL: it literally means after fader listen. The auxiliary output is to mix the auxiliary signals of the previous input channel, so the signal size should be monitored to avoid out of control, so the signal after the push (actually in the form of a knob) is used to monitor.

76. Aux3 transmit output level control button

The total sending level of aux3 auxiliary output can be controlled by adjusting the button.

77. Aux3 monitor switch / monitor indicator light "AFL"

AFL: it literally means after fader listen. The auxiliary output is to mix the auxiliary signals of the previous input channel, so the signal size should be monitored to avoid out of control, so the signal after the push (actually in the form of a knob) is used to monitor.

78. Aux4 / external effect transmit output level control button

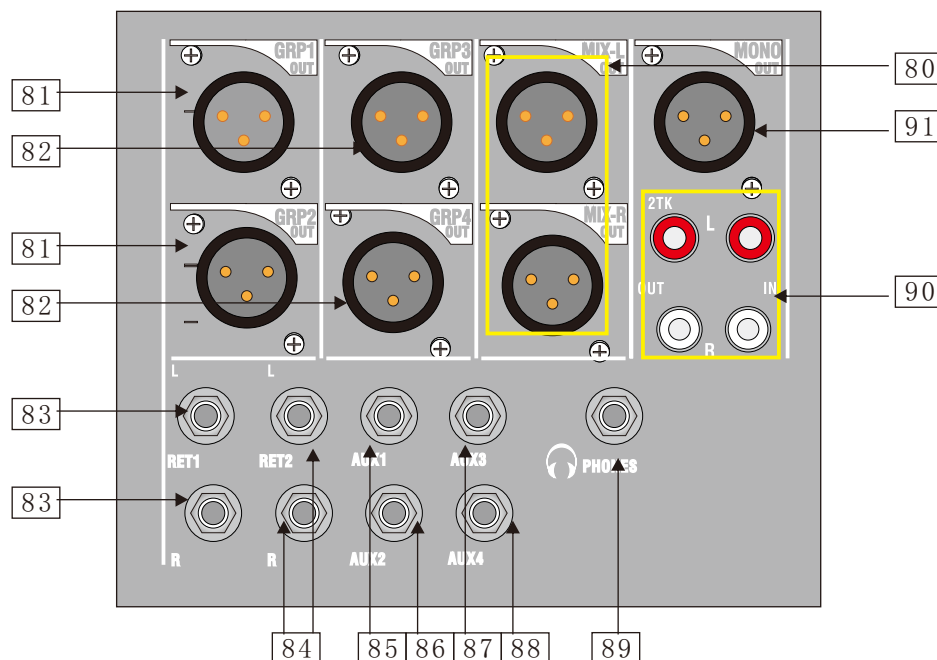
The total transmitting level of aux4 auxiliary output can be controlled by adjusting the button.

79. Aux4 monitoring switch / monitoring indicator light "AFL"

AFL: it literally means after fader listen. The auxiliary output is to mix the auxiliary signals of the previous input channel, so the signal size should be monitored to avoid out of control, so the signal after the push (actually in the form of a knob) is used to monitor.

7、Various output and auxiliary feedback input terminals

This part is shown in the following figure. It mainly introduces various kinds of output and auxiliary return input terminal. Please read it carefully to avoid wiring error.



80. Main mix output (left & right) socket

There are XLR sockets on the front panel of the console as the main output terminals of the left and right channels, and their output size is finally controlled by the main output pusher.

81. Group output 1 and group 2 output socket

The output signals of group 1 and group 2 are output in these two XLR interfaces, and the output ratio can be adjusted by the audio-visual knob of the input channel.

82. Group output 3 and group 4 output socket

The output signals of group 1 and group 2 are output in these two XLR interfaces, and the output ratio can be adjusted by the audio-visual knob of the input channel.

83. First set of auxiliary return input terminals

A group of stereo input terminals can also be used as mono input (single input signal from the socket above). Through aux ret1, the volume control can be returned. The signal can be added to 1 / 2 of the group, or the left and right mixed bus can be added.

84. Second set of auxiliary return input terminals

A group of stereo input terminals can also be used as mono input (single input signal from the above socket). The volume control is returned through aux ret2, and the signal can be added to the group 3 / 4 or left and right mixed bus.

85. AUX1 output

The mixed signal of AUX1 auxiliary transmission bus is output from here through AUX1 send volume control button;

86. Aux2 output

The mixed signal of aux2 auxiliary transmission bus is output from here through aux2 send volume control button;

87. Aux3 output

The mixed signal of aux3 auxiliary transmission bus is output from here through aux3 send volume control button;

88. Aux4 output

The mixed signal of aux4 auxiliary transmission bus is output from here through aux4 send volume control button;

89. Monitor headphone output socket

Stereo headphone output socket, output signal and level meter synchronization, monitoring equipment working state;

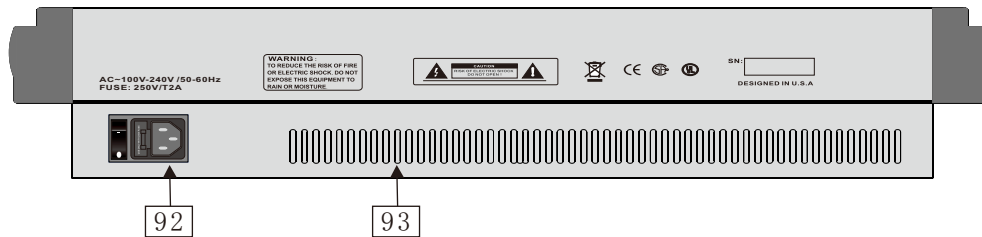
90. 2-TRACK Dual track recording input and output socket

This set of sockets are mainly used for recording. Tape out means the output of tape, which is the input from the mixer to the recorder. It is not necessarily a tape recorder. Other machines can also use it. It can also directly output signals to the later level equipment, such as power amplifier. Pay attention to its high output impedance; tape in means to output the signal from the recorder to the mixer, The main purpose is to return to the mixer in the process of recording, so as to understand the effect of recording;

91. MONO XLR output interface

Mono output is to output the left and right signals of the main output, which can be easily connected to other equipment (such as active ultra-low speaker) through mono volume knob.

8. REAR PANNEL



92. Three in one power supply base

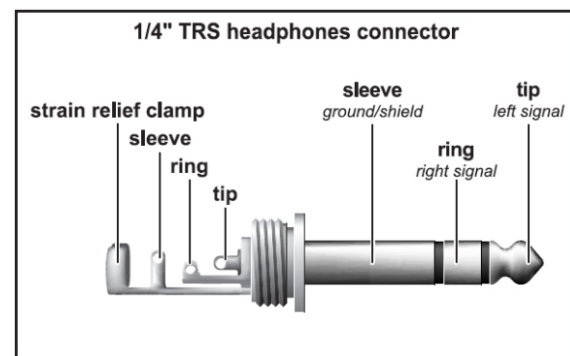
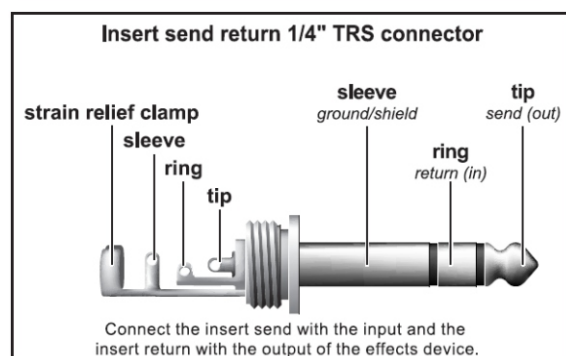
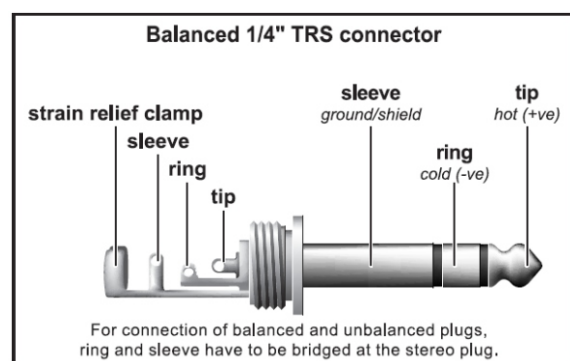
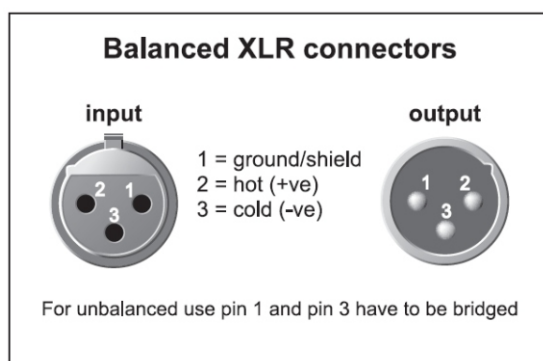
The rear panel of the mixer is relatively simple, mainly a three in one power supply base, including socket, switch and insurance. Due to the use of switching power supply, the voltage requirement is relatively low, ranging from 100V to 260V

93. Ventilation and cooling hole

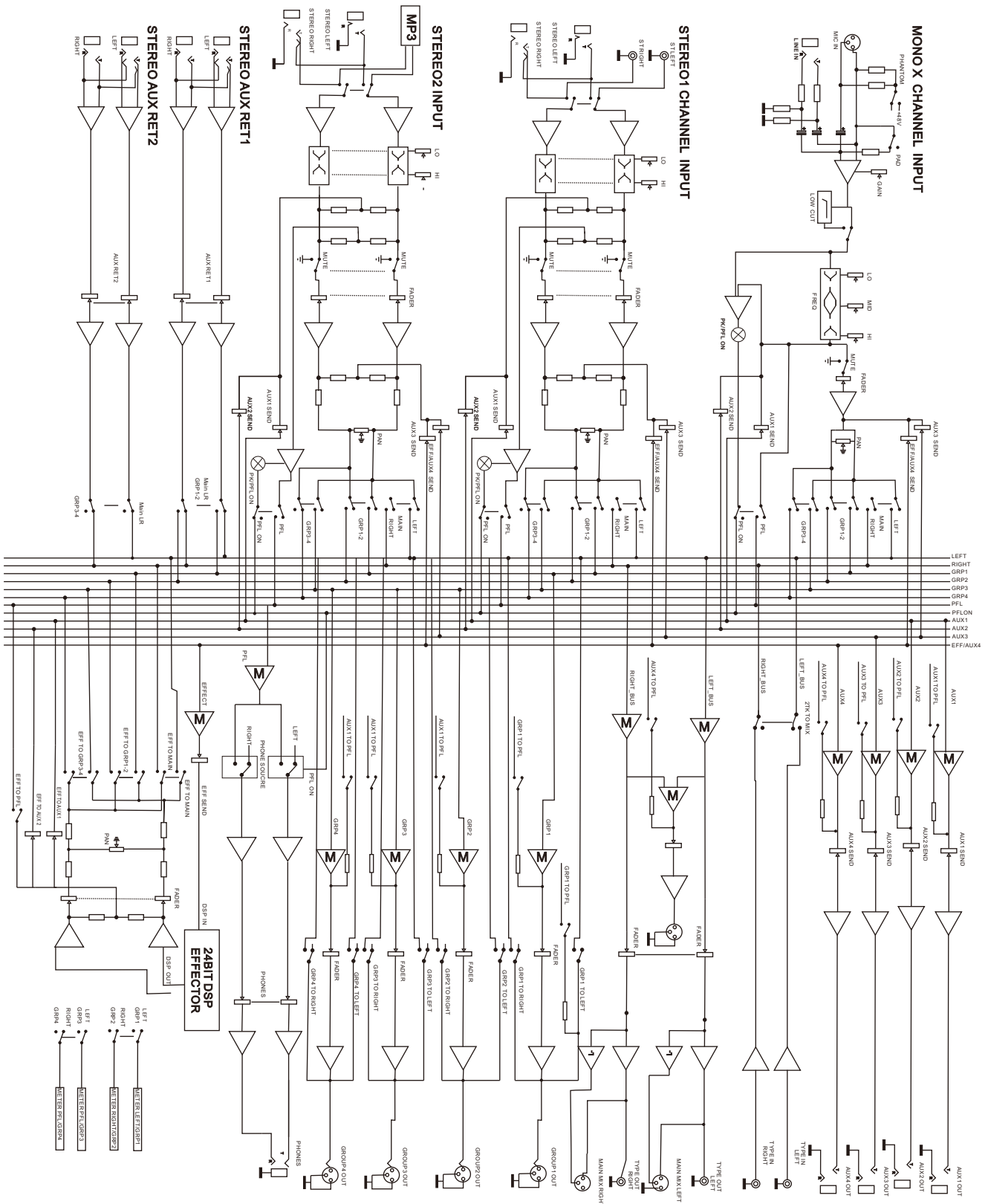
A row of air holes are opened on the back of the case, so that the heat can be diffused in time when the machine is used in high temperature environment, so that the machine can maintain excellent operation performance.

9. Various plug connection modes

Before connecting various devices, you have to prepare many connecting wires for different purposes. In order for you to use them correctly, you must read the instructions below carefully.



10.Circuit Diagram



EQ stereo channels

Low	80 Hz / ± 15 dB
Mid	2.5 kHz / ± 15 dB
High	12 kHz / ± 15 dB

Dual 7 band graphic equalizer

2.5 oct, constant Q
63 160 400 1K 2.5K 6.3K 16K ± 12 dB

AUX/EFF send

Type	1/4" TS connector, unbalanced
Impedance	approx. 120 Ω
Max. output level	+22 dBu

Aux returns

Type	1/4" TRS connector, unbalanced
Impedance	approx. 10 k Ω
Max. input level	+22 dBu

Main outputs

Type	XLR, electronically balanced
	1/4" TRS connector, balanced
Impedance	approx. 240 Ω
	/ 120 Ω unbalanced
Max. output level	+28 dBu

Sub outputs

Type	1/4" TS connector, unbalanced
Impedance	approx. 120 Ω
Max. output level	+22 dBu

Headphone output

Type	1/4" TRS connector, unbalanced
Max. output level	+19 dBu / 150 (+25 dBm)

CD/tape out

Type	RCA connectors
Impedance	approx. 1 k Ω
Max. output level	+22 dBu

DSP

Converter	Texas Instruments 24-bit Sigma-Delta, 64/128-times
oversampling	
Sampling rate	48 kHz

Main mix system data

Noise

Main mix @ - ∞ ,	
Channel fader - ∞	-99 dB / -101 dB A-weighted
Main mix @ 0 dB,	
Channel fader - ∞	-84 dB / -87 dB A-weighted
Main mix @ 0 dB,	
Channel fader @ 0 dB	-80 dB / -82 dB A-weighted



CAUTION: Do not open the equipment cover arbitrarily, so as not to electric shock. Please contact the professionals to maintain if necessary.