



AUDSTER

Professional Audio Mixing Console



MIX-AUD16





MIX-AUD16

FUNCTION INSTRUCTION

12,16 channels MONO input, low noise, high - precision microphone preamplifier, tone is clear and beautiful.

Each channel has 3 bands EQ and 1 band center frequency scan control

Dual return input, dual auxiliary group output

Dual auxiliary send output (EFFECT/AUX2 select)

Dual 7 bands L and R main control graphic equalizer

Built-in 16 kinds DSP Echo Delay Effects

Built-in MP3 player(USB/MMC/FM function)

Built-in +48V Phantom power

SAFETY INSTRUCTIONS

CAUTION: To reduce the risk of electrical shock, do not remove the cover (or back). No user serviceable parts inside; refer servicing to qualified personnel.

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



This symbol, wherever it appears, alerts you to the presence of uninsulated dangerous voltage inside the enclosure - voltage that may be sufficient to constitute a risk of shock.



This symbol, wherever it appears, alerts you to important operating and maintenance instructions in the accompanying literature. Read the manual.

INPUT CHANNEL SECTION

1. BALANCE INPUT (MIC)

Electronically Balanced inputs acceptable a standard XLR male connector. +48V Phantom Power available on each input Mic socket.

2. LINE INPUT

The unbalanced Mic input is provided for the use of an unbalance Mic and is designed to accept an unbalanced high impedance input signal. (This use for connection Deck, Turntable, Keyboard etc..)

3. INSERT

The INSERT is a break point in the input channel signal path. It allows the signal to be taken out from the mixer, through an external equipment such as a compressor, and then back to the mixer to continue the final mix output.

4. GAIN

This has a function which adjusts the input sensitivity of each channel in order to input the constant level of the signal.

5. LOW CUT

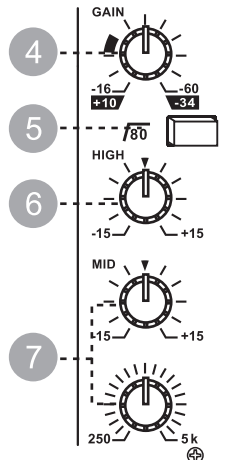
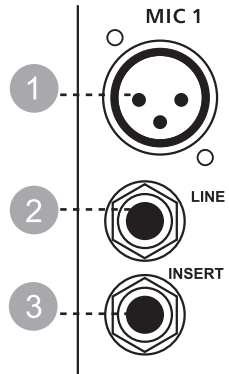
Slide down the slide-switch, insert the 18 dB per octave 80Hz low cut filter in the signal path. This low cut filter is useful on live vocals to reduce stage rumble or "popping" from microphones. It can also be used to cut off low frequency hum.

6. HIGH

Control the high frequency tone of each channel. Always set this control to the 12 o'clock position, but you can control the high frequency tone according to the speaker, the conditions of listening position and listener's Taste. Clockwise rotation of the control increases level.

7. FREQUENCY +MID

This equalization has a "bell" response i.e. Having reached maximum amplification or attenuation at the selected frequency, the amplitude response returns to zero either side of that frequency. The FREQ at which this occurs is variable between 250Hz. The GAIN is variable between *15dB at the selected frequency with a fixed q of 1.5Q is a factor a bandwidth.



8. LOW

Control the low frequency tone of each channel. Always set this control to the 12 o'clock position, but you can control the low frequency tone according to the speaker, the conditions of listening position and listener's taste. Clockwise rotation of the control increases the level.

9. AUX 1

This is normally derived after the EQ section and channel fader (PRE-FADER, POSE-EQ), and is therefore unaffected by the fader position and routing status. This makes the send particularly suitable for foldback or monitor feeds, which need to be controlled separately from the main P.A. Mix. All pre-fade sends may be selected internally to be PRE-FADER, PRE-EQ.

10. AUX 2/EFF

This is normally derived after the EQ and channel fader (POST FADER, POST EQ), and is therefore follow any changes in fader level. They are normally used to drive effects processing units which are fed back into the mixer and which must fade out with the input channel.

11. PAN

The pan control sends continuously variable amounts of the post fader signal to either the left or right and G1 or G2 main busses. In the center position equal amounts of signal are sent to the left and right or G1 & G2 busses.

12. STEREO

Push the switch, can use ST L-R fader. During the stereo L-R switch pushed, you can't use ST L-R fader.

13. GRPS 1-2

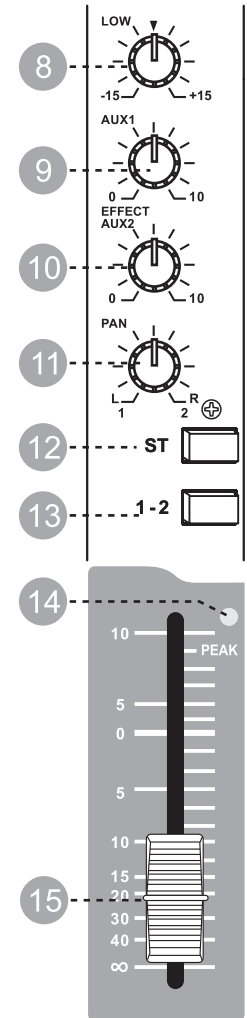
Push the switch, can use GROUP 1-2 fader. During the G1-2 switch pushed, you can't use stereo L-R fader.

14. PEAK

A red LED indicates a signal level at the insert return point, premaster fader, it illuminates at approximately 5 dB below clipping.

15. CHANNEL FADER

This is function to adjust the volume of signal connection into each channel and adjust the volume of output, together with master fader. Normal operating position is at the "O" mark, providing 4dB of gain above that point, if required.



MASTER SECTION

16.SEND/EFFECT

When this button is up, Post signal work as send signal.

When this button is down, post signal work as EFFECT signal.

17.AUX SEND/RETURN

This is used for adjusting volume of AUX sound, when sending and return AUX signal to used jack.

18.EFFECT SEND

This is used for adjusting volume of echo sound, when sending echo sound to send jack in effect panel.

19.PARAMETER

This is used for adjusting frequency of echo repeat; since too echo repeat may cause a howl, please adjust frequency properly.

20.DELAY

This is used for adjusting the time Interval of echo repeat. The middle Position (100MS) may be most Effective.

21.EFFECT LEVEL

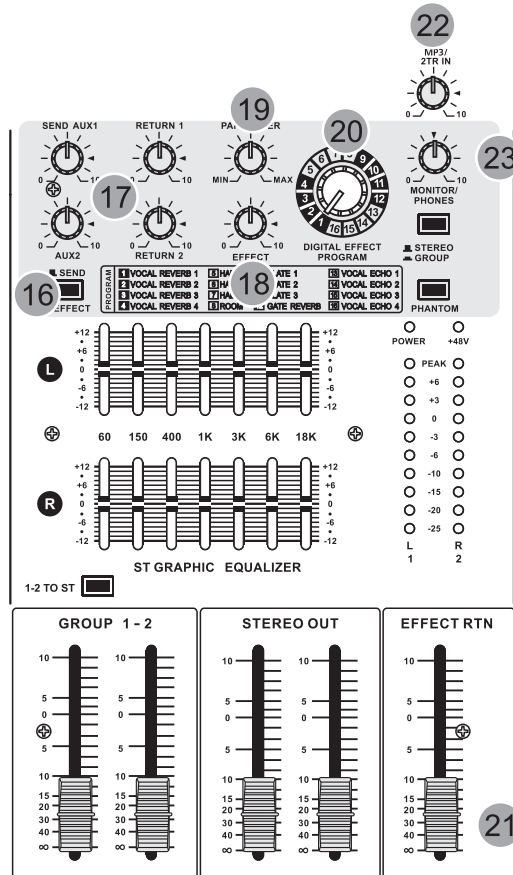
Using by this control, you can adjust signal level of echo repeat & external effect.

22.TAPE & Mp3 LEVEL

You can adjust the volume of TAPE and Mp3 in signal by this when connecting tape in.

23.HEADPHONE/CONTROL ROOM LEVEL

This is a single volume control sends the level to the headphones and main monitors.



24.L-R/G1-2

When L-R/G1-2 switch up, could monitor stereo (L-R) output signal, when L-R/G1-2 switch down, could monitor group (G1-2) output signal.

25.PHANTOM POWER SWITCH/LED

Depressing this switch applies 48 V DC across all microphone input channels connectors for remote powering of condenser microphones.

The LED will be turned on when start working.

26.STEREO GRAPHIC EQUALIZER

2 X 7 - band equalizer is provided for tone control over each frequency, and for precise high quality sound by final tone control.

27.POWER LED

The POWER LED will be turned on when start working.

28.OUTPUTS LEVEL INDICATOR

This is level meter which shows output levels of left & right channel condition on the way of operation, therefore, you can see output condition through this master level indication.

29.G1-2/L-R SWITCH

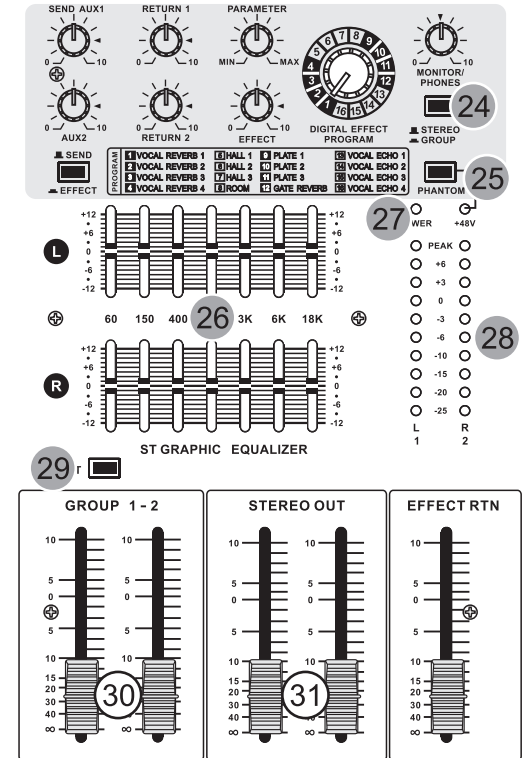
This switch routes the G1-2 mix output to the STEREO bus, allowing G1-2 bus to be used two mono subgroups mixed down to a single output when stereo is not required.

30.OUTPUT GROUPS 1-2 FADERS

Using by this control, you can adjust G1-2 output level.

31.OUTPUT MAIN FADER (LEFT/RIGHT)

This is a master fader for adjustment for volume of left/right output. Unity gain is the top their travel.



MIXER OUTPUT SECTION

32. STEREO AUX RETURNS & SENDS

This can be used to connect all kinds of effects from outside.

33. GROUP 1-2 OUTPUT JACK

There are to be output with the volume control against in putting signal into GRPS 1-2 board.

34. STEREO OUTPUT JACK(LEFT/RIGHT)

In this product, the final confirmed sound can be send to main amplifier through XLR & 1/4 jack.

35. ROOM OUT JACK

The phones signal follows the control room output.

36. TAPE INPUT JACK

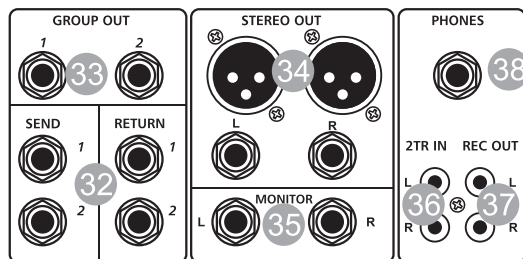
This jack is to be connected with cassette deck when playing back.

37. RECORD PIN JACK

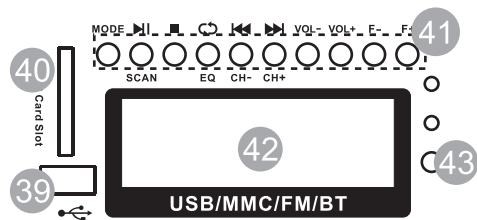
This jack is to be connected with cassette deck when recording the mixed output.

38. PHONES JACK

This is used for monitoring the master signal and individually monitoring each channel with PFL, L/R & G1-2.



DIGITAL SECTION



39. USB PORT

40. MMC SLOT

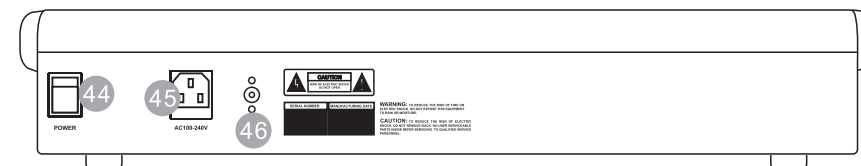
41. Control button of USB/MMC/FM/BT

42. MP3 LCD display with USB/MMC/FM/BT

43. Remote infrared receiver

- MODE
MODE SELECTION (USB/MMC/FM/BT)
Long press turn off
- USB/MMC: Play/Pause (Short press)
FM: Auto search (Long Press)
- USB/MMC:
6 kinds built-in EQ (Short press)
Repeat (Long Press)
- Previous
- Next
- VOL-
VOL-
- VOL+
VOL+
- Play in the previous file
- Play in the next file

POWER SECTION



44. POWER SWITCH

Push marked(1), when you want to operate. The LED(SEE NO, 16) will be turned on when working.

45. POWER SOCKET

AC100~240V check the power source of AC 100-240V before connections when occur a problem on this appliance.

46. FM ANT.

TECHNICAL SPECIFICATION

Mono Inputs

Mic Input	Electronically balanced, discrete input configuration
Bandwidth	10Hz to 60kHz \pm 3dB
Distortion(THD & N)	0.01% at +4dBu, 1kHz, Bandwidth 80kHz
Mic E.I.N (22Hz-22kHz)	-129.5dBu, 150Ohm source
	-117.3dBu, 150Ohm source
	-132.0dBu, input shorted
	-122.0dBu, input shorted
GAIN range	+10dB to -60dB
Line Input	Electronically balanced
Bandwidth	10Hz to 60kHz \pm 3dB
Distortion(THD & N)	0.01% at +4dBu, 1kHz, Bandwidth 80kHz
Line level range	+10dBu to -4dBu

Equalization	
Hi Shelving	12kHz \pm -15dB
Mid Range	2.5kHz \pm -15dB
Lo Shelving	80Hz \pm -15dB

Master Mix section

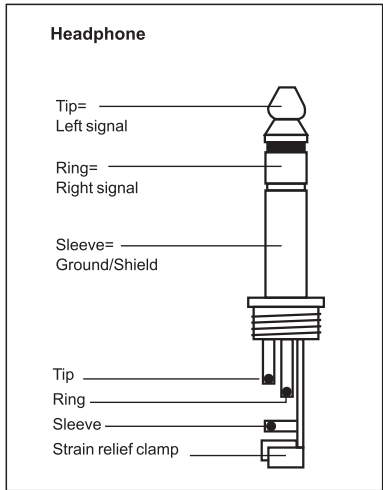
Max Output	+22dBu balanced
Aux Send Max Out	+22dBu unbalanced
Control Room Out	+22dBu unbalanced
Signal-To-Noise Ratio	+112dB, all channels at Unity Gain

Power supply

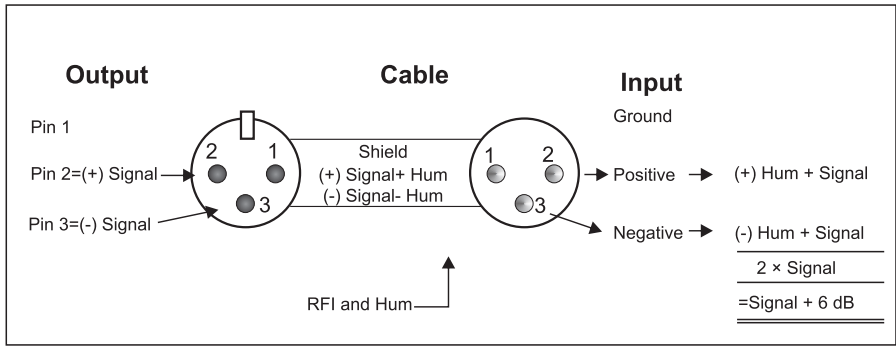
Input voltage : AC100-240V

CONNECTIONS

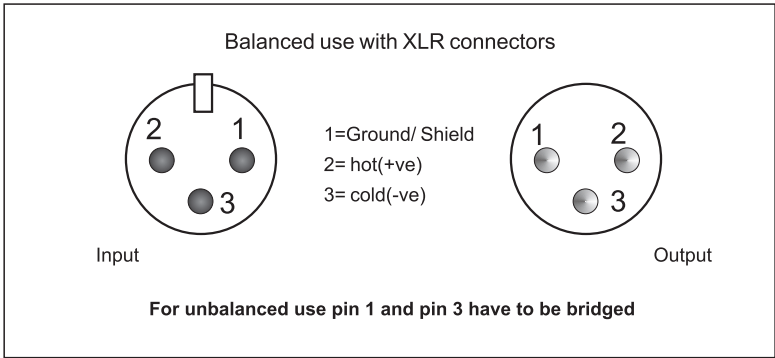
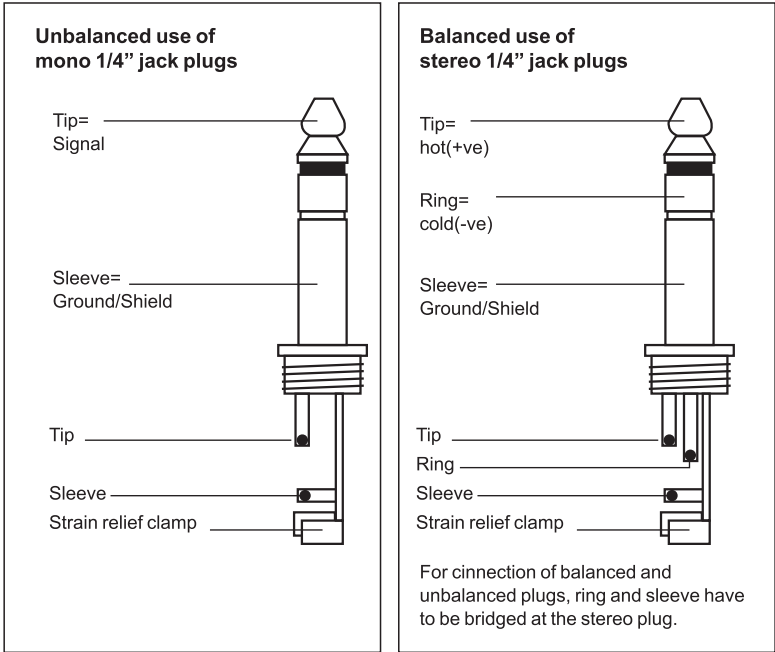
You will need a lot of cables for different purposes-see the following figures to make sure you have got the right ones. Unbalanced equipment may be connected to balanced inputs/outputs. Either use mono 1/4" jacks or connect ring and sleeve of TRS jack.



Headphone connection



Compensation of interference with balanced connections



Different plug types