

Owners Manual



**6,8, 12, 16 Channel Mic/Line Mixer
PMX608, PMX808, PMX1208, PMX1608**

www.pyleaudio.com

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Ultra low noise 6,8,12,16 - Channel Mic / Line Mixer

- ▲ 6, 8, 12, 16 Mono Input Channels with silver plated XLRs and balanced Line Inputs
- ▲ Ultra-low noise discrete Mic Preamps with +48 V Phantom Power
- ▲ Ultra-musical 3-band EQ on all channels
- ▲ Peak LEDs all Mono Channels
- ▲ 1 Aux Send per channel for external effects
- ▲ Built in digital multi effect (16 DSP)
- ▲ 2-Track Inputs assignable to Master Mix Output
- ▲ Highly accurate 10 segment Bargraph Meters
- ▲ 1 Stereo master output and 1 Stereo Group output
- ▲ (Separate Master Mix Outputs)

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.

A. INPUT CHANNEL SECTION

1. BALANCED INPUT(MIC)

Electronically Balanced inputs accepting 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 is for connecting a Tape 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 external equipment such as a compressor, and then back to the mixer to continue the final mix output.

4. TRIM

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

5. HI EQ

This control gives you up to 15 dB of boost or cut at 12KHz and above. Use it to add sizzle to cymbals, and an overall sense of transparency. Add highs to keyboards, vocals, guitar, ect. Turn it down a little to reduce sibilance, or to hide tape hiss.

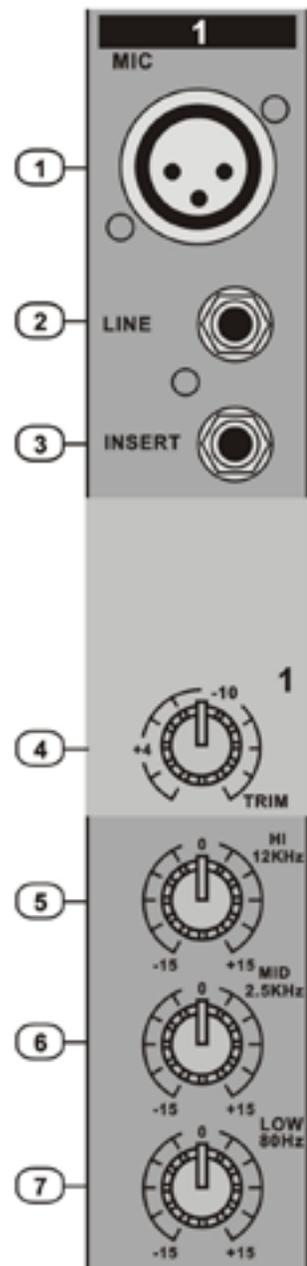
6. MID EQ

Short for "midrange", this knob provides 12 dB of boost or cut, centered at 2.5KHz. Midrange EQ is often thought of as the most dynamic, because the frequencies that define any particular sound are almost always found in this range. You can create many interesting and useful EQ changes by turning this knob down as well as up.

7. LOW EQ

This control gives you up to 15 dB boost or cut at 80Hz and below. This circuit is flat (no boost or cut) at the center position.

This frequency represents the punch in bass drums, bass guitar, fat synth patches, and some male vocals.



8. AUX

This is normally derived after the EQ section and channel fader (PRE-FADER, POST-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-fader sends may be selected internally to be PRE-FADER, PRE-EQ.

9. EFF

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

10. 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.

11. PEAK

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

12. STEREO (L/ R)

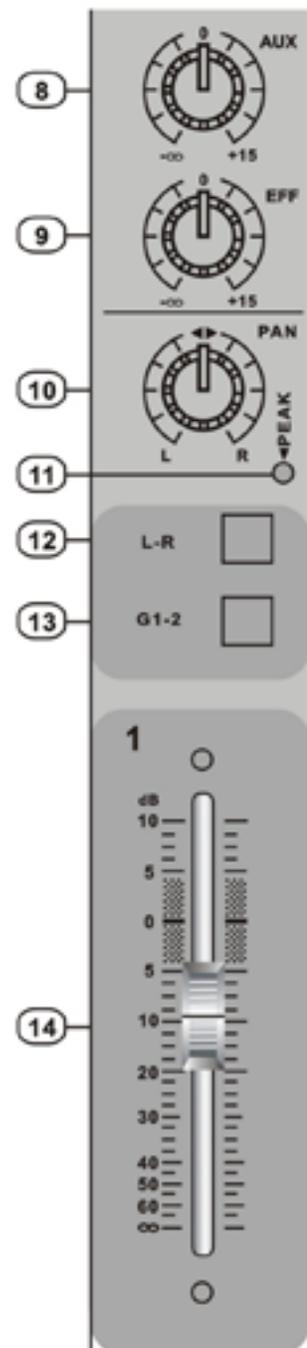
Push the switch, to balance left and right.
(In this mode the Fader is unavailable)

13. GROUP1-2

Push the switch, to use GROUP 1-2 fader.
(In this mode the Fader is unavailable)

14. 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.



B. MASTER SECTION

15. HEADPHONE LEVEL

This is a single volume control for the level of the headphones and main monitors.

16. AUX SEND

This is used for adjusting input volume of an AUX device when using the AUX send jack.

17. AUX RET

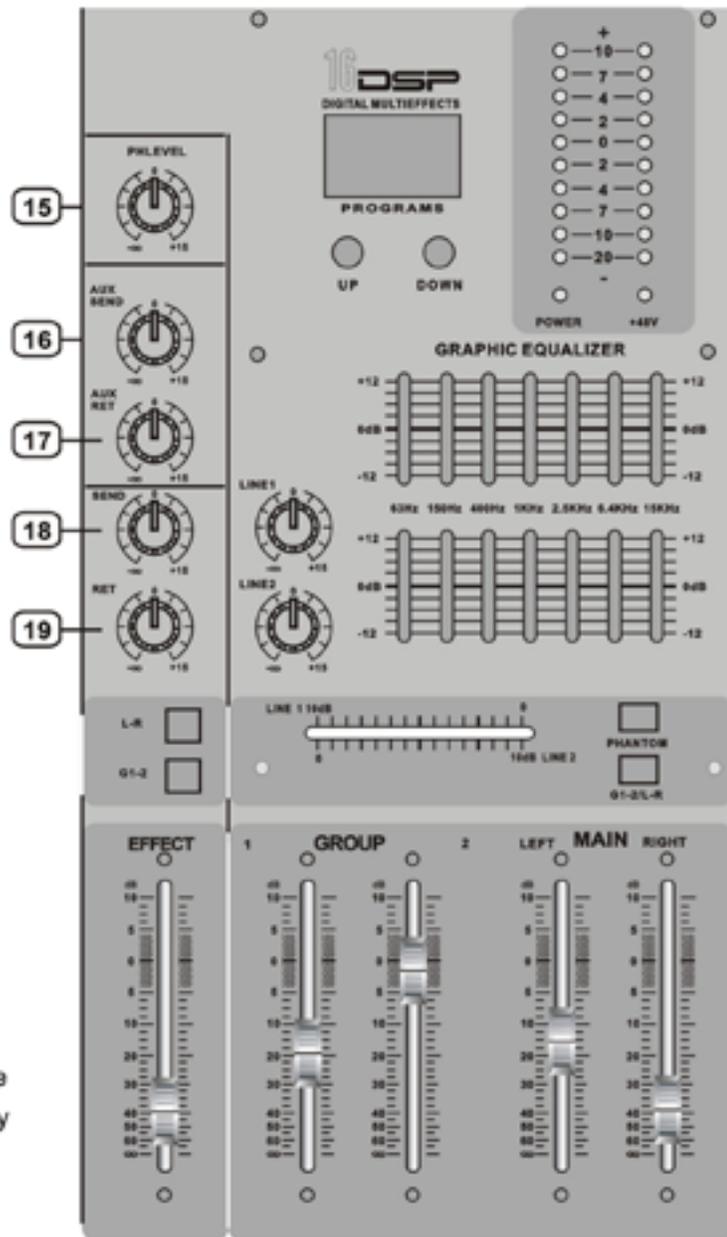
Controls the level of effect input signal.

18. EFFECT SEND

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

19. EFFECT RETURN

This is used for adjusting frequency of echo repeat, since too much echo repeat may cause distortion, please adjust frequency properly.



20. EFFECT PROGRAMS

When adjusting switch 21 and 22 more effects are displayed.

21. UP TAPE SWITCH

One push = one program up,
push for more than 5 seconds
to get hi-speed program up.

22. DOWN TAPE SWITCH

One push=one program down,
for with more than 5 seconds to
get hi-speed program down.

23. EFFECT STEREO(L/R)

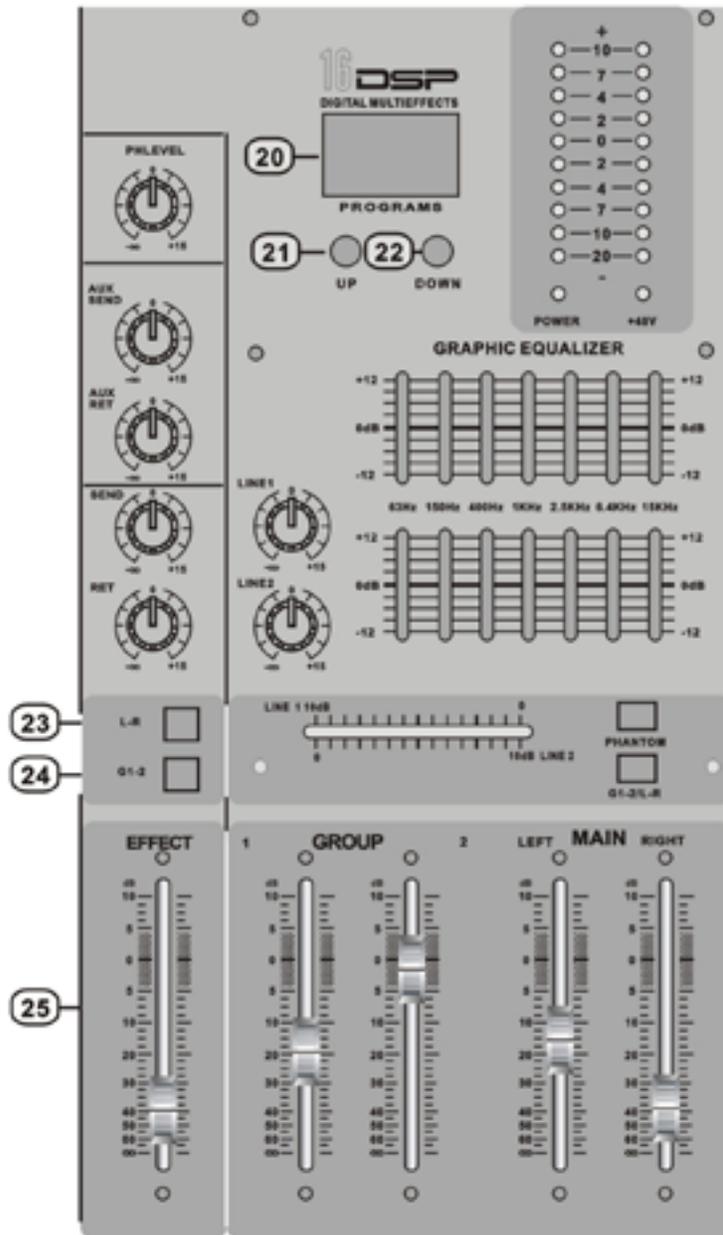
By pressing this switch, you can
allow the EFFECT that you need
to connect to the main control
buses.

24. EFFECT GROUP(1-2)

Push this switch to allow the
EFFECT needed to connect
to the main group buses.

25. EFFECT LEVEL

By using this control, you can
adjust the signal level of echo
repeat & external effects.



26. LINE IN LEVEL

Adjusts the volume of line in signal when a device is connected to the line in.

27. LINE (1 / 2) CHANNEL CONVERSION FADER

This is a fader to control the conversion of LINE 1, LINE 2 stereo channel. When pushed to the left side, LINE 1 channel is audible; right side, LINE 2 audible. If in the center, LINE 1 & LINE 2 are on audible at the same time & have the same gain.

28. OUTPUT LEVEL INDICATOR

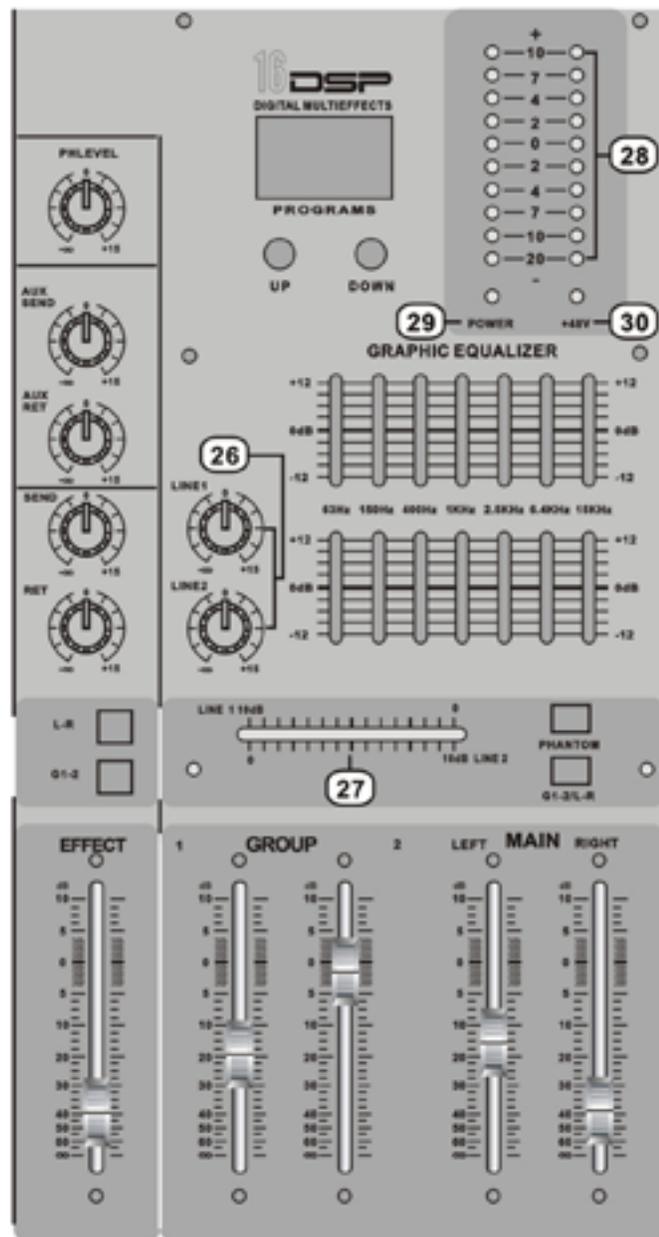
This is a level meter which shows output levels of left & right channel conditions during operation.

29. POWER LED

Indicates that the device is on and ready for operation.

30. PHANTOM LED

Indicates that phantom power is on and ready for operation.



31. PHANTOM POWER SWITCH

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

32. STEREO GRAPHIC EQUALIZER

2X7-band equalizer is provided for tone control over each frequency, and for precise high quality sound by final tone control.

33. L-R/G1-2 SWITCH

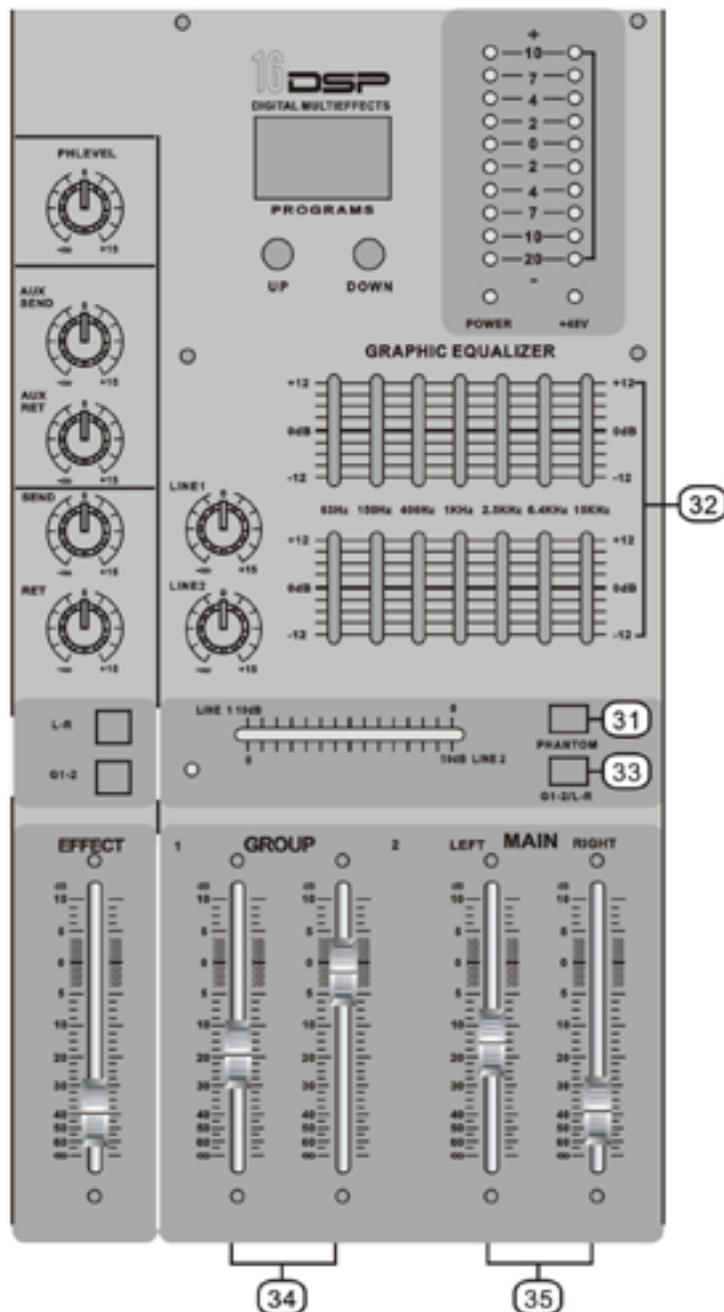
This switch routes the G1-2 mix output to the STEREO bus, allowing G1-2 bus to be used two mono subgroups mixed down to a single output when stereo is not required.

34. OUTPUT GROUPS 1-2 FADERS

By using this control, you can adjust G1-2 output level.

35. OUTPUT MAIN FADER (LEFT/RIGHT)

This is a master fader to adjust the volume of left/right output. Unity gain is at the top of their travel.



32

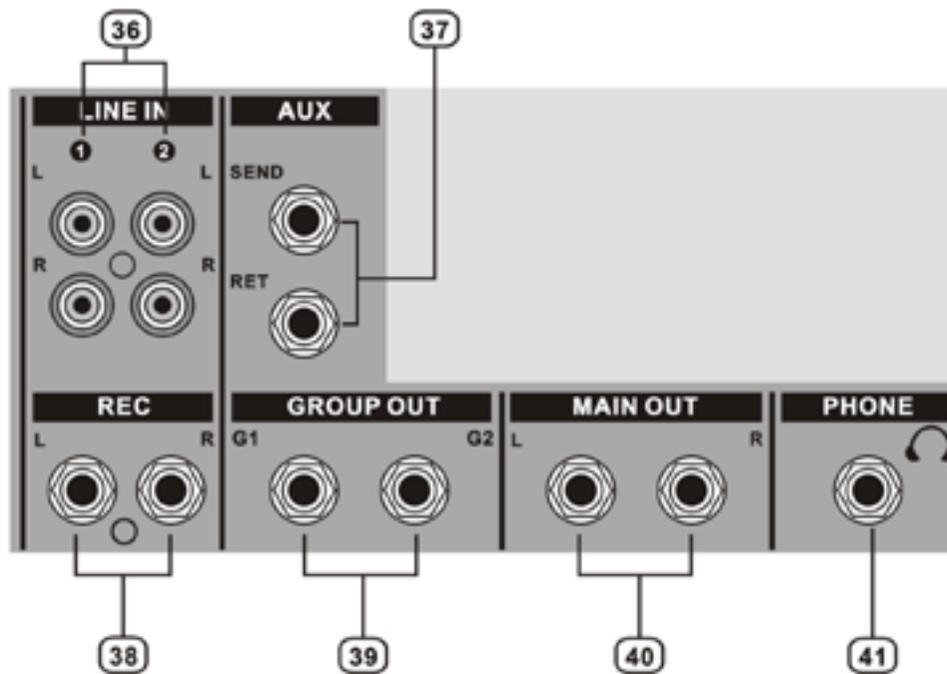
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C. MIXER OUTPUT SECTION



36. LINE INPUT JACK

Input Jacks 1 and 2 for Tape Deck, MIC, Guitar, ect.

37. AUX SEND/RETURN JACK

This can be used to connect all external effects.

38. RECORD PIN JACK

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

39. GROUP 1-2 OUTPUT JACK

Line out, connect the external amplifier.

40. MAIN OUTPUT JACK (LEFT / RIGHT)

This is the main output signal to be connecte to amplifier through 1/4Jack.

41. HEADPHONE JACK

You can monitor working conditions by connecting headphones to this 1/4jack.

D. POWER SECTION

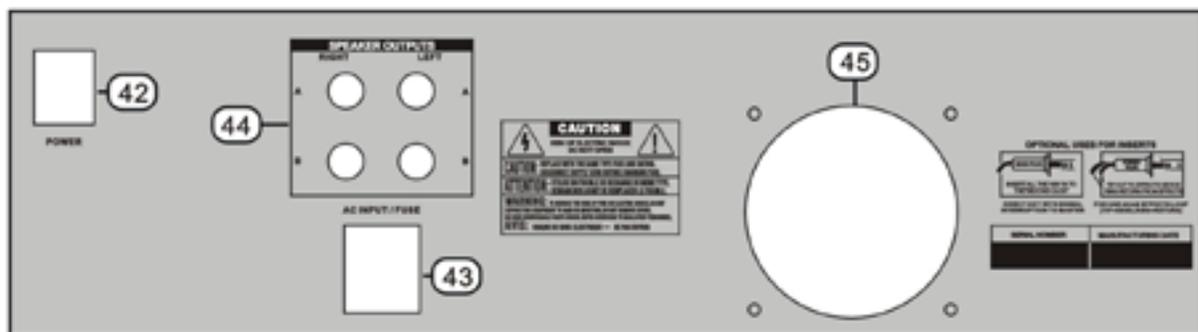
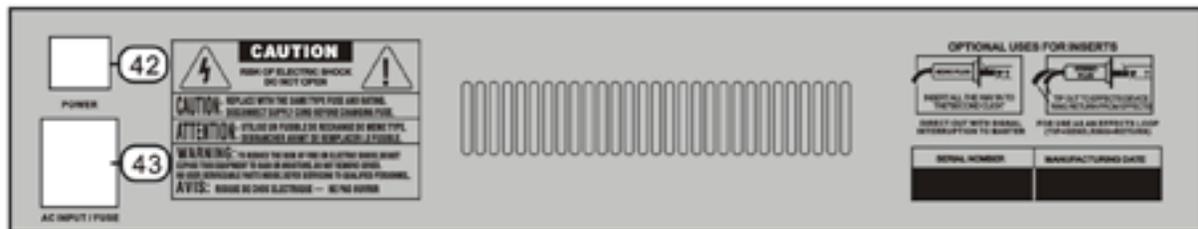
42. POWER SWITCH

On/off switch (see no.29) is on indicating device is ready for operation.

43. AC INPUT/FUSE

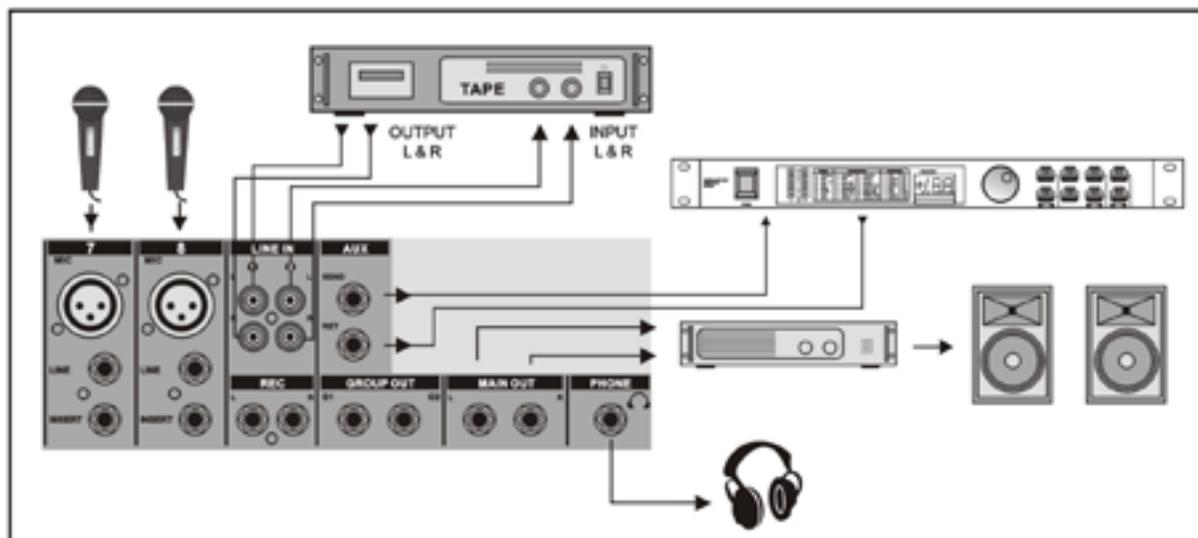
44. SPEAKER OUT

45. FAN Exhaust fan to eliminate heat and protect from burning.



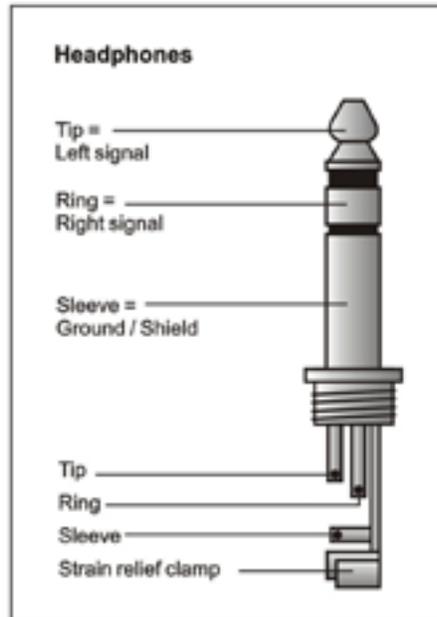
E. INSTALLATION

Experience tells us that the cables in a studio environment get tangled very quickly (inviting mistakes).

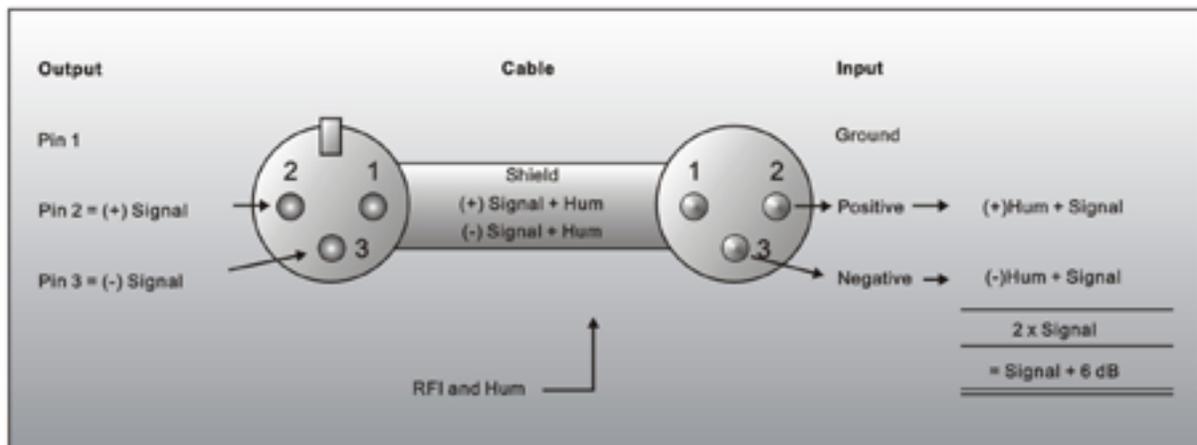


F. CONNECTIONS

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 jacks.

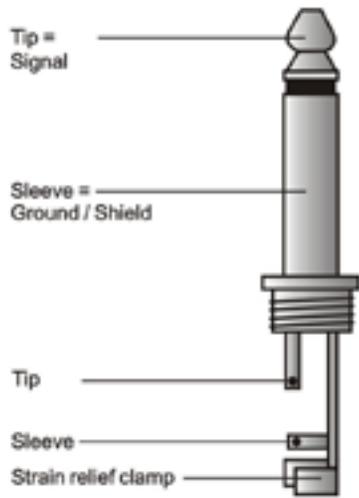


Headphone connection

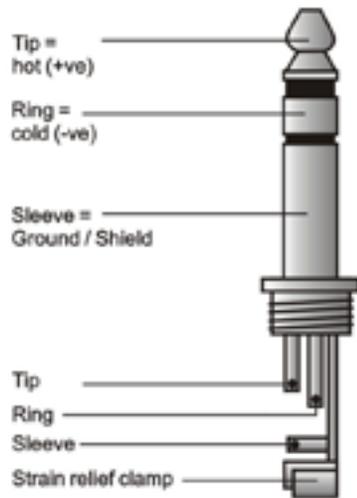


Compensation of interference with balanced connections

Unbalanced use of mono 1/4" jack plugs

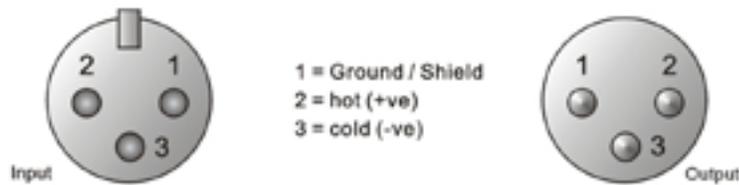


Balanced use of stereo 1/4" jack plugs



For connection of balanced and unbalanced plugs, ring and sleeve have to be bridged at the stereo plug.

Balanced use with XLR connectors



For unbalanced use pin 1 and pin 3 have to be bridged

Different plug types

G. APPENDIX

Specifications

Mono Inputs

Mic Input	electronically balanced, discrete input configuration
Bandwidth	10 Hz to 60 kHz \pm 3 dB
Distortion (THD & N)	0.01% at +4 dBu, 1 kHz, Bandwidth 80 kHz
Mic E.I.N (22 Hz - 22 KHz)	-129.5 dBu, 150 Ohm source -117.3 dBq, 150 Ohm source -132.0 dBu, input shorted -122.0 dBq, input shorted
TRIM range	+10dB to +60dB
Line Input	electronically balanced
Bandwidth	10 Hz to 60 kHz \pm 3dB
Distortion (THD&N)	0.01% at +4 dBu, 1kHz, Bandwidth 80 kHz
Line level range	+10 dBu to -40 dBu
Equalization	
Hi Shelving	12 kHz +/-15 dB
Mid Range	2.5 kHz +/-15dB
Lo Shelving	80 Hz +/-15 dB

Master Mix section

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

Power supply

Mains Voltages	USA/Canada	~ 120 V AC, 60 Hz,
	U.K./Australia	~ 240 V AC, 50 Hz,
	China	~ 220 V AC, 50 Hz

Power	6CH	8CH	12CH	16CH
	250W+250W	300W+300W	350W+350W	350W+350W

H. BLOCK DIAGRAM

