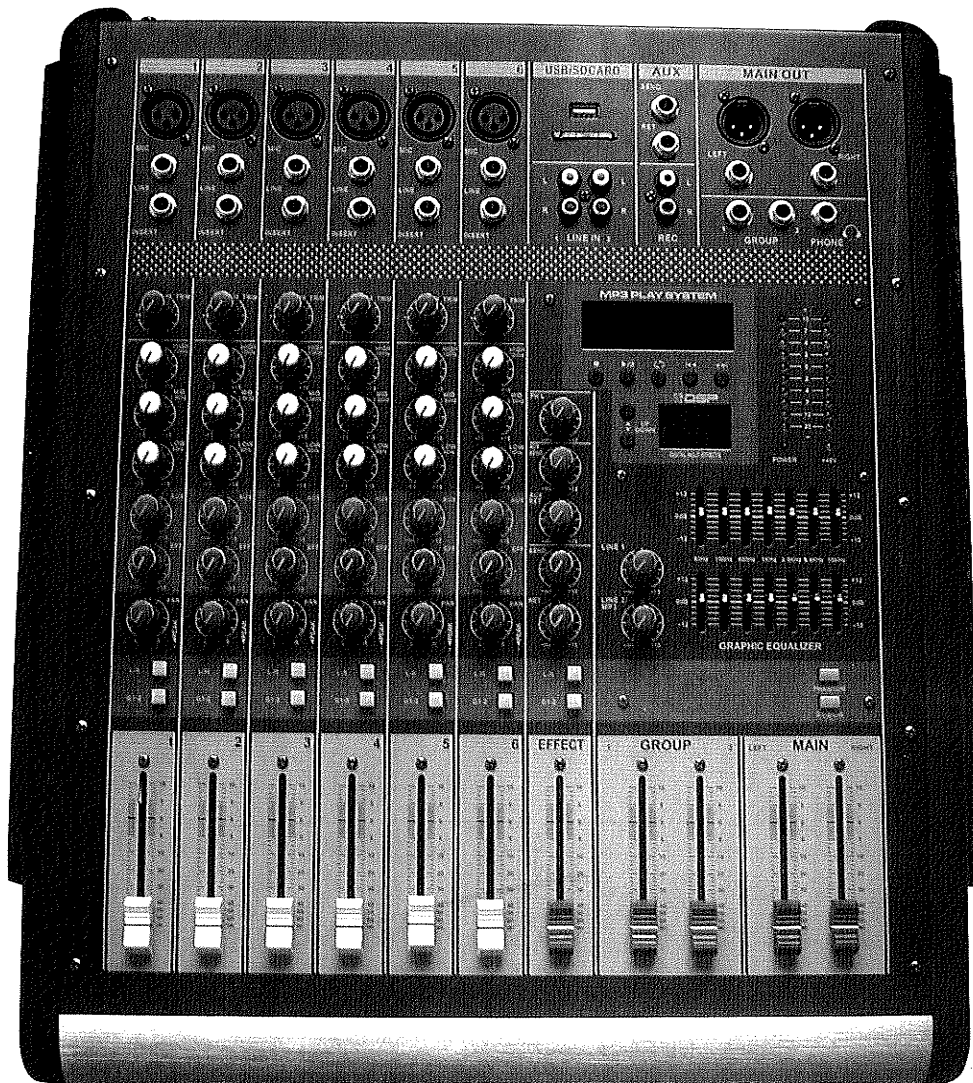


PD Power Dynamics Professional Audio PDM-S1202A

[Http://www.tronios.com](http://www.tronios.com)

6, 8, 12, 16 CHANNEL MIC/LINE MIXER OWNERS MANUAL



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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
- ▲ With inside USB & S.D, MP3 playing system
- ▲ 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. BALANCE INPUT (MIC)

Electronically Balanced inputs accept a standard XLR male connector.

+ 48V Phantom Power available on each input Mic socket.
and this switch is on Rear Phantom Power.

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. TRIM

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

5. HI EQ

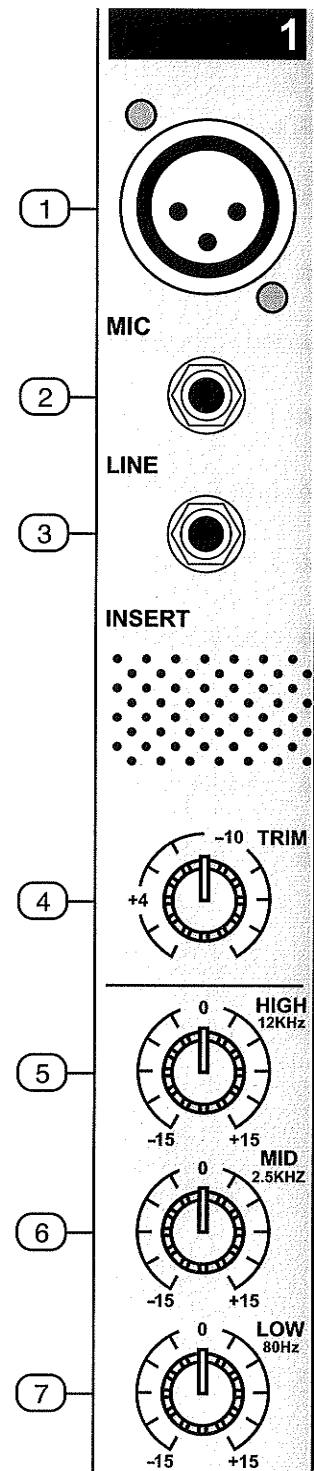
This control gives you up to 15 dB of boost or cut at 12KHz and above, and it is also flat at the detent. Use it to add sizzle to cymbals, and an overall sense of transparency or edge to keyboards, vocals, guitar, and bacon frying. Turn it down a little to reduce sibilance, or to hide tape hiss.

6. MID EQ

Short for "midrange", this knob provides 12 dB of boost or cut, centered at 2.5KHz, also flat at the center detent. 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 detent position. This frequency represents the punch in bass drums, bass guitar, fat synth patches, and some really serious male singers.



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 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 fader 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, can use ST L-R fader.

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

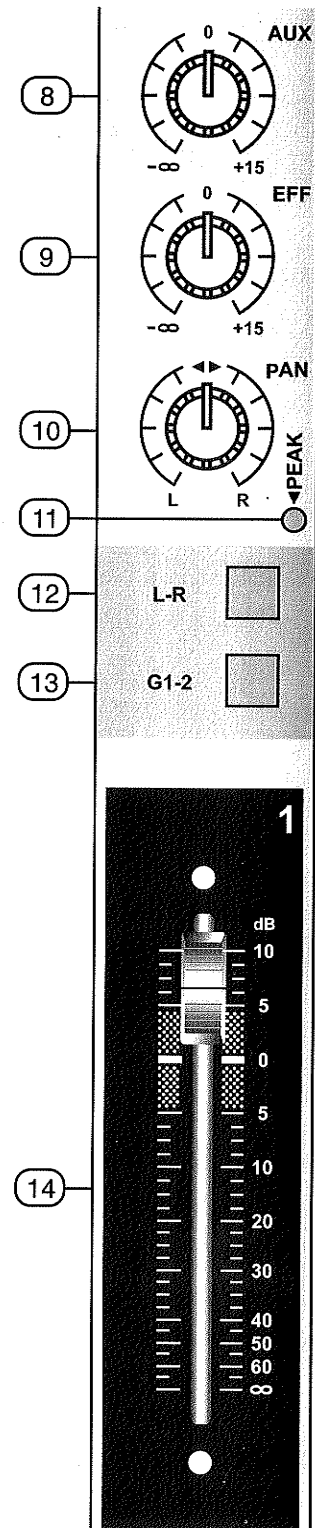
13. GROUP 1-2

Push the switch, can use GROUP 1-2 fader.

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

14. 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 "0" mark, providing 4dB of gain above that point, if required.



B. MASTER SECTION

15. HEADPHONE LEVEL

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

16. AUX SEND

This is used for adjusting volume of AUX sound, when sending AUX signal to used 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 echo repeat may cause a novel, please adjust frequency properly.

20. UP TAPE SWITCH

One push, one program up, push with more than 5 seconds hi-speed program up.

21. DOWN TAPE SWITCH

One push, one program down, push with more than 5 seconds, hi-speed program down.

22. EFFECT PROGRAMS

When adjust switch 20,21 more effects are displayed.

23. EFFECT STEREO (L/R)

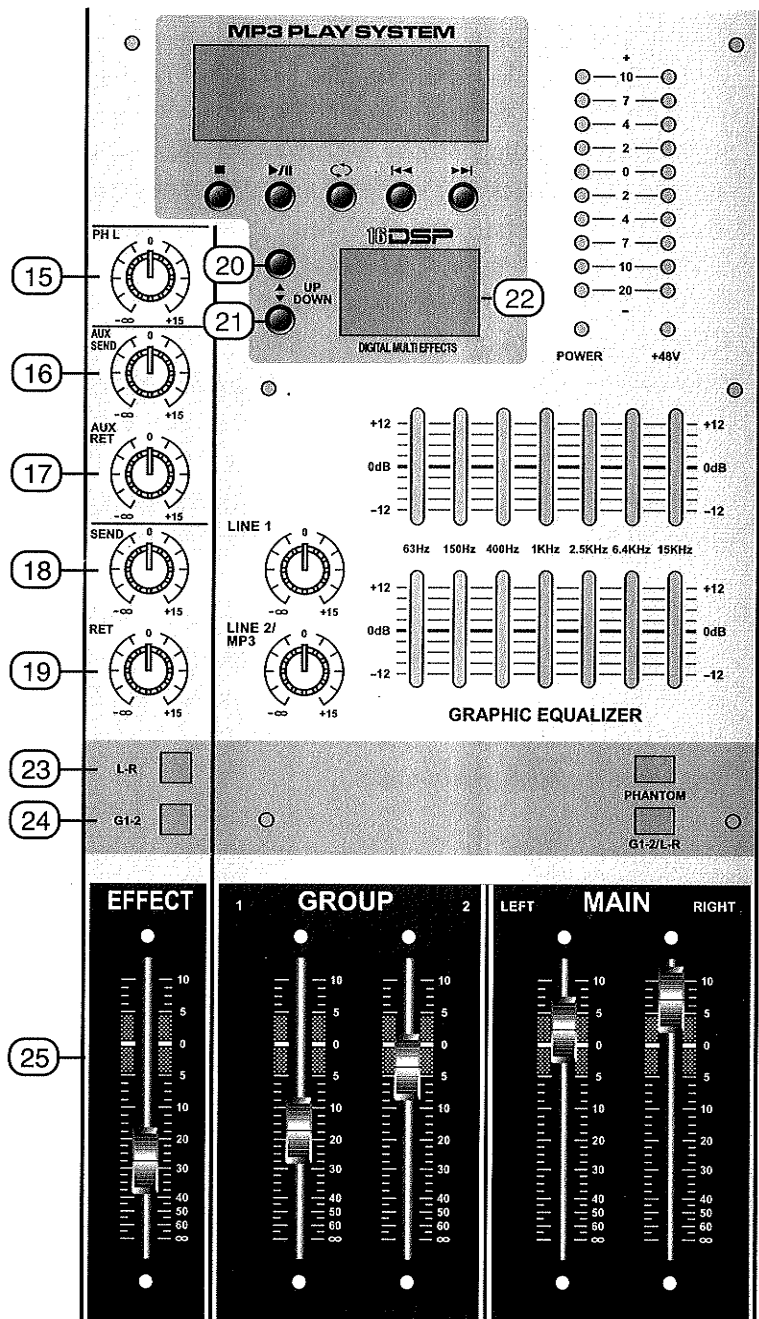
Depressing this switch, can let the EFFECT you need connect to the main control buses.

24. EFFECT GROUP (1-2)

Push the switch, can let the EFFECT you need connect to the main group buses.

25. EFFECT LEVEL

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



26. MP3 PROGRAMS

Indicate MP3 playing function.

27. MP3 PLAYER SYSTEM

STOP ■ (STOP Button)

PLAY/PAUSE ►/II (PLAY/PAUSE Button)

REPE ↻ (REPE Button)

PREV ◀◀ (PREV Button)

NEXT ▶▶ (NEXT Button)

28. LINE 1/LINE2 MP3 LEVEL

You can adjust the volume of line in signal by this when connecting line in.

29. 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 thru this master level indication.

30. POWER LED

The POWER LED will be turned on when start working.

31. PHANTOM LED

The LED will be turned on when strtt working.

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. PHANTOM POWER SWITCH

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

34. L-R/G1-2 SWITCH

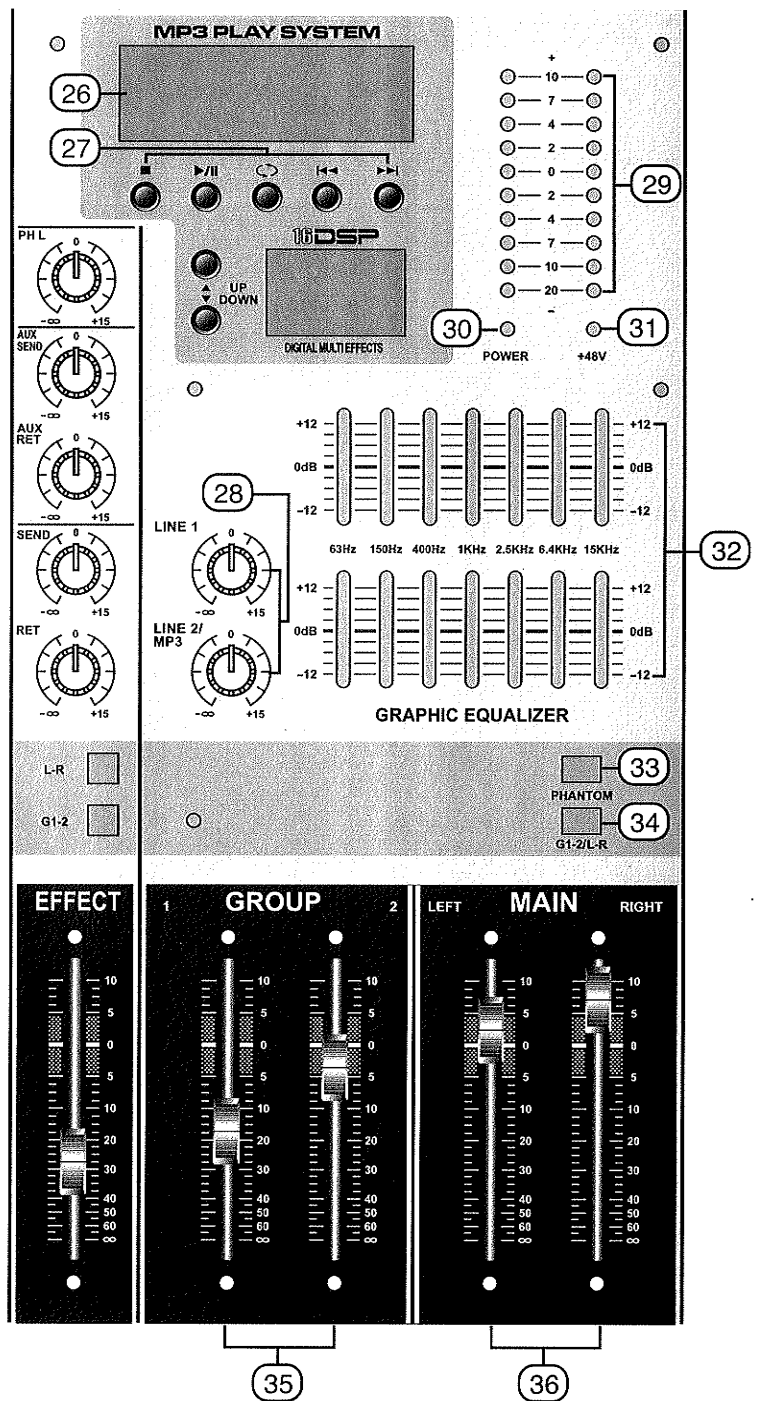
This switch routes the G1-2 mix output to the STEREO bus, allowing G1-2 bus to be used two mono subgroups mixed down to a single output when stereo is not required.

35. OUTPUT GROUPS 1-2 FADERS

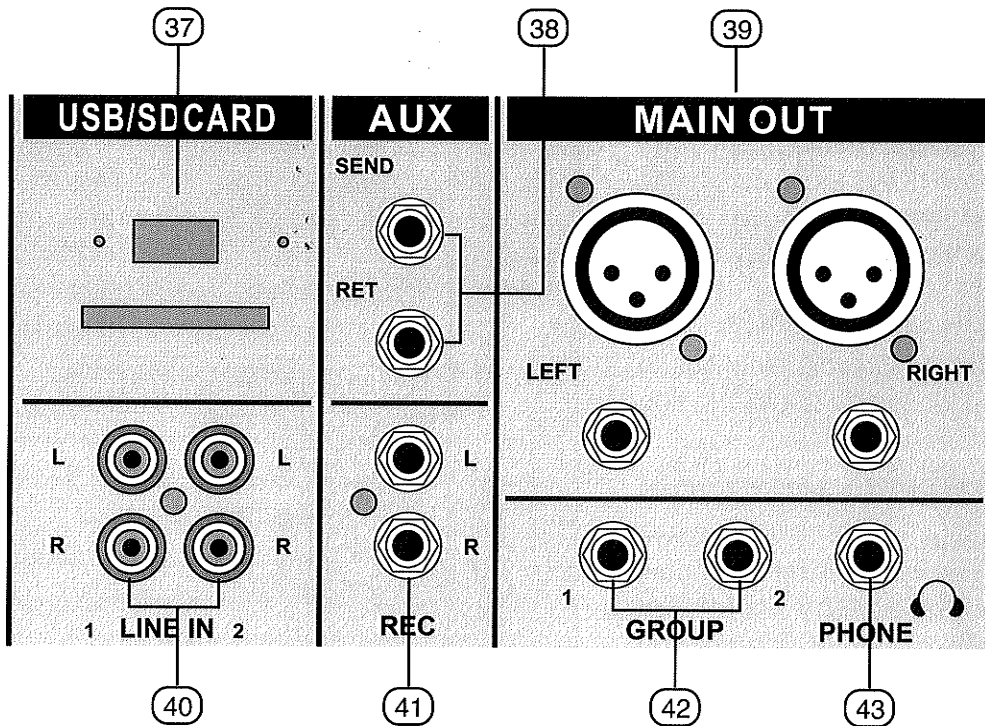
Using by this control, you can adjust G1-2 output level.

36. 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.



C. MIXER OUTPUT SECTION



37. USB / S.D JACK

This is USB / SDCARD Jack,

38. AUX SEND/RETURN JACK

This can be used to connect all kinds of effect form outside.

39. MAIN OUTPUT JACK (LEFT / RIGHT)

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

40. LINE INPUT JACK

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

41. RECORD PIN JACK

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

42. GROUP 1-2 OUTPUT JACK

There are to be output with the volume control against inputting signal into GGOUPS 1-2 board.

43. HEADPHONE JACK

You can monitor working condition by sound thru the headphone.

D. POWER SECTION

44. POWER SWITCH

Push marked (1), when you want to operate. The LED (SEE NO, 30) will be turned on when working

45. POWER JACK This is out of connect the power supply jack.

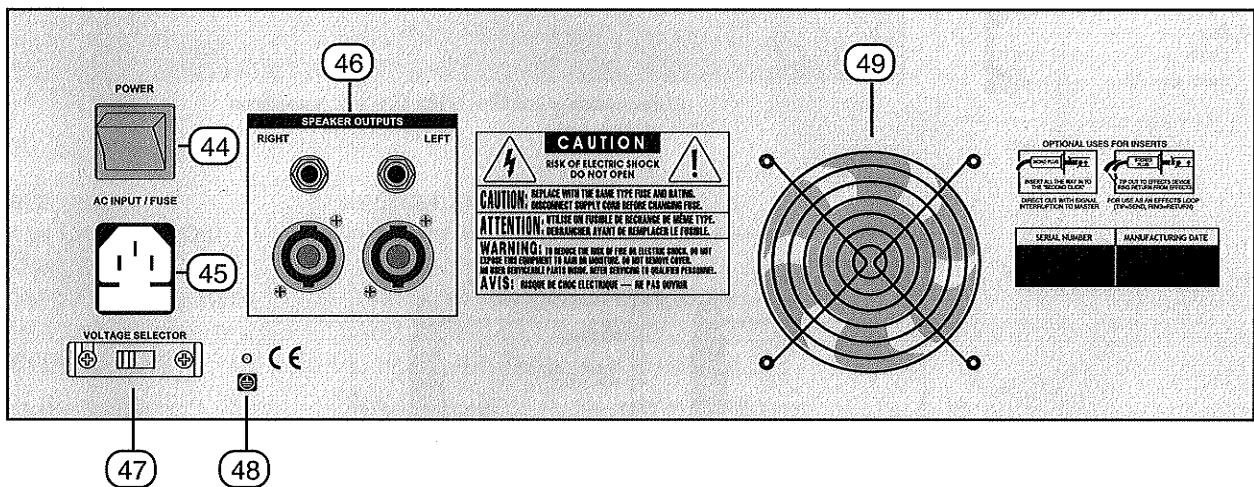
46. SPEAKER JACK This is same functions as below but the using jack is different.

47. VOLTAGE SELECTOR Push the switch, can select voltage you need.

48. CONNECTING EARTH POINT

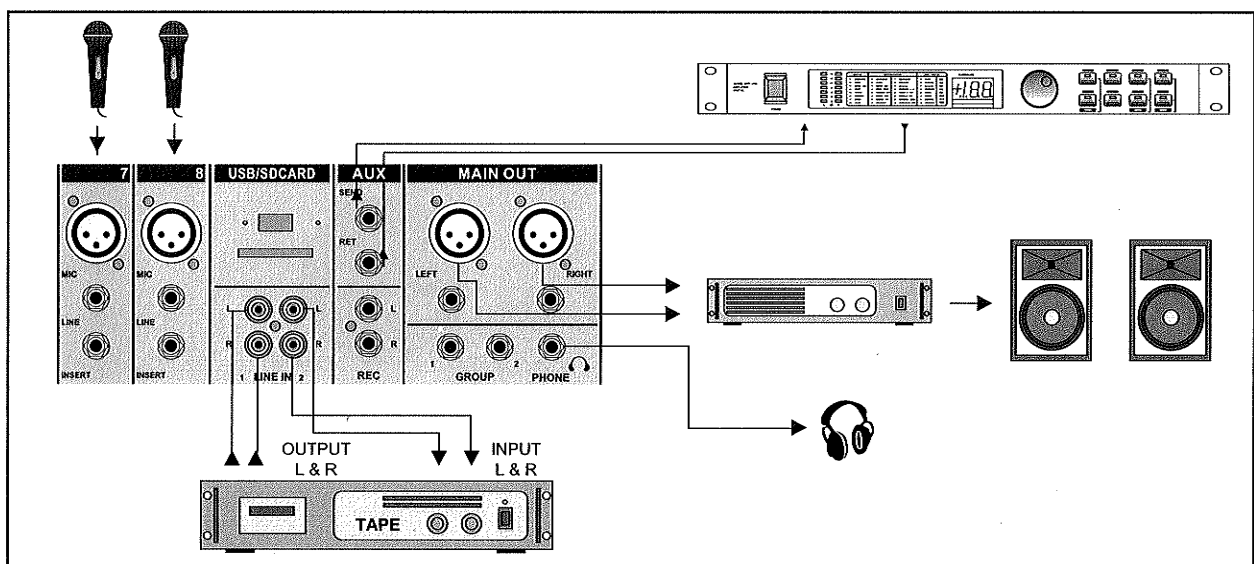
To connect earth line into the ground to protect the device and prevent static electricity from hurting user.

49. FAN Use the switch, it can fan the heat out, protect amplifier against burning.



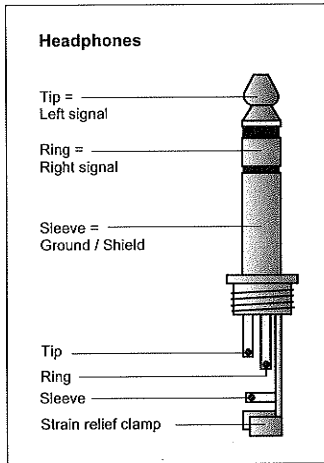
E. INSTALLATION

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

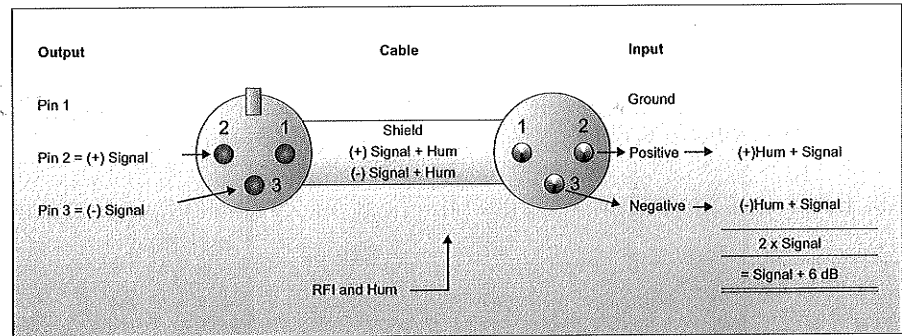


F. CONNECTIONS

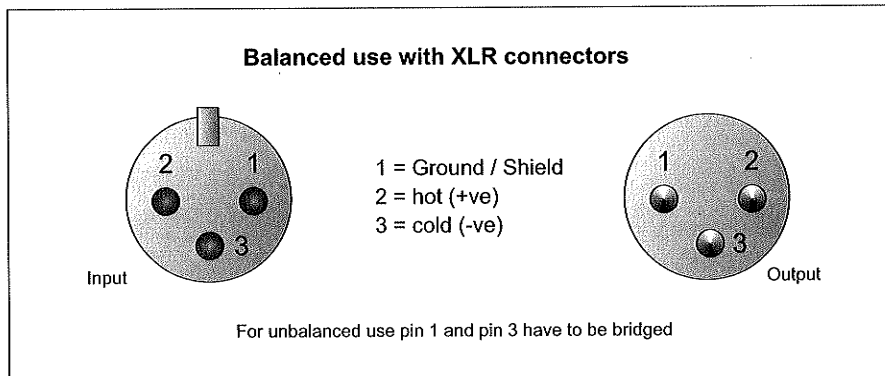
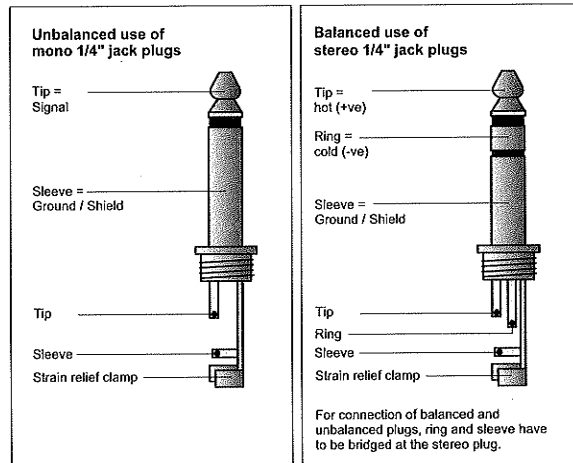
You will need a lot of cables for different purposes - see the following figures to make sure you have got the right ones. Unbalanced equipment may be connected to balanced inputs/outputs. Either use mono 1/4" jacks or connect ring and sleeve of TRS jacks.



Headphone connection



Compensation of interference with balanced connections



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 dBqp, 150 Ohm source -132.0 dBu, input shorted -122.0 dBqp, input shorted
TRIM range	+10dB to +60dB

Line Input	electronically balanced
Bandwidth	10 Hz to 60 kHz \pm 3 dB
Distortion (THD&N)	0.01% at +4 dBu, 1 kHz, Bandwidth 80 kHz
Line level range	+10 dBu to -40 dBu

Equalization	
Hi Shelving	12 kHz +/-15 dB
Mid Range	2.5 kHz +/-15 dB
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

