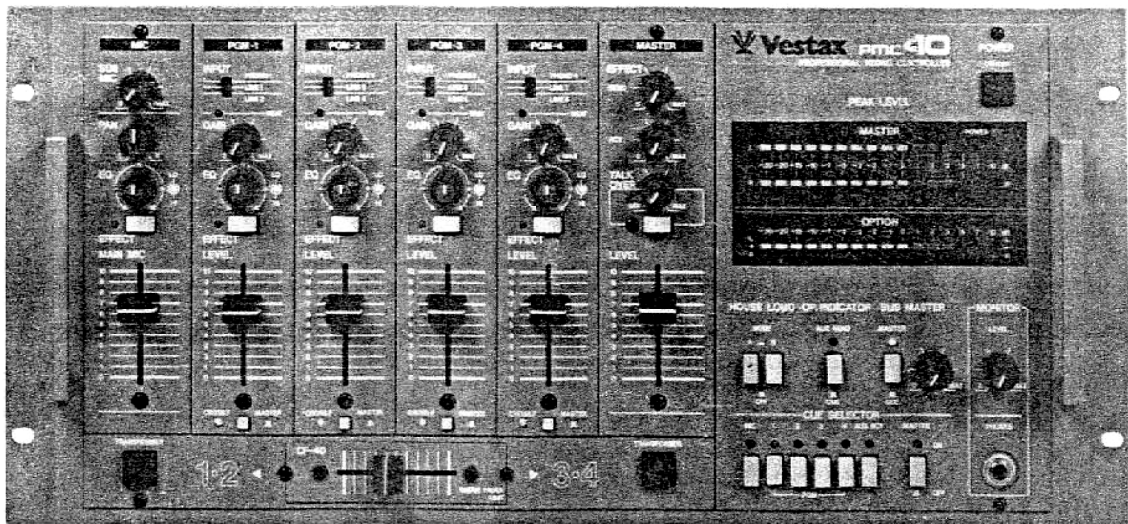




PROFESSIONAL MIXING CONTROLLER

PMC 40

OWNER'S MANUAL



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IMPORTANT

To prevent electric shock, do not remove cover. No user serviceable parts, refer servicing to qualified personnel.

Always disconnect all the equipment from the main supply when disconnecting the signal leads.

The power cord should be connected last. Make sure that the power switch is off when connecting.

Disconnect from AC supply when equipment is not used for an extended period of time.

WARRANTY

Warranty might vary from country to country. Each distributor has their own warranty system in accordance with the country or state regulations. Vestax has manufacturers responsibility for products by the manufacturing country's regulations.

PRECAUTIONS

Please read these instructions before operating this unit.

*Humidity and dust

Avoid use where there is high humidity and dust which may cause damage to internal parts.

*Temperature

Avoid use in hot (over 35 °C) and cold (below 5 °C) locations. Keep the unit away from extreme direct heat such as direct sunlight, heating radiators, or closed vehicles.

*POWER CORD HANDLING

Connecting the power cord to other cords or joining cords together can cause fire and electric shock. This is extremely dangerous.

Take precaution when handling AC plugs and connectors. Handle only the plug or connector and do not perform these operations with wet hands.

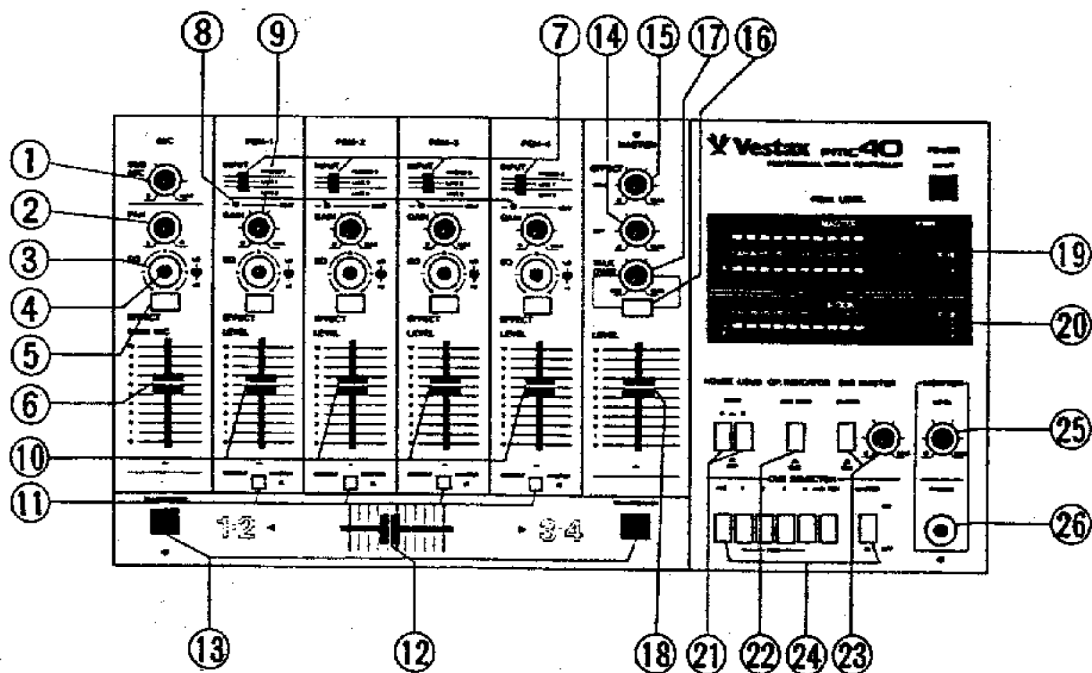
*KEEP AWAY FROM LIQUIDS

Do not stand vessel containing liquids on or near the equipment. If liquid does happen to enter equipment, disconnect the power cord from the power outlet immediately.

FEATURES

* For trouble free operation, read this manual carefully before using your PMC-40

1. 4 channels can be mixed from a total of 12 input (8 Line & 4 Phono : all Stereo)
2. The source input to the various channels can be assigned to the crossfader or master by using the CROSSFADER/MASTER switch. This makes it possible to output Sampling, Rhythm machines etc., independent of the crossfader. Also this allows normal four channel mixing.
3. Each channel is equipped with a gain control, allowing leveling of different level input sources. This means a smooth remix can be obtained.
4. An Effect switch with 5 input modules, makes good timing and dynamic effect techniques possible.
5. A newly added BEAT INDICATOR functions as confirmation of input signals and assists BPM adjustment. Use together with gain controls for best effect.
6. Two microphones, main and sub can be input simultaneously. Mic channels are equipped with 2 band EQ and Pan controls to give the DJ best control.
7. The VESTAX original "Transformer" Switch makes transformer scratching easy. A newly designed Crossfader, employing data and experience learnt over many years, is specially "curved" and has the durability to endure hard scratching of course, maintenance is easy with the VDC, VESTAX Detachable Cross-fader.
8. Microphone Override or Voice Over Muting can be adjusted freely with the volume.
9. In addition to the 16 point PEAK HOLD INDICATOR which is so popular in the PMC-30. An optional indicator is provided. By changing the switch, LEVEL/RHYTHM of desired channel, AUX SEND LEVEL can be monitored.
10. The Monitor section has the same type of program monitor as in current models, Additionally, AUX SEND and MASTER prioritised switches have been fitted together with the channel monitors.
11. A newly developed HOUSE/LOUD system is equipped with three different types of equalizer. Any type of Disco source can be equalized.
12. PMC-40 is equipped with ¼" jack (unbalanced) and XLR (+4dB balanced output). Therefore the mixer can be matched with any commercial SR system.
13. By employing a sub master output, not only are two master outputs available, sub master output also outputs the booth monitor. (This is the same as headphone outputs but at line level).
14. Newly employed SAMPLER OUT outputs the sound of the source selected with the cue button without the fader effecting it.
15. The unit size is EIA 5U. Perfect for rack mounting.



INPUT SECTION

1. SUB MIC (Sub Mic input Adjustment Knob).
This knob used to adjust the input of the sub mic connected to the standard jack on the rear panel.
 2. PAN (Pan Volume)
Sets PAN of main mic connected to XLR CONNECTOR on rear the rear panel.
 3. EQ-HI (Equalizer High)
Auxiliary treble knob. Boosts and cuts of $\pm 12\text{dB}$ are possible above 10KHz .
 4. EQ-LO (Equalizer LO)
Auxiliary bass knob. Boosts and cuts of $\pm 12\text{dB}$ are possible below 100Hz .
- NOTE: In certain cases, it is possible to cause distorted sound by overloading output with low boost. Use the master level meter to check output level.
5. EFFECT SW (Effect Switch)
Used when sending signal to external effectors connected to EFFECT SEND/RETURN jack.
 6. MAIN MIC (Main Mic Input Fader)
Adjusts the input level of the MAIN MIC connected to the XLR connector on the rear panel.
 7. INPUT (Input select Switch)
Used to select the input to be sent to each PGM. Selection of one of the three inputs connected to the rear panel can be programmed as follows.

- PGM 1-Phono 1, Line 1, Line 2
 PGM 2-Phono 2, Line 3, Line 4
 PGM 3-Phono 3, Line 5, Line 6
 PGM 4-Phono 4, Line 7, Line 8

All Phono inputs are RIAA squalised. Connect the output of a CD player or Tape deck to the line input.

NOTE: Phono levels are set for MM type pickup cartridge. When MC type pickup cartridge is used a head amp is required.

8. BEAT INDICATOR
Flashes at peak level in low frequency range of input source. Gain control should be set so that indicator flashes at 2 O'Clock position. However fine adjustment will be required using Gain control and EQ-LO controls for certain tracks.

NOTE: There are some tracks where it will be impossible to count the beat correctly because the bass and bass drum are intermixed. The flashing level can be fine tuned with Gain level and EQ-LO control. However be sure that the output doesn't go over level.

9. GAIN LEVEL
Adjusts input level of each channel. Set INPUT FADER and MASTER FADER at 7-8 position. Set MASTER LED METER to flash occasionally at +5dB.

10. LEVEL (Channel Level Fader)
Used to adjust the input level of the various channels. Usually set at 7-8.

11. CROSSFADER/MASTER (Crossfader/Master Switch)

Used to send signals from each channel to either the crossfader or the master. The corresponding LED will light when a particular channel is routed through the crossfader. Usually select either one of PGM 1 & PGM 2 and either one of PGM 3 and PGM 4.

12. CROSSFADER

Mixes the signals of selected PGM's, (see CROSSFADER/MASTER SWITCH). When the crossfader module requires replacing, change, using part CF-40.

NOTE: When changing the crossfader, make sure it is facing the right direction.

13. TRANSFORMER SWITCH

With the crossfader moved to either right or left, the opposite program can be heard instantly by pressing opposite transformer button.

MASTER SECTION

14. EFFECT RCV (Effect Input Adjustment Knob)

Adjusts the input signal level from an external effector connected to EFFECT RCV jack on the rear panel.

15. EFFECT SEND (Effect Send Output Adjustment Knob)

Adjusts the output signal level to an external effector connected to the EFFECT SEND jack on the rear panel.

NOTE: When the crossfader is used, the signal is taken after crossfader and returned before the master fader. This makes possible a variety of techniques such as the application of echo to a cut out, in which the crossfader would be used.

16. TALK OVER SWITCH

When this switch is depressed, the level of all sources excluding the MAIN and SUB MIC is muted.

17. TALK OVER LEVEL

Mute level can be adjusted by this control. Muting is set to 6dB in the left and 50dB in the right position.

18. LEVEL

Adjusts the signal level outputs from LINE OUT and PA OUT jack on the rear panel.

19. MASTER PEAK LEVEL METER

The bar graph level meters indicate the peak L & R output.

20. OPTION PEAK LEVEL METER

Indicates on the LED bargraph meter, the output of either the AUX SEND or CUE selected by OP. INDICATOR switch.

21. HOUSE LOUD A, B

Three different kinds of equalizer, A, B, A + B are set. Cuts noisy middle range and boosts high and low range. A boosts the super low register and B is set to make the sound tight.

22. OP. INDICATOR SWITCH

Selects the source indicated by OPTION PEAK LEVEL METER. AUX SEND indicates the level of the channel selected by the CUE SELECTOR.

23. SUB MASTER SWITCH & LEVEL

Selects the source and signal level output from the SUB MASTER OUT jack on the rear panel. MASTER output master output and CUE output the source of channel which is selected by CUE SELECTOR.

MONITOR SECTION

24. MONITOR SELECTOR

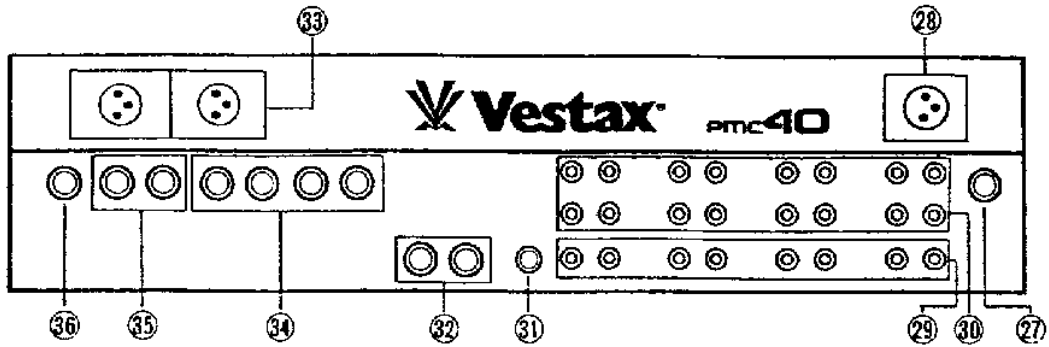
Used to select the cue monitor for programs 1-4, mic channel and effect receive level. When one of the buttons is selected, the contents of the selected program can be heard from the left side of the headphone and the present output can be heard from the right side. This enables both programs to be monitored simultaneously, thus assisting in beat mixing.

25. LEVEL (Headphone Volume)

Adjusts the monitor level through headphones.

26. PHONES (Headphone jack)

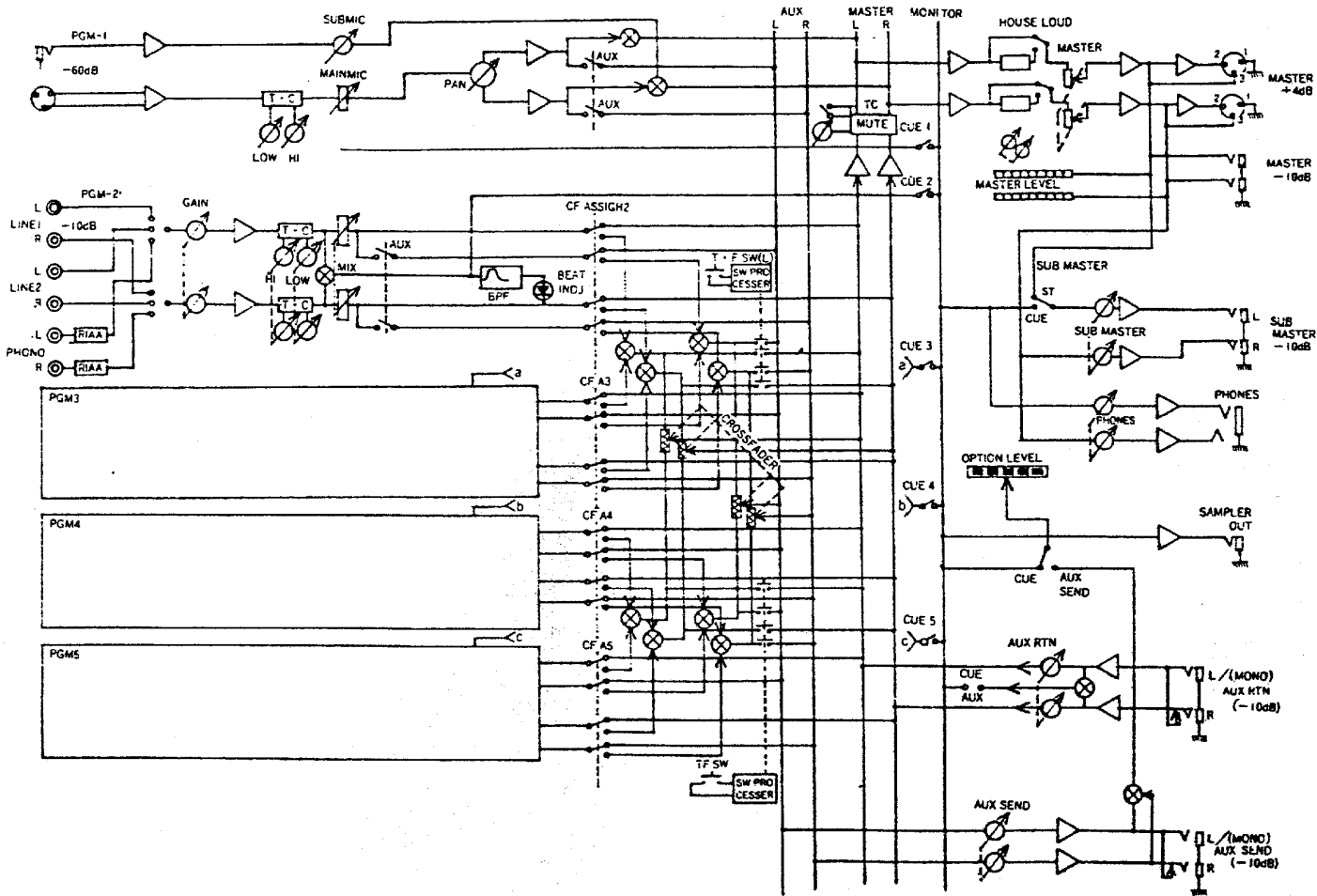
Use this jack to connect the headphones. Headphones from 8 ohm to 600 ohm can be used, 150 ohm is recommended.



REAR PANEL SECTION

27. SUB MIC (1/4" jack)
SUB MIC input connector.
28. MAIN MIC (XLR female pin 3 hot)
Input jack of the main mic.
29. PHONO INPUT L/R
Input jack for each PGM turntable. Connect turntables equipped with MM pickup cartridge.
30. LINE INPUT L/R (1-8)
Input connectors for line level equipment such as CD players, tape decks and VTR's.
31. GND (Ground terminal)
Connect this terminal to ground terminal of the turntable. This helps to reduce noise.
32. LINE OUT L/R (1/4" jack)
Unbalanced output of MASTER output. Connect to the input of power amp.
33. PA OUT L/R (XLR male pin 3 hot)
Balanced output of MASTER output. Connect with the input of power amp.
34. EFFECT SEND/RECEIVE (1/4" jack)
Connect the SEND to the input of an external effector unit. (Delay, Reverb Etc). Connect the RECEIVE to the output of the effector. STEREO IN/STEREO OUT effectors or MONO IN/MONO OUT effectors can be used. Where MONO is connected, use L terminals.
35. SUB MASTER OUT L/R (1/4" jack)
SUB MASTER output jack. Connect to input of power amp as monitor in DJ booth or as separate sound zone for entrance foyer etc.
36. SAMPLER OUT (1/4" jack)
The signal selected by CUE SELECTOR SW is mono output. It can be Sampled by connecting to the input of DSG-1 or DSG-101 without hearing over the PA.

Block Diagram



PMC-40 SPECIFICATION

INPUT SECTION		RATED INPUT	MAXIMUM INPUT	IMPEDANCE
PHONO 1~4 L/R (RCA PIN JACK)		-44dBV	-18dBV	50K ohm
LINE 1~8 L/R (RCA PIN JACK)		-10dBV	+20dBV	18K ohm
MAIN MIC (XLR female 3pin hot) BALANCE		-60dBV	-20dBV	3K ohm
SUB MIC (1/4 inch PHONO JACK)		-60dBV	-22dBV	3K ohm
EFFECT RCA L/R (1/4 inch PHONO JACK)		-15dBV	+20dBV	16K ohm
OUTPUT SECTION		RATED OUTPUT	MAXIMUM OUTPUT	OPTIMUM IMPEDANCE/ OUTPUT IMPEDANCE
PA OUT L/R (XLR male 3pin hot) BALANCE		+4dBV	+25dBV	600 ohm or greater/200ohm
LINE OUT L/R (1/4 inch PHONO JACK)		-10dBV	+12dBV	600 ohm or greater/120ohm
SUB MASTER L/R (1/4 inch PHONO JACK)		-10dBV	+12dBV	10K ohm or greater/200ohm
SAMPLER OUT MONO (1/4 inch PHONO JACK)		-10dBV	+12dBV	10K ohm or greater/220ohm
EFFECT SEND L/R (1/4 inch PHONO JACK)		-10dBV	+10dBV	10k ohm or greater/200 & 1.7ohm
HEADPHONE OUTPUT (1/4 inch PHONO JACK)			90mV	82ohm load
FREQUENCY RESPONSE	MIC (BALANCE +4dB) LINE	30Hz~20Khz +0, -2dB	PEAK LEVEL INDICATER	16 dot indication HOLD FUNCTION HOLD TIME
S/N	MIC (BALANCE +4dB) < INPUT CONVERSION >	120dB or greater	POWER SUPPLY	AC 50/60Hz 10w
CHANNEL CROSSTALK	-65dB or greater		WEIGHT	5Kg
TOTAL HARMONIC DISTORTION	0.1% or less		DIMENSION W×H×D	482×135×220mm

DIMENSION

