



Vestax

Professional Mixing Controller

PMC-500

OWNER'S MANUAL

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CONGRATULATIONS!

Thank you for purchasing the Vestax PMC-500 Professional Mixing Controller. We suggest that you read through this owner's manual thoroughly so that you may enjoy the full use of this product safely and in the knowledge of all its special features and suitable applications.

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	CAUTION RISK OF ELECTRIC SHOCK DO NOT OPEN	
CAUTION : TO REDUCE THE RISK OF ELECTRIC SHOCK DO NOT REMOVE COVER (OR BACK) NO USER-SERVICEABLE PARTS INSIDE REFER SERVICING TO QUALIFIED SERVICE PERSONNEL		



The lightning flash 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 to persons.



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.

TO REDUCE THE RISK OF FIRE OR ELECTRIC SHOCK, DO NOT EXPOSE THIS APPLIANCE TO RAIN OR MOISTURE.

IMPORTANT SAFEGUARDS

READ BEFORE OPERATING EQUIPMENT

This product was designed and manufactured to meet strict quality and safety standards. There are, however, some installation and operation precautions which you should be particularly aware of.

1. Read instructions-All the safety and operating instructions should be read before the appliance is operated.
2. Retain instructions-The safety and operating instructions should be retained for future reference.
3. Heed Warnings-All warnings on the appliance and in the operating instructions should be adhered to.
4. Follow Instructions-All operating and use instructions should be followed.
5. Cleaning-Do not use liquid cleaners or aerosol cleaners. Use a damp cloth for cleaning.
6. Attachments-Do not use attachments not recommended by the product manufacturer as they may cause hazards.
7. Water and Moisture-Do not use this product near water-for example, near a bath tub, wash bowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool, and the like.
8. Accessories-Do not place this product on an unstable cart, stand, tripod, or table. The product may fall, causing serious injury to a child or adult, and serious damage to the appliance. Use only with a cart, stand, tripod, bracket, or table recommended by the manufacturer, or sold with product. Any mounting of the appliance should follow the manufacturer's instructions, and should use a mounting accessory recommended by the manufacturer.
9. This product should never be placed near or over a radiator or heat register. This product should not be placed in a built-in installation such as a bookcase or rack unless proper ventilation is provided or the manufacturer's instructions have been adhered to.
10. Power sources-This product should be operated only from the type of power source indicated on the marking label. If you are not sure of the type of power supply to your home, consult your appliance dealer or local power company.
11. Lightning-For added protection for this product during lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet. This will prevent damage to the product due to lightning and power-line surges.
12. Overloading-Do not overload wall outlets and extension cords as this can result in a risk of fire or electric shock.
13. Object and Liquid Entry-Never push objects of any kind into this product through openings as they may touch dangerous voltage points or short-out parts that could result in a fire or electric shock. Never spill liquid of any kind on the product.
14. Servicing-Do not attempt to service product yourself as opening or removing covers may expose you to dangerous voltage or other hazards. Refer all servicing to qualified personnel.

15. Damage Requiring Service-Unplug this product from the wall outlet and refer servicing to qualified service personnel under the following conditions:
 - a. When the power-supply cord or plug is damaged.
 - b. If liquid has been spilled or objects have fallen into the product.
 - c. If the product has been exposed to rain or water.
 - d. If the product does not operate normally by following the operating instructions. Adjust only those controls that are covered by the operating instructions as an improper adjustment of other controls may result in damage and will often require extensive work by a qualified technician to restore the product to its normal operation.
 - e. If the product has been dropped or cabinet has been damaged.
 - f. When the product exhibits a distinct change in performance-this indicates need for service.
16. Replacement Parts-When replacement parts are required, be sure the service technician has used replacement parts specified by the manufacturer or have the same characteristics as the original parts. Unauthorized substitutions may result in fire, electric shock or other hazards.
17. Safety Check-Upon completion of any service or repairs to product, ask the service technician to perform safety checks to determine that the product is in proper operating condition.
18. Carts and Stands-The appliance should be used only with a cart stand that is recommended by manufacturer.
19. An appliance and cart combination should be moved with care. Quick stops, excessive force, and uneven surfaces may cause the appliance and cart combination to overturn.



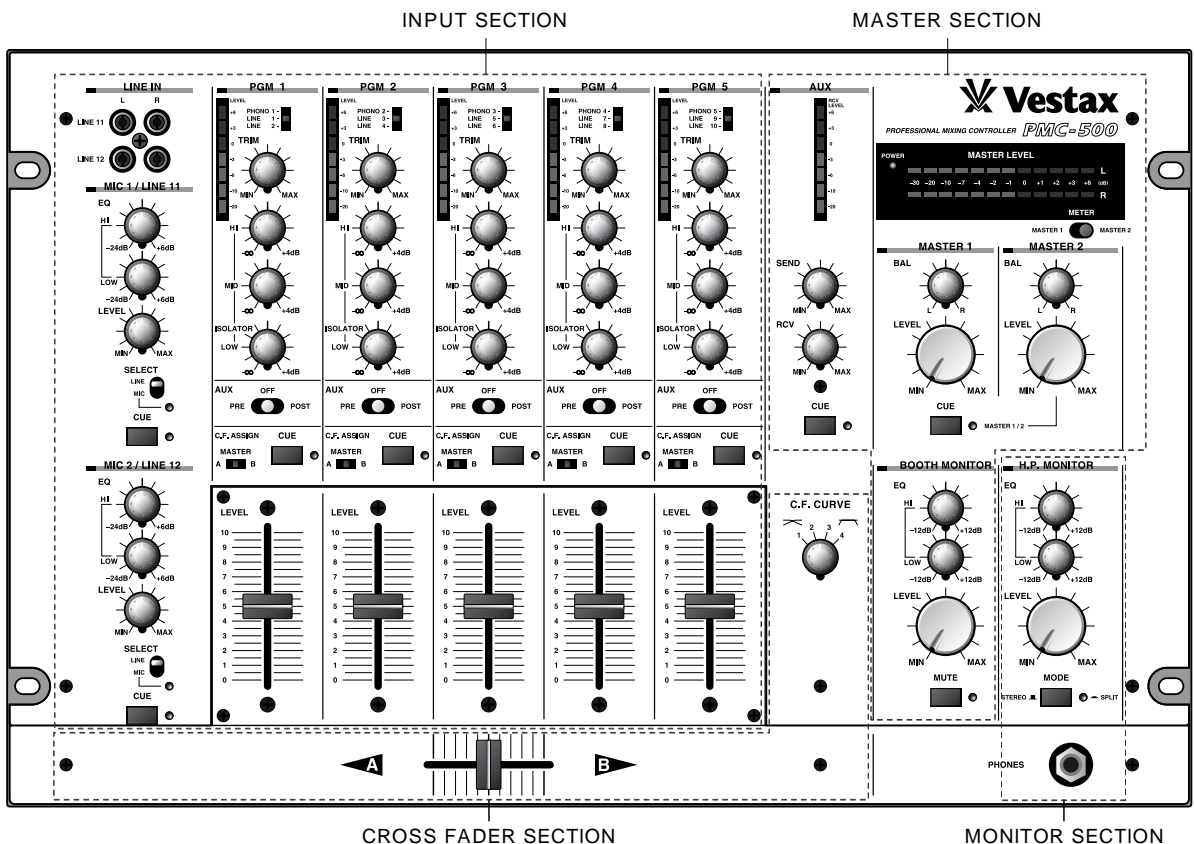
SPECIFICATION

		NOMINAL INPUT	MAXIMUM INPUT	IMPEDANCE
INPUT SECTION	MIC1 (XLR FEMALE 2PIN HOT BALANCE)	-50dBv	-20dBv	3.3k
	MIC2 (1/4 INCH PHONE JACK)	-50dBv	-20dBv	3.3k
	PHONO 1 ~ 5L/R (RCA PIN JACK)	-46dBv	-18dBv	57k
	LINE 1 ~ 12L/R (RCA PIN JACK)	-10dBv	+8dBv	17k
	AUX RCV (1/4 INCH PHONE JACK)	-10dBv	+12dBv	47k
		RATED OUTPUT	MAXIMUM OUTPUT	IMPEDANCE
OUTPUT SECTION	MASTER1/2 L/R (XLR MALE 2PIN, BALANCE)	-6dB	+27dB	600 OVER/440
	MASTER1/2 L/R (1/4 INCH PHONE JACK, UNBALANCE)	0dB, -10dB	+22dB	600 OVER/440
	REC OUT	-10dB	+13dB	750
	BOOTH L/R (1/4 INCH PHONE OUT)	0dB ~ -10dB	+22dB	10k OVER/220
	AUX SEND L/R (1/4 INCH PHONE JACK)	0dB	+22dB	220
	HEAD PHONE (1/4 INCH PHONE JACK)		190mW	8 OVER/68
FREQUENCY RESPONSE	MIC	30Hz ~ 20kHz ±3dB	CROSSFADER CROSSTALK	> 80dB
	LINE	30Hz ~ 20kHz ±1.5dB	CHANNEL CROSSTALK	> 65dB
S/N RATIO	MIC	> 60dB	POWER SUPPLY	AC 100V 50/60Hz 50W
	LINE	> 75dB	DIMENSION(W × H × D)	482 × 308 × 142
FADER ATTENUATION		> 80dB	WEIGHT	7kg

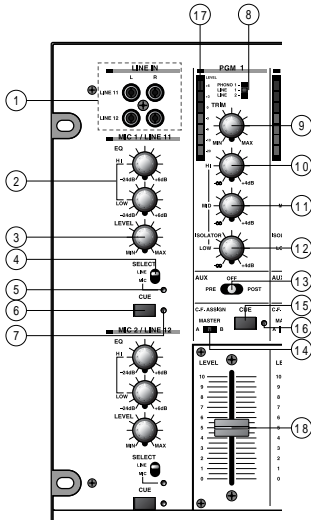
FEATURES

- The PMC-500 has Five (5) dedicated line channels, each with a three (3) band isolator (HI, MID, LOW), seven (7) segment level indicator, numerous input options, great effects controls and super smooth 60mm tight torque rail slide fader.
- Two (2) dedicated MIC channels, which can also be used as line channels. The main MIC channel has a XLR input whilst MIC 2 has an unbalanced (1/4) jack input. Both MIC 1 & 2 have MIC effect loop inputs (1/4) and two (2) band EQ (HI, LOW). Both channels are also switch able to line channels with a LED indicating which channel is active
- Quality Vestax PCV cross fader (user replaceable) with four pre-selectable cross fader curve settings for long or short mixing (scratching and cutting).
- Flexible Auxiliary (AUX) Send and Receive (RCV) controls, both with volume level controls. AUX SEND is pre selectable to Pre, off or post with its own CUE switch. The AUX RCV has a seven (7) segment LED for active level metering.
- Full Master and Booth controls. Both Master 1 & 2 and booth outputs are limitable. The attenuation switch is located under the top panel and pre selectable to -10dB or 0dB. The BOOTH level also has a dedicated two (2) band EQ for accurate monitoring and a BOOTH mute (100%) switch.
- Advanced monitoring and headphone controls with dedicated two (2) band EQ (HI, LOW). The headphone signal is selectable to SPLIT CUE or STEREO CUE.
- Fire Alarm, MUTE function
- High power AC-20 Adapter (+20/-20v, 1500mA).

FUNCTIONS



PROGRAM INPUT SECTION



① LINE INPUT RCA JACK

Input connectors for line level equipment such as CD players, MD players, tape decks, DAT and VTR etc.

② MIC EQ (HI/LOW)

Adjusts the HI and LOW frequencies for the MIC input.

③ MIC LEVEL

Adjusts the input level of the MIC input.

④ MIC/LINE SELECT SWITCH

Selects between MIC and LINE input.

⑤ MIC/LINE CUE LED

When MIC is selected this LED will be illuminated.

⑥ MIC/LINE CUE ON/OFF SWITCH

Sends the signal from the mic channel to the monitor section for headphone monitoring.

⑦ MIC/LINE CUE LED

When CUE is selected this LED will be illuminated.

⑧ INPUT SELECT SWITCH

Selects the input to be sent to each PGM channel. On the five (5) main PGMs you can select from up to three (3) input sources as follows.

- PGM-1PHONO1/LINE1/LINE2
- PGM-2PHONO2/LINE3/LINE4
- PGM-3PHONO3/LINE5/LINE6
- PGM-4PHONO4/LINE7/LINE8
- PGM-5PHONO5/LINE9/LINE10

All phono inputs are RIAA equalized. The line inputs can be assigned to either a CD player, MD player, DAT player, tape deck or other like LINE device.

NOTE

PGM levels are pre-set for MM type (pick up) cartridges. When MC type (pick up) cartridges are used, a head amplifier is required.

⑨ PGM TRIM

Adjusts the input level of each PGM channels. For acoustic clarity, set the INPUT FADER and MASRER FADER to a position of 7-8. Then adjusts the INPUT LEVEL METER ⑰ so as to established an indicated level of about 0dB.

⑩ PGM ISOLATOR HI

Adjusts the HI frequency level of each PGM.

⑪ ISOLATOR MID

Adjusts the MID frequency level of each PGM.

⑫ PGM ISOLATOR LOW

Adjusts the LOW frequency level of each PGM.

⑬ AUX SEND SWITCH

This switch enables the signal from each program to be sent to AUX SEND JACK ④⑨. This signal can be sent to the AUX device in the following three (3) ways;

PRE: The signal before the input fader (after EQ) will be sent to AUX SEND JACK.

POST: The signal after the input fader and crossfader will be sent to AUX SEND JACK.

OFF: No signal will be sent to AUX SEND JACK.

⑭ C.F. ASSIGN SWITCH

Assigns the signals from each of the PGM channels to either side of the crossfader or to MASTER OUT. There are three positions;

AThe PGM is sent to the "A" position or left position of the crossfader.

MASTERThe PGM is sent directly to the master out.

BThe PGM is sent to the "B" position or right side of the crossfader.

⑮ CUE ON/OFF SWITCH

Sends a signal from each PGM to the monitor section for headphone monitoring.

⑯ CUE LED

This LED will be illuminated when the CUE SWITCH ⑮ is on.

⑰ INPUT LEVEL METER

The LED bar level meters indicate the L and R outputs.

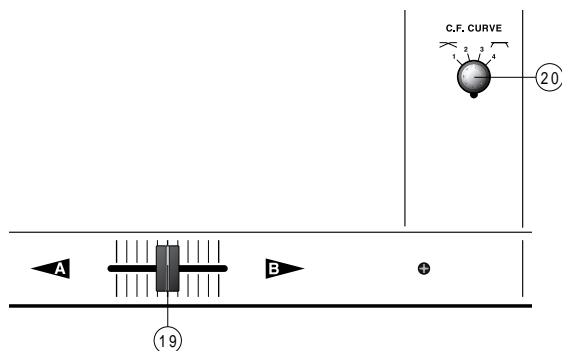
⑱ INPUT FADER

Adjusts the Input level of each program. Typically this fader is set to a position of 7-8. This fader is user replaceable and may be changed easily by following this users guide's instructions carefully.

See "HOW TO CHANGE THE INPUT FADER UNIT".

*Replace this fader with a Vestax IF-500 replacement inputfader.

CROSS FADER SECTION



19 CROSS FADER

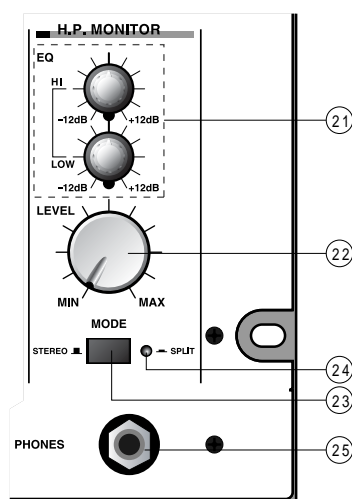
Mixes the signals assigned by the C.F. ASSIGN SWITCH (14) to either side of the crossfader. When the crossfader is set in the center position, both the left and right signals will be heard. This fader is user replaceable and may be changed easily by following this user guide's instructions carefully. See "HOW TO CHANGE THE CROSSFADER".

*Replace this fader with a Vestax CF-PCV replacement inputfader.

20 C.F. CURVE SELECT SWITCH

Adjusts the crossfader curve. A clockwise rotation gives a gentle crossfade, good for long running mixes, whereas a counter clockwise rotation gives a steep crossfade which is good for scratching and cutting.

MONITOR SECTION



23 MONITOR MODE SELECT SWITCH

When this switch is set to "SPLIT", the master signal is always heard through the right ear-cup with the "monitor" PGM being heard in the left ear-cup. The monitor PGM sent the headphone is controlled through the MONITOR MODE SELECT SWITCH. When set to "STEREO" no master output is heard in the headphones, and only the signal selected by MONITOR SELECT SWITCH will be heard in both ear-cups.

24 MONITOR MODE LED

This LED will be illuminated when the MONITOR MODE SELECT SWITCH (23) is on.

25 PHONES JACK

Use this jack to connect headphones. Headphones with an impedance of 8ohm to 600ohm can be used on this unit.

*For best sound quality Vestax recommends using Headphones with 150ohm impedance.

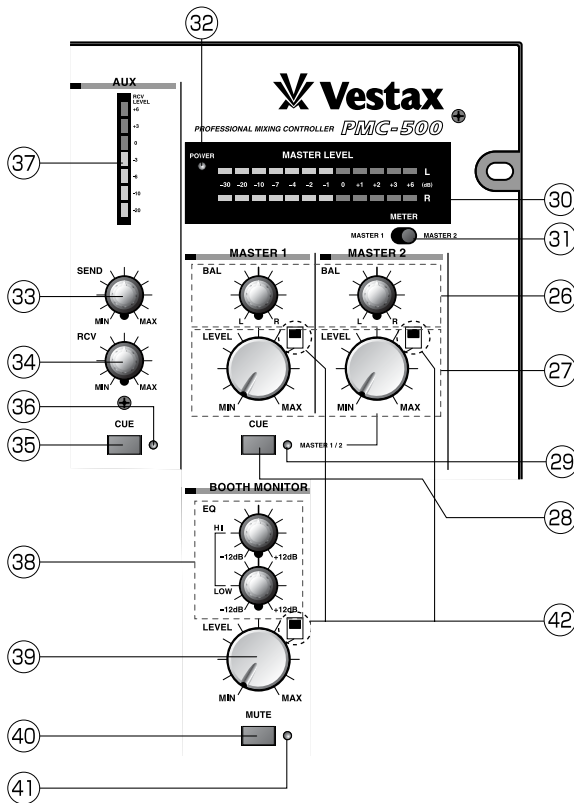
21 MONITOR EQ (HI/LOW)

Adjusts the HI and LOW frequencies for Headphone monitoring.

22 MONITOR LEVEL

Adjusts the headphone monitor level.

MASTER SECTION



②6 MASTER BALANCE 1&2

Adjusts the signal balance of the L to R side of the outputs from MASTER OUT 1&2 JACKS ⑤2 on the rear panel.

②7 MASTER LEVEL 1&2

Adjusts the signal level outputs from MASTER OUT 1&2 JACKS on the rear panel.

②8 MASTER 1&2 CUE SWITCH

Used to send the signal from the MASTER OUT 1&2 to the monitor section for headphone monitoring.

②9 MASTER 1&2 CUE LED

This LED is illuminated when the MASTER 1&2 CUE SWITCH ②8 is on.

③0 MASTER LEVEL METER

This LED bar level meter indicates the L and R outputs.

③1 METER ASSIGN SWITCH

Use this switch to select either MASTER OUT 1 or 2 to be shown in the MASTER LEVEL METER ③0.

③2 POWER LED

This LED will be illuminated when the POWER SWITCH ⑤4 is on.

③3 AUX SEND LEVEL

Adjusts the output level sent to an external effects unit connected to the AUX SEND JACK ④9 on the rear panel. When the crossfader is used, this signal is taken after the crossfader but before the master fader. This makes a variety of techniques possible, such as the application of echo to a cut out in which the crossfader would be used.

③4 AUX RCV LEVEL

Adjusts the input level from an external effect unit connected to the AUX RCV JACK ⑤0 on the rear panel.

③5 AUX CUE ON/OFF SWITCH

Sends the signal of external effects unit connected to the AUX SEND JACK to the MONITOR section for headphone monitoring.

③6 AUX CUE LED

This LED will be illuminated when the AUX CUE SWITCH ③5 is on.

③7 AUX RCV LEVEL METER

This LED bar level meter indicates the level of the AUX RCV JACK signal.

③8 BOOTH OUT EQ (HI/LOW)

Adjusts the HI and LOW frequencies for the BOOTH OUT.

③9 BOOTH OUT LEVEL

Adjusts the output level of BOOTH OUT.

④0 MUTE SWITCH

This switch mutes the signal being sent to BOOTH OUT.

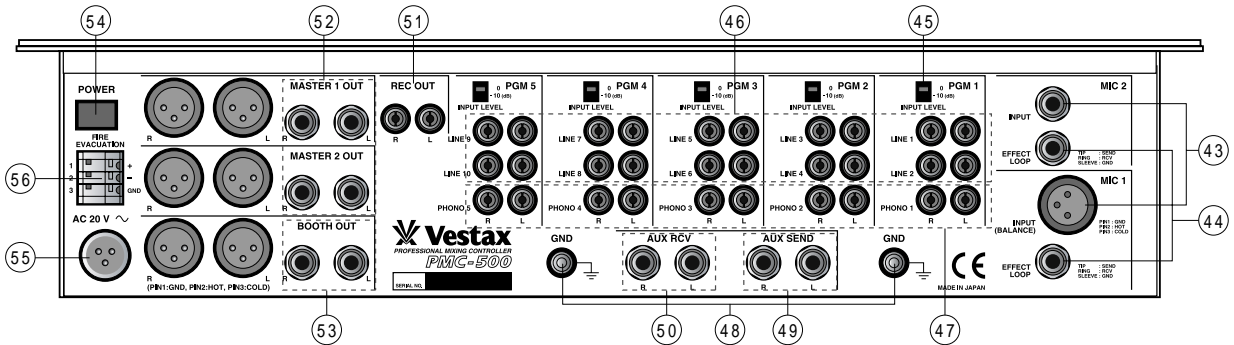
④1 MUTE LED

This LED will be illuminated when the MUTE SWITCH ④0 is on.

④2 MASTER 1&2 & BOOTH OUTPUT LEVEL SELECTOR (ATTENUATION).

Located under the top panel, this switch adjusts the output level for Master 1&2 in addition to the Booth out put level. The PMC-500 is pre-set to a 0dB output level but may be changed to -10dB.

REAR PANEL

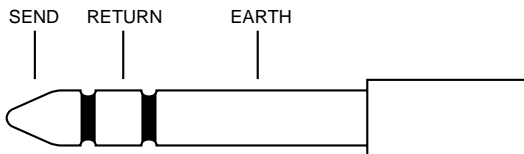


④③ MIC1 INPUT JACK

Input jack for MIC.
 MIC1: PHONE JACK (UNBALANCED)
 MIC2: XLR JACK (BALANCED)

④④ EFFECT LOOP JACK

TIP: SEND OUT
 RING: RETURN INPUT
 SLEEVE: EARTH
 Connects to the input of an external effects device.



⑤① REC OUT JACK

Connects to the input jack of any recording device IE, tape recorder, MD, DAT, etc. The output level of this jack is fixed and does not change with the MASTER LEVEL.

⑤② MASTER OUT1&2 (1/4" PHONE JACK (UNBALANCED), XLR JACK (BALANCED))

Connect to the input on a power amplifier. These jacks are Phone type for consumer applications. This mixer has two sets of MASTER OUT jacks so that the each output level can be set separately. Therefore, the MASTER OUT can be used for main output or sub output IE. One for the main area and the other for entrance.

⑤③ BOOTH OUT (1/4" PHONE JACK (UNBALANCED), XLR JACK (BALANCED))

Connects to the DJ booth monitors.

④⑤ INPUT LEVEL SELECT SWITCH (0dB/-10dB)

Selects the attenuation level for any input signal.

④⑥ LINE INPUT RCA JACK

Input connectors for line level equipment such as CD players, MD players, tape decks, DAT and/or VTR etc.

④⑦ PHONO INPUT RCA JACK

Input jacks for turntables. Connect turntables equipped with MM (pick up) cartridge.

④⑧ GND TERMINAL

Connect this terminal to the ground lead of the turntable. This will help to reduce unnecessary noise.

④⑨ AUX SEND JACK

Connects to the input of external effects devices. (Delay, Reverb, etc)

⑤④ AUX RCV JACK

Connects to the output of external effects devices.

⑤④ POWER SWITCH

Power on/off.

⑤⑤ POWER JACK

Connect the Vestax AC-20, AC adaptor.

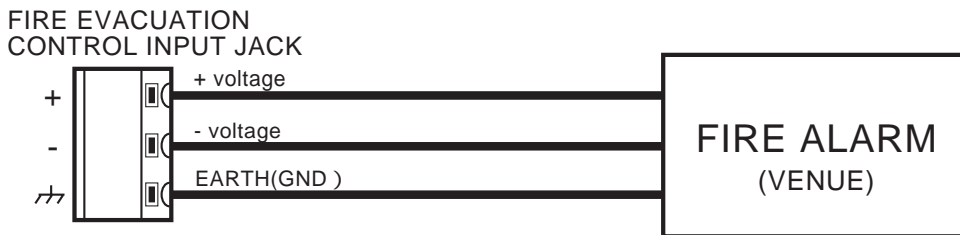
In order to prevent feedback from booth monitors in a typical setting, both MIC1/LINE11 & MIC2/LINE12 cannot be heard through the booth monitor section. These 2 PGMs can however be monitored through the headphone section. An internal modification is needed in order to allow these a PGMs to be heard through the booth monitor section. Please consult a Vestax Technical Support Representative before attempting any such modification.

54 FIRE EVACUATION CONTROL (JACK)

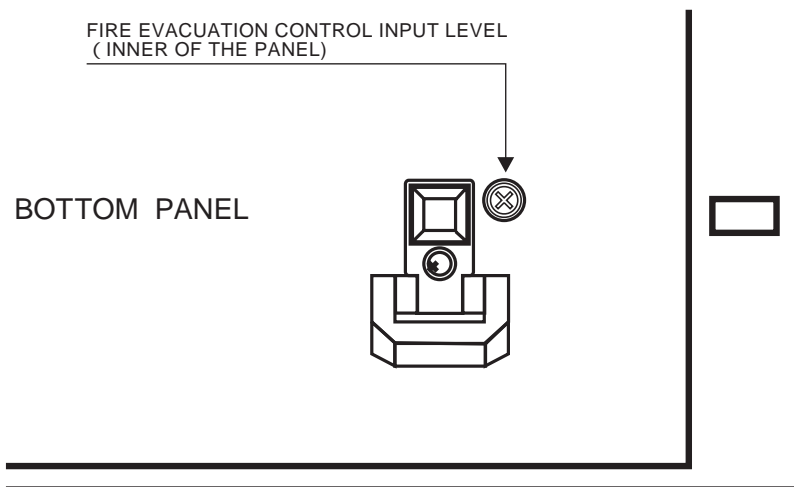
This feature has been added in order to ensure that venues using the PMC-500 are in compliance with modern fire safety standards. If a Fire Alarm is correctly connected to the PMC-500 and is triggered in an evacuation emergency, the PMC-500 will react to such a signal (alarm) by swiftly canceling the

output of all but the MIC signal(s). Keeping the MIC signal(s) open will thus allow the PMC-500 operator to broadcast any necessary evacuation procedures ensuring that all present are quickly and safely notified in an emergency.

Connection to the Fire Evacuation Control Jack can be accomplished as illustrated.



When a signal of greater than -20dB is sent through the Fire Evacuation Control Jack to the PMC-500, both the Master Out and Booth Out volume levels (excepting MIC) will automatically decrease to -18dB, thereby facilitating the broadcast of any emergency information clearly.



Professional installation users may wish to alter the sound output level further. In order to do so please make any such adjustment by using the Fire Evacuation Control Trim (screw) located on the bottom panel of the PMC-500. (This screw is located next to the left leg stand).

HOW TO CHANGE THE INPUT FADER UNIT

Change to "IF-500"

- ① Re1.Remove the fader knobs. (See fig-a)
- ② Remove the 4 screws which fix the input fader panel to the mixer. (See fig-b)
- ③ Remove the 2 screws which fix the input fader. (See fig-c)
- ④ Remove the input fader, and carefully remove the multi-cable connector from the fader unit. (See fig-d)
- ⑤ Replace the fader unit making sure that the connector wires are securely fastened before carefully positioning the fader unit and affixing with screws.

fig-a

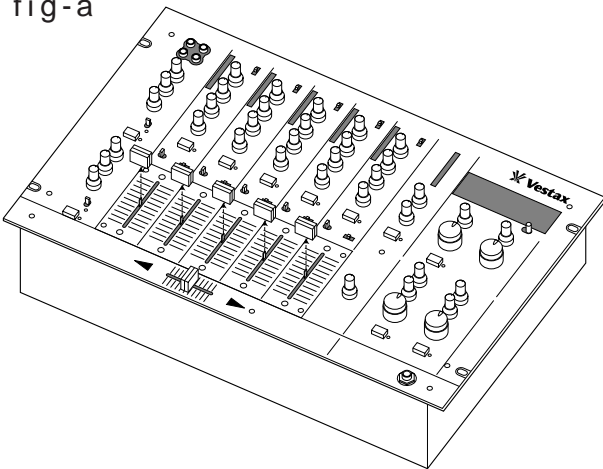


fig-b

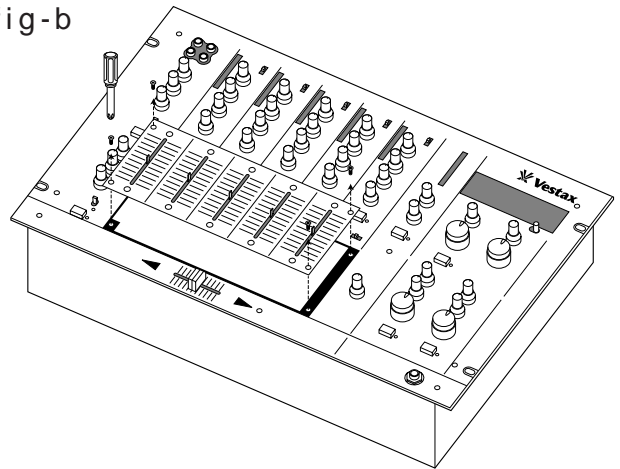


fig-c

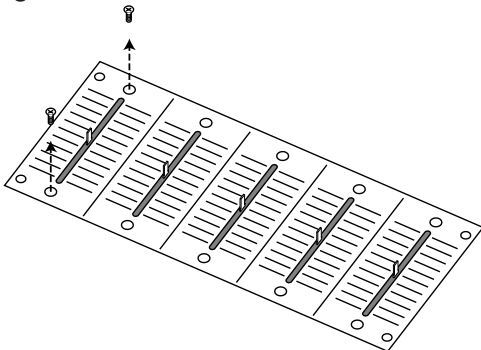
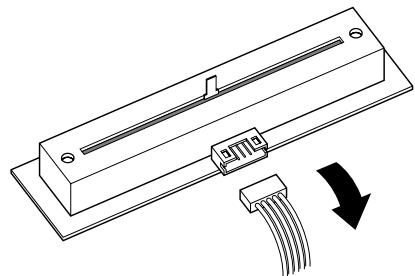


fig-d



HOW TO CHANGE THE CROSSFADER UNIT

Change to "CF-PCV"

- ① Remove the fader knob and 3 screws which fix the crossfader panel, and the carefully remove the panel. (See fig-e)
- ② Remove the 2 screws affixing the crossfader unit. (See fig-f)
- ③ Carefully remove the multi-cable connector from the fader unit. (See fig-g)
- ④ Remove the fader knob of the new CF-PCV. (See fig-h)
- ⑤ Replace the fader unit making sure that the connector wires are securely fastened before carefully positioning the fader unit and affixing with screws.

fig-e

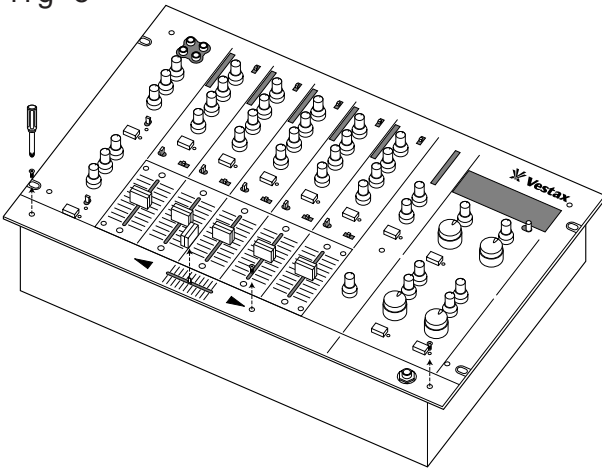


fig-f

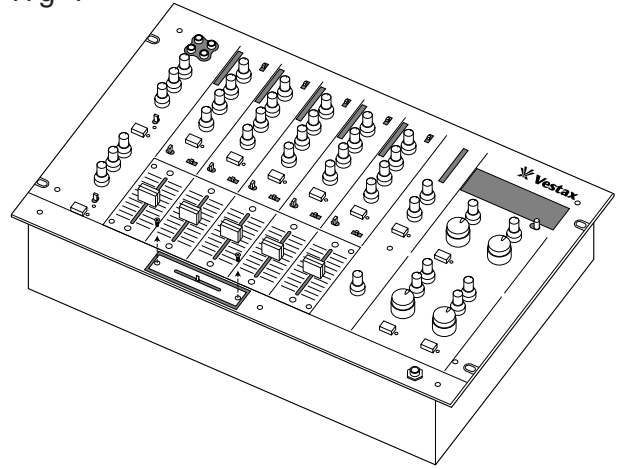
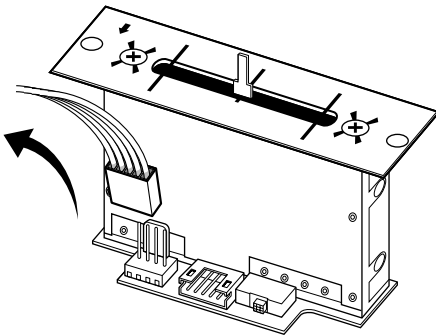
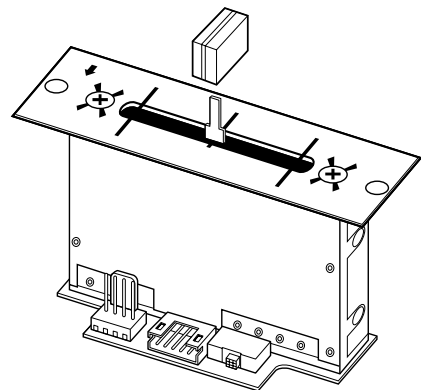


fig-g

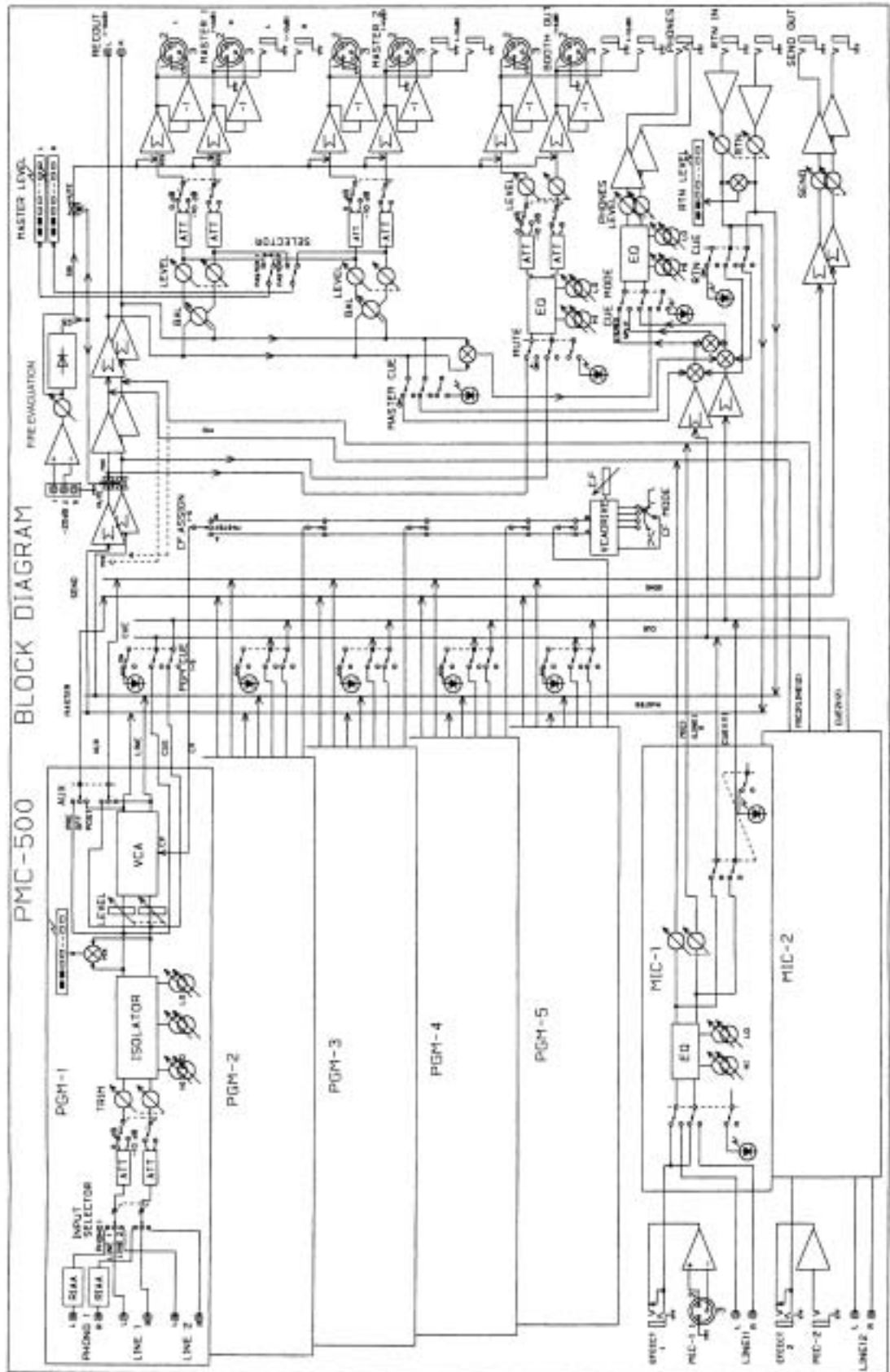


Set side switch to "PMC" position

fig-h



BLOCK DIAGRAM



482

