



Professional Mixing Controller

PMC-CX

OWNER'S MANUAL

Vestax Corporation

1-18-6 Wakabayashi, Setagaya-ku, Tokyo 154-0023 Japan
Phone 03-3412-7011 Fax 03-3412-7013
Web : www.vestax.com

Vestax (Europe) Ltd.

Unit 5 Riverway Industrial Park Alton Hampshire GU34 2QL England, U.K.
Phone (0)1420-83000 Fax (0)1420-80040
Web : www.vestax.co.uk

Vestax Europe Technical Support

Rheinstr.213 D-53332 Bornheim Germany
Phone 49(0)2222-95-23-72 Fax 49(0)2222-95-23-74

CONGRATULATIONS!

Thank you for purchasing the Vestax PMC-CX 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.

SIZE

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.

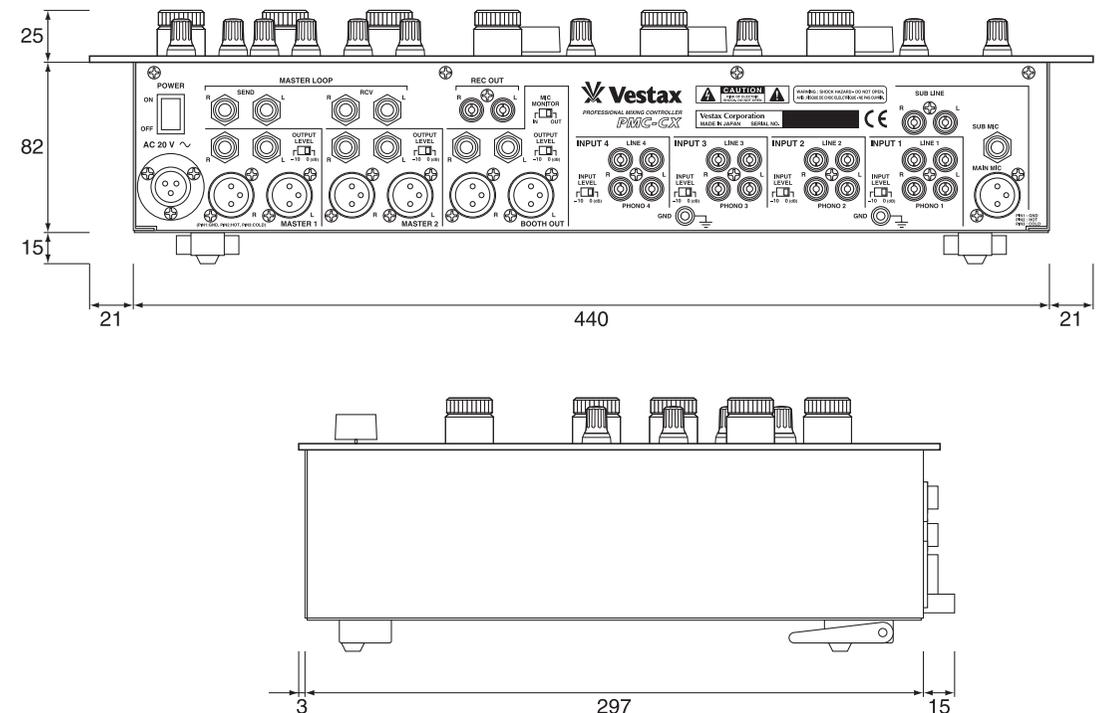
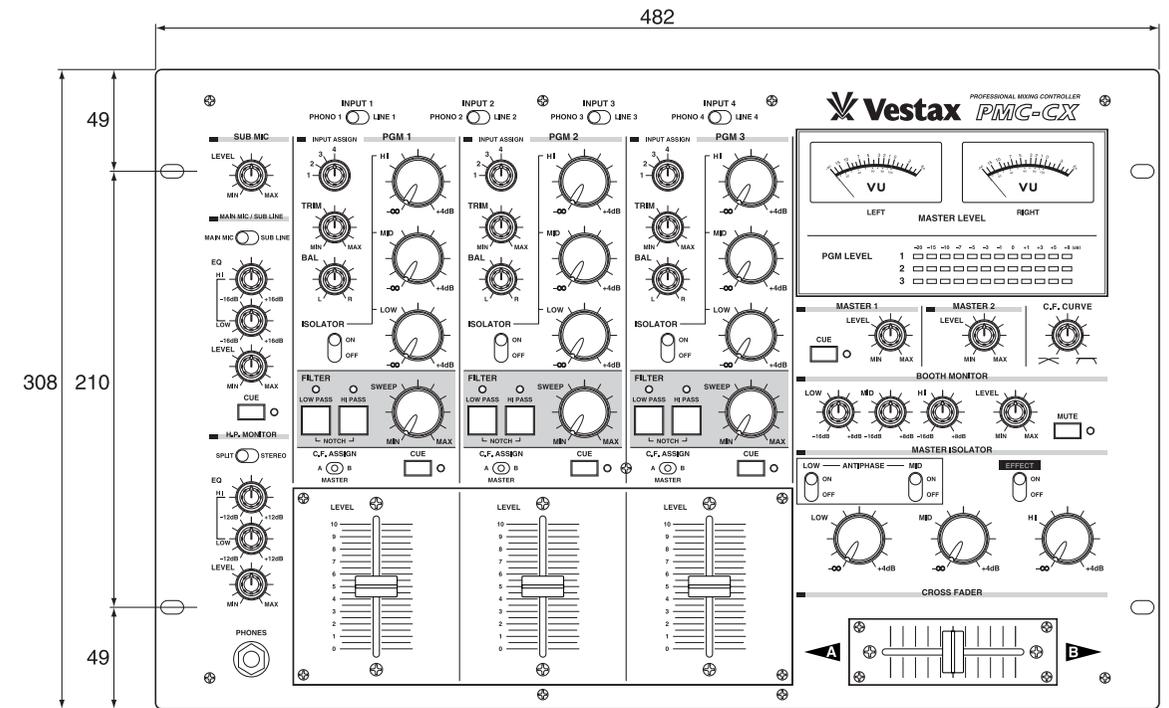


FEATURES

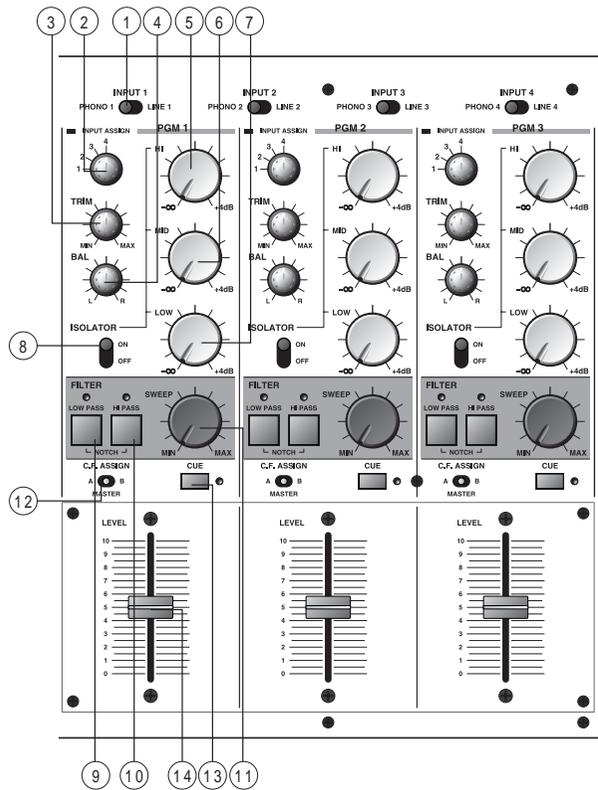
- The PMC-CX was built to give Carl Cox what he always wanted. A solid, reliable, high quality mixer, that has enough features to allow him to give 110% during every performance, every time. Specifically the PMC-CX includes a number of features that will definitely give you a lot more creative freedom whilst "in the mix". Such as 3 band isolators & great high, low and notch filters on each PGM, a master out isolator section with anti phase and a matrix input control so you can mix in and out of inputs quickly and easily. Regardless of your skill level you will find the CX enjoyable and easy to use because of its layout and great features, but you will fall in love with it because of its high quality components and design.
- Matrix Input Assign**
- The matrix input assign on the PMC-CX is an innovative and useful feature that allows you to select or route any input source on/to any channel. On the PMC-CX you are able to route inputs connected on one channel to any other channel. It is also possible to route the one input signal across all three PGMs with this feature, for more information read below.

3 Band Isolators on each PGM

- The PMC-CX features a superb 3-band isolator on each PGM. The isolators on the PMC-CX offer infinity cut (100%) with a boost of +4dB. This means that you can cut out 100% of the Low, Mid and Highs or boost them by 4dB. In addition to being able to make adjustments using the isolator volume knobs, the isolator feature is selectable to either on or off. When used in tandem with the Matrix Input Assign feature a user can set up the isolator levels for one track across all three PGMs and then use the input faders or cross fader to control what is heard (PGM1 = Low cut, PGM2 = Mid cut & PGM3 = high cut). By using the system this way there is more precise control and a lot more room for dynamic (physical) changes in the frequency structure of a particular track.



PROGRAM SECTION



① PHONO / LINE SELECTOR

Selects the signal (PHONO or LINE) to be sent to each INPUT. All phono inputs are RIAA equalized. Connect the output of a CD player, MD player, and tape deck to the line input.

② INPUT ASSIGN SWITCH

Selects the input to be sent to each PGM channel.

③ PGM TRIM VOLUME

Adjusts the input level of each PGM channel. PGM LEVEL METER to indicate at about 0dB.

④ PGM BALANCE VOLUME

Adjusts the stereo balance for each PGM channel. Can be used for adjusting the unbalanced stereo image. Clockwise rotation from center position increases the volume of R over L channel. A counter clockwise rotation increases the volume of L channel over R.

⑤ PGM ISOLATOR HI

Adjusts the HI frequency level of each PGM.

⑥ PGM ISOLATOR MID

Adjusts the MID frequency level of each PGM.

⑦ PGM ISOLATOR LOW

Adjusts the LOW frequency level of each PGM.

⑧ ISOLATOR ON/OFF SWITCH

When set to "OFF", a full range signal is transmitted regardless of the position of any isolator controls.

⑨ HI PASS FILTER SWITCH

On each PGM is a Hi Pass Filter Switch. Pressing this switch activates the high pass filter and when on the indicator LED will illuminate. The cut off frequencies for this filter can be adjusted by the SWEEP volume rotary dial ⑪. If this switch is pressed simultaneously with the Low Pass Filter switch the resulting effect is a Notch Pass Filter.

⑩ LOW PASS FILTER SWITCH

On each PGM is a LOW pass filter switch. Pressing this switch activates the low pass filter for that PGM. When on the indicator LED will be illuminated and this filter will remove sound frequencies below the cut off point. The cut off point can be adjusted by using the SWEEP volume rotary dial ⑪. If this switch is pressed simultaneously with the High Pass Filter switch the resulting effect is a Notch Pass Filter.

⑪ SWEEP VOLUME

This rotary dial is used to adjust the filter cut off points on each PGM. A rotation to the left will result in a movement away from the High frequencies towards the Low frequencies. Vice versa a movement to the right will result in a movement away from the Low frequencies towards the High frequencies.

⑫ 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.

MASTER ...The PGM is sent directly to the master out.

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

⑬ CUE SWITCH

Sends a signal from each PGM to the monitor section for headphone monitoring. When switch is on, an indicator lights up.

⑭ INPUT LEVEL VOLUME

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 FADER UNIT".

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

CROSS FADER

Change to "CF-50"

① Remove the fader knob and 4 screws which fix the crossfader panel, and the carefully remove the panel. (See fig-e)

② Remove the 2 screws affixing the crossfader. (See fig-f)

③ Carefully remove the multi-cable connector from the fader unit. (See fig-g)

④ Remove the fader knob and the fader panel of the new CF-50. (See fig-h)

⑤ Attach the fader panel to the new CF-50.

⑥ Replace the fader unit making sure to that the connector wires are securely fastened before carefully positioning the fader unit and affixing screws.

fig-e

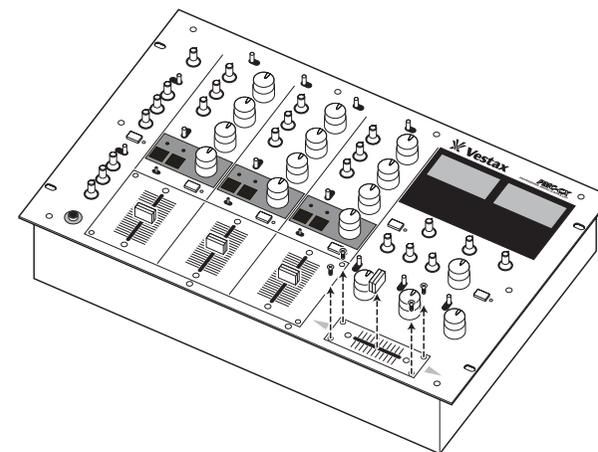


fig-f

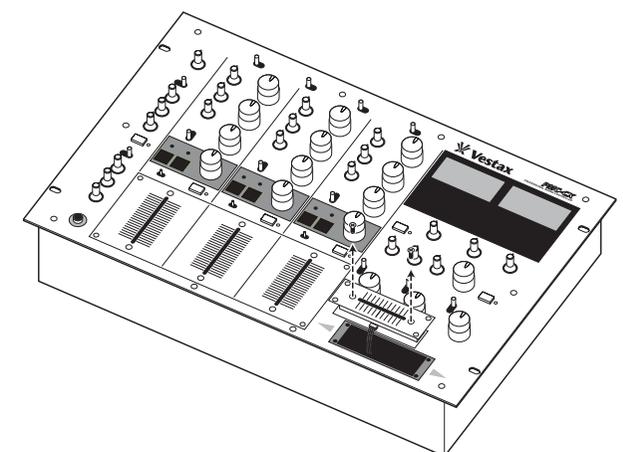


fig-g

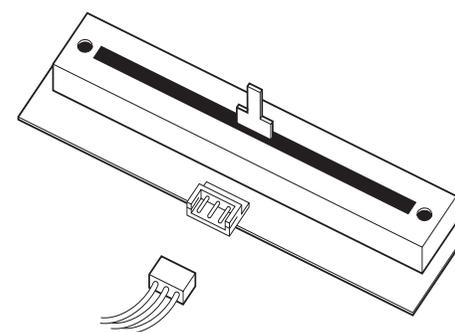
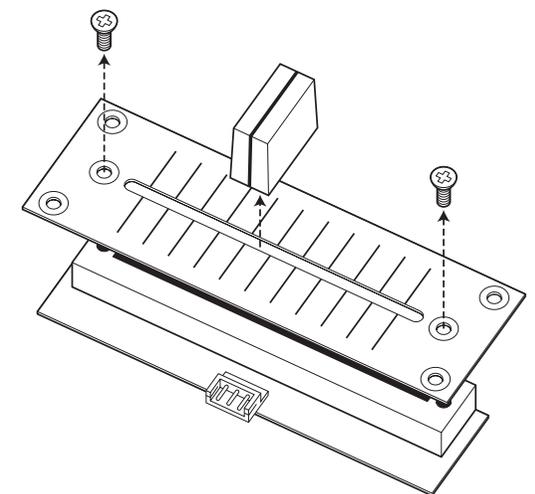
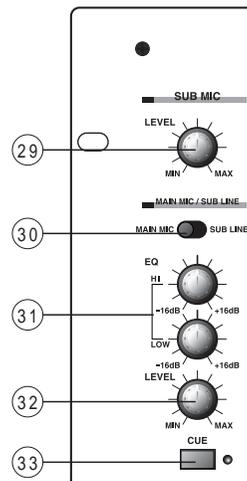


fig-h

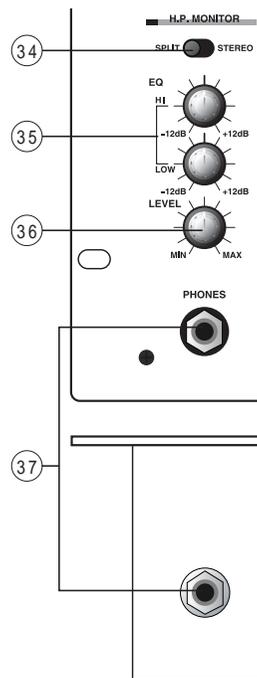


MIC / LINE SECTION



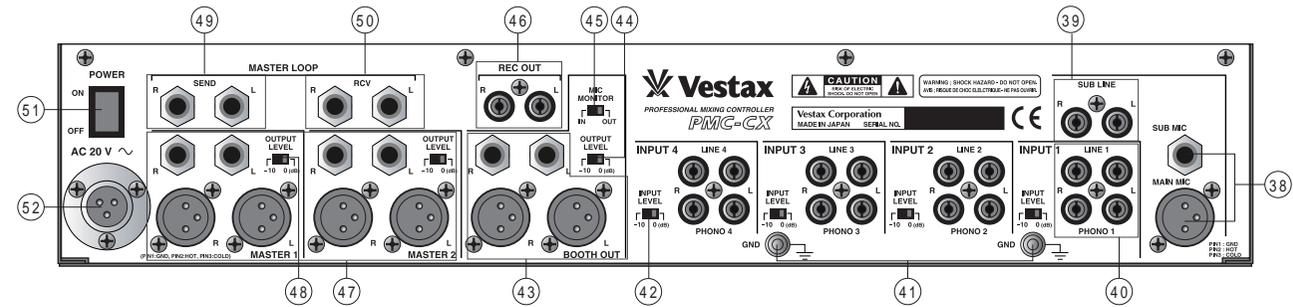
- ②9 **SUB MIC LEVEL VOLUME**
Adjusts the input level of the SUB MIC input.
- ③0 **MAIN MIC / SUB LINE SELECTOR**
Selects between MAIN MIC and SUB LINE input.
- ③1 **MIC / LINE EQ VOLUME**
Adjusts the HI and LOW frequencies for the signal chosen by MAIN MIC / SUB LINE SELECTOR.
- ③2 **MIC / LINE LEVEL VOLUME**
Adjusts the input level of the MAIN MIC or SUB LINE input.
- ③3 **MIC / LINE CUE SWITCH**
Sends the signal from the MIC or LINE channel to the monitor section for headphone monitoring. When switch is on, an indicator lights up.

MONITOR SECTION



- ③4 **SPLIT / STEREO SELECTOR**
When this switch is set to "SPLIT", the master signal is always heard through the right ear-cup of the headphone. The signal selected by each CUE SWITCH will be heard in the left ear-cup. This enables both programs to be monitored simultaneously, thus assisting in beat mixing. When this switch is set to "STEREO" no master output is heard in the headphones, and only the signal selected by each CUE SWITCH will be heard in both ear-cups.
- ③5 **HEADPHONE EQ VOLUME**
Adjusts the HI and LOW frequencies for Headphone monitoring.
- ③6 **HEADPHONE LEVEL VOLUME**
Adjusts the headphone monitor level.
- ③7 **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.

REAR PANEL



- ③8 **MAIN/SUB MIC JACK**
[MAIN MIC: XLR JACK (BALANCED), SUB MIC: PHONE JACK (UNBALANCED)]
Input jack for MIC.
- ③9 **LINE INPUT JACK**
[LINE: RCA PIN JACK, SUB LINE: 1/4' PHONE JACK (UNBALANCED)]
Input connectors for line level equipment such as CD players, CD-R/RW players, MD players, tape decks, DVD players, DAT and VTR etc.
- ④0 **PHONO INPUT JACK**
[RCA PIN JACK]
Input jacks for turntables. Connect turntables equipped with MM (pick up) cartridge.
- ④1 **GND TERMINAL**
Connect this terminal to the ground lead of the turntable. This will help to reduce unnecessary noise.
- ④2 **INPUT LEVEL SELECT SWITCH (-10/0dB)**
Select the attenuation level for the input.
- ④3 **BOOTH OUT JACK**
[1/4' PHONE JACK (UNBALANCED), XLR JACK (BALANCED)]
Connects to the DJ booth monitors. This signal is identical to the HEADPHONE OUT signal.
- ④4 **BOOTH OUT LEVEL SELECT SWITCH**
Select the attenuation level for the BOOTH OUT.
- ④5 **MIC MONITOR IN/OUT SWITCH**
Select whether the signal connected to MAIN/SUB MIC is mixed with the signal outputted from MASTER OUT1/2.
- ④6 **REC OUT JACK**
[RCA PIN JACK]
Connects to the input jack of a recording device IE, tape recorder, MD, DAT, etc. The output level of this jack is fixed and does not change with the MASTER LEVEL.
- ④7 **MASTER OUT 1/2 JACK**
[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.
- ④8 **MASTER OUT LEVEL SELECT SWITCH (-10/0dB)**
Select the attenuation level for the BOOTH OUT.
- ④9 **MASTER LOOP SEND JACK**
[1/4' PHONE JACK]
Connects the input terminal of an external effector. (Delay, Reverb, etc.)
- ⑤0 **MASTER LOOP RCV JACK**
[1/4' PHONE JACK]
Connects the output terminal of an external effector.
- ⑤1 **POWER SWITCH**
Power on/off.
- ⑤2 **AC IN JACK**
Connect the Vestax AC-20, AC adaptor.

HOW TO CHANGE THE FADER UNIT

INPUT FADER

Change to "IF-500"

- ① Remove the fader knob. (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 to that the connector wires are securely fastened before carefully positioning the fader unit and affixing with screws.

fig-a

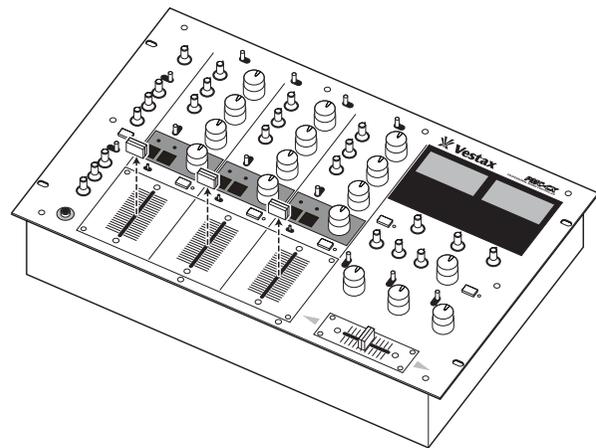


fig-b

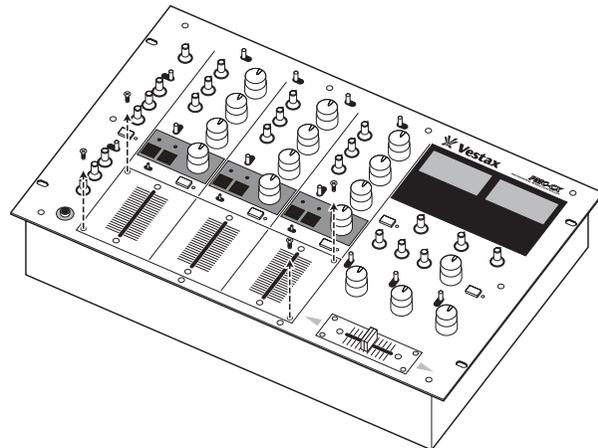


fig-c

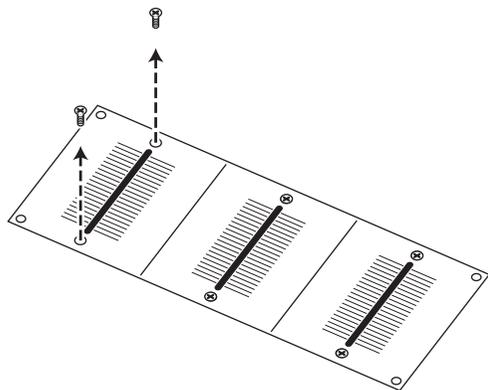
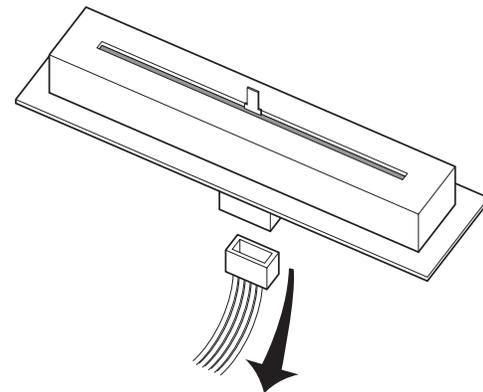
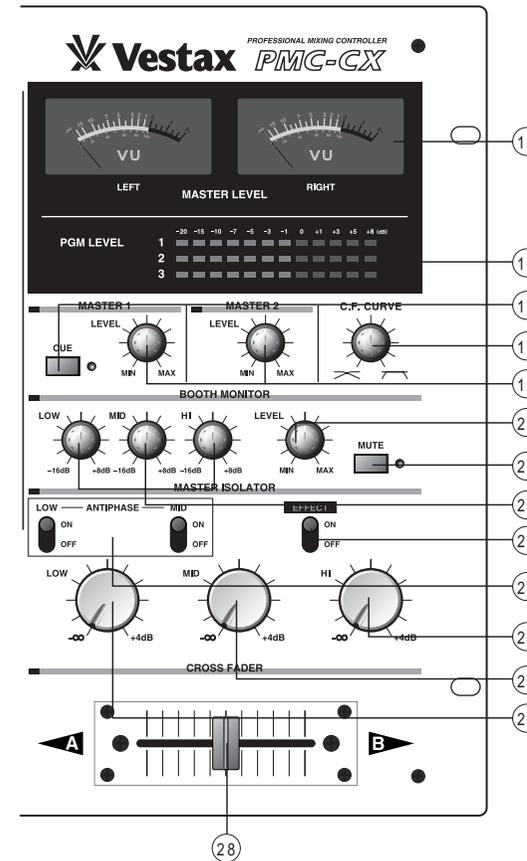


fig-d



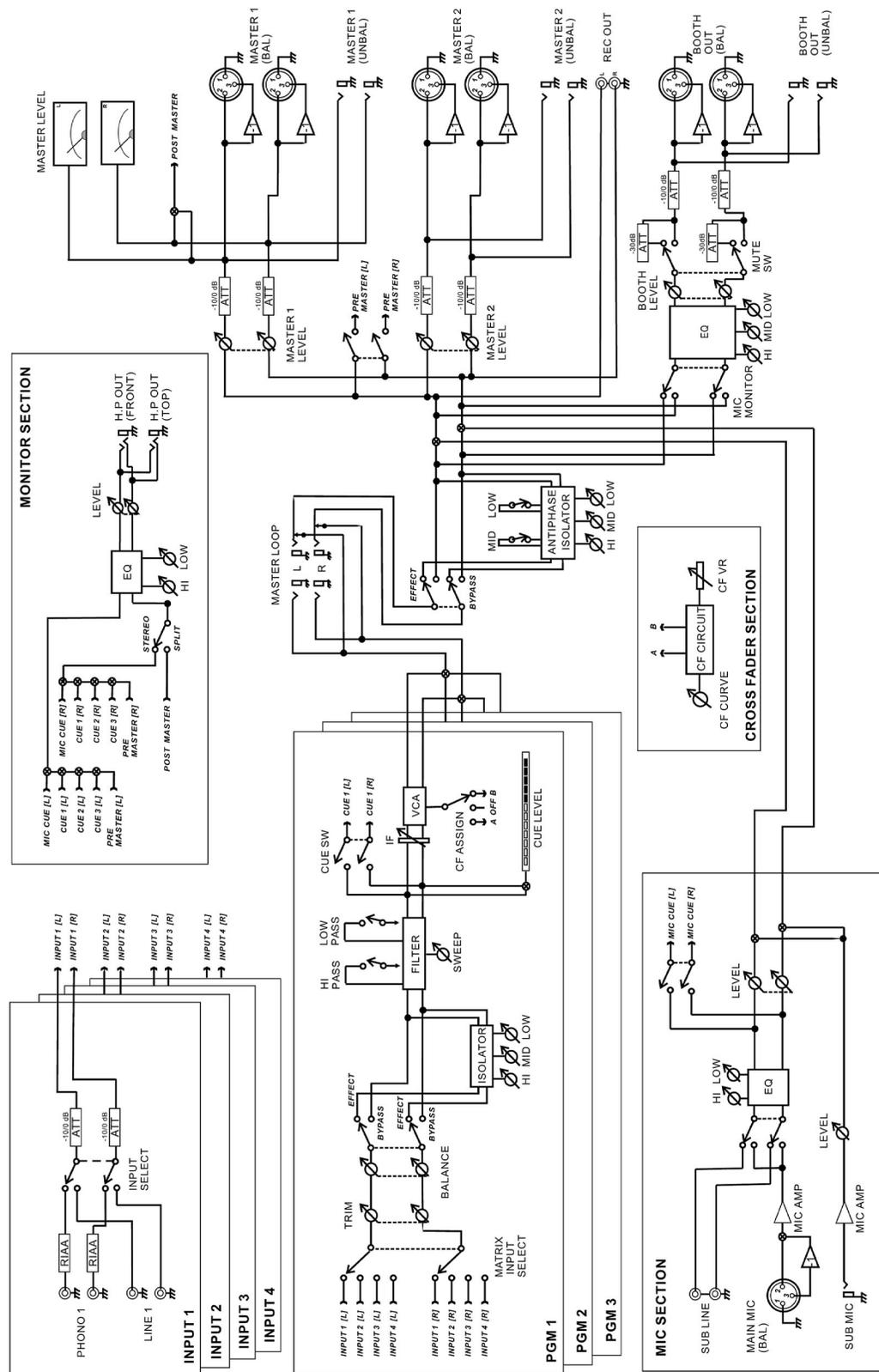
MASTER SECTION



- ⑮ **MASTER LEVEL VOLUME**
Adjusts the signal level outputs from MASTER OUT1/2 JACKS ④7 on the rear panel.
- ⑯ **MASTER CUE SWITCH**
Used to send the signal from MASTER OUT1/2 to the monitor section for headphone monitoring. When switch is on, an indicator lights up.
- ⑰ **CF CURVE VOLUME**
Adjusts the crossfader curve. A clockwise rotation gives a steep crossfade which is good for scratching and cutting, whereas a counter clockwise rotation gives a gentle crossfade, good for long running mixes.
- ⑱ **MASTER LEVEL METER**
The VU analog level meters indicate the L and R outputs.
- ⑲ **PGM LEVEL METER**
The LED bar level meters indicate the PGM channel.

- ⑳ **BOOTH MONITOR EQ VOLUME**
Adjusts the HI/MID/LOW frequencies for the BOOTH OUT.
- ㉑ **BOOTH MONITOR LEVEL VOLUME**
Adjusts the output level of BOOTH MONITOR.
- ㉒ **BOOTH MONITOR MUTE SWITCH**
This switch mute the signal being sent to the BOOTH OUT.
- ㉓ **ANTI PHASE ON / OFF SWITCH**
This switch is used to activate an antiphase effect on the Master Isolator Section. Essentially, an antiphase flips the isolator curve upside down on both the low and mid frequency ranges, which thereby creates a reverb type effect on the signal being outputted.
- ㉔ **MASTER ISOLATOR HI**
This rotary dial section can be used to isolate the Hi frequencies on any MASTER SECTION input signal.
- ㉕ **MASTER ISOLATOR MID**
This rotary dial section can be used to isolate Mid frequencies on any MASTER SECTION input signal.
- ㉖ **MASTER ISOLATOR LOW**
This rotary dial section can be used to boost the Low frequencies on any MASTER SECTION input signal.
- ㉗ **ISOLATOR ON / OFF SWITCH**
This switch is used to turn the Master Isolator Volume Section either on or off. When set to the "OFF" position the full range of input signal being sent to the MASTER section will be heard regardless of the position of the Master Isolator Volume rotary dials.
- ㉘ **CROSS FADER**
Mixes the signals assigned by the CROSSFADER ASSIGN SWITCHES 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 FADER UNIT".
*Replace this fader with a Vestax CF-50 replacement inputfader.

BLOCKDIAGRAM



High Pass, Low Pass & Notch Filter (effect) on each PGM

On the PMC-CX each PGM has a filter effect section with a high pass, low pass and (when pressed together) a notch filter. These filters are used to alter the frequency response of a given audio signal in either an extreme or subtle manner

Master Isolator with Antiphase

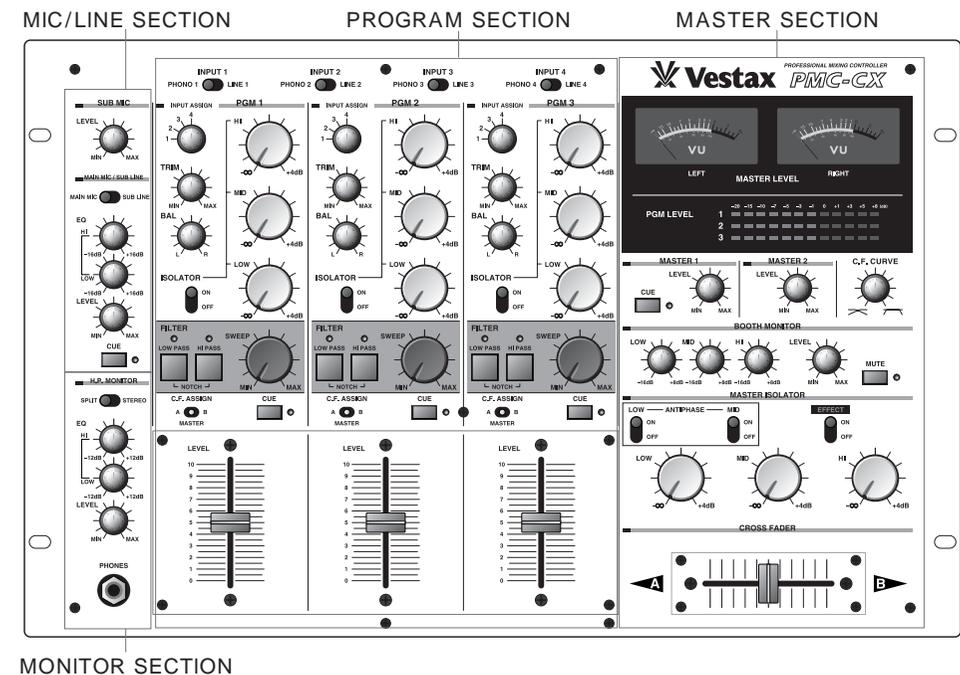
On the master output of the PMC-CX we have incorporated one of Carl's favorite Vestax units, the DCR-1200, a 3 Band Isolator with Antiphase. Using the master isolator allows finer control over the cut and or boost of the low, mid and high ranges when the effect is set to on. Obviously when set to off, only the PGM features will effect the sound. When combined with antiphase it is possible to create sensational reverb like effects over the whole mix. Antiphase flips the isolator curve upside down on both the low and mid frequency ranges (there is no need for a high antiphase as it is out of our human hearing range).

Suitable for all DJs

With more than enough creative room for even the most experimental DJs the PMC-CX is truly suitable for almost any type of DJ. In addition to the features above, there are a number of other features that make this mixer very user friendly whether you are a hobby DJ, a professional touring DJ or a club install user. The large analogue VU meters allow you to easily view the output level and safely stay within a suitable range. The large open design of this mixer means that you can accurately and quickly get to all features in any environment (dark or light) even if you are endowed with big fingers. For install users the booth, master out and input levels can be attenuated keeping expensive sounds systems safe from over zealous users. For those users who need scratch capabilities (Hip Hop, drum & bass etc) the cross fader (VCA PCV type fader) curve is adjustable from a steep to gentle slope. The booth output section has its own 3-Band EQ and the headphone section has its own 2-Band EQ. Add in the MIC features and this mixer is perfect for Mobile DJs who desire the quality of this top line model from Vestax. In all, the PMC-CX was designed by a great mixer to be used as a great mixer.

FUNCTIONS

TOP PANEL



SPECIFICATION

		NOMINAL INPUT	MAXIMUM INPUT	IMPEDANCE
INPUT SECTION	MAIN MIC (XLR FEMALE 2PIN HOT BALANCED)	-50dBv	-35dBv	1.0K
	SUB MIC (6.3 PHONE JACK UNBALANCED)	-50dBv	-35dBv	1.0K
	PHONO 1 ~ 4 L/R (RCA PIN JACK)	-46dBv	-35dBv	59K
	LINE 1 ~ 4 SUB L/R (RCA PIN JACK)	0dBv	+12dB	35K
	MASTER LOOP RCV (6.3 PHONE JACK UNBALANCED)	0dBv	+12dB	50K
		RATED OUTPUT	MAXIMUM OUTPUT	IMPEDANCE
OUTPUT SECTION	MASTER1/2 L/R (XLR MALE 2PIN HOT BALANCED)	+4dBv	+22dB	600 over/150
	MASTER1/2 L/R (6.3 PHONE JACK UNBALANCED)	0dB,-10dB	+22dB	10K over/220
	REC OUT (RCA PIN JACK)	-10dB	+12dB	10K
	BOOTH L/R (XLR MALE 2PIN HOT BALANCED)	+4dBv	+22dB	600 over/150
	BOOTH L/R (6.3 PHONE JACK UNBALANCED)	0dB,-10dB	+22dB	10K over/220
	MASTER LOOP SEND (6.3 PHONE JACK UNBALANCED)	0dBv	+22dB	10K over/220
	HEADPHONE (6.3 PHONE JACK)		190mW	8 over/47
FREQUENCY RESPONSE	MIC	30Hz ~ 20KHz ± 3dB	POWER SUPPLY	AC20V
	LINE	30Hz ~ 20KHz ± 1.5dB	POWER REQUIREMENT	45W
S/N RATIO	MIC	> 60dB	DIMENSION(W × H × D)	482 × 122 × 308(mm)
	LINE	> 75dB	WEIGHT	7.0kg
CROSSFADER CROSSTALK		> 80dB		
CHANNEL CROSSTALK		> 65dB		
FADER ATTENUATION		> 80dB		

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.