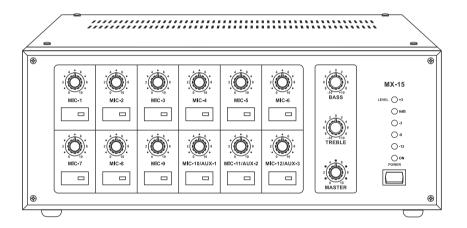
# PA AUDIO MIXER PREAMPLIFIER

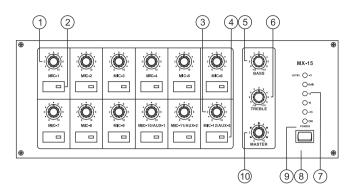
# **MX-15**



# **FEATURES**

- AC Mains / 12V DC Car Battery operation. Automatic changeover to battery operation in case of mains failure ensures continuity of program.
- 12 MIC & 3 AUX inputs.
- Mic-1 to Mic-9 inputs with ON / OFF switch and LED indication. MIC-10 to MIC-12 inputs alternate to 3 AUX inputs through MIC / AUX switch & LED indication. AUX-3 is Stereo Input for CD / TAPE Playback.
- Separate Volume Controls for each Mic Input.
- Headphone output for monitoring.
- Active BASS and TREBLE controls provided for shaping tonal quality of music & speech as desired.
- PREOUT, LINE OUTPUTS available.
- 5 LED array calibrated in dB for Output level indication.
- Ideal for Stage, Music Programs, Open Conferences and other PA Applications
- Please read this manual thoroughly before making connections and turning on the power. Following the instructions in this
  manual will enable you to obtain optimum performance from your new
   PA Audio Mixer Preamplifier.
- Please retain this manual for future reference.

# • Front & Rear Panel Controls & Features



### 1. MIC-1 Volume Control

Similar volume controls are also provided for MIC-2 to MIC-9 input channels.

 MIC-1 ON / OFF Switch with LED indication Switches with similar functions are also provided for MIC-2 to MIC-9 input channels.

### 3. MIC-12 / AUX-3 Volume Control

Similar volume controls are also provided for MIC-10 / AUX-1 and MIC-11 / AUX-2 input channels.

# MIC-12 / AUX-3 Selector Switch with Bi-colour LED indication

Similar switches with bi-colour LED are also provided for MIC-10 / AUX-1 and MIC-11 / AUX-2.

#### 5. BASS Control

This control boosts or cuts the low frequencies. Musical instruments like Tabla, Drum and percussion instruments respond to boost of low frequencies. When moved from '0' position to '-10' position the low frequencies are reduced which help eliminate feedback and howling on mic operation thus allowing opening of higher volume.

## 6. TREBLE Control

This control boosts or cuts the high frequencies. It improves the brilliance of sound for string instruments like Violin, Sarangi, Sitar and to some extent human voice. Too much boost of this control can cause oscillation and distortion of sound.

# 7. LED Array

The 5 LED array calibrated in dB indicates the Line Output Levels.

# 8. POWER Switch

Push the top part of the knob to switch the amplifier ON. Push the bottom part of the knob to switch the amplifier OFF.

# 9. POWER 'ON' LED

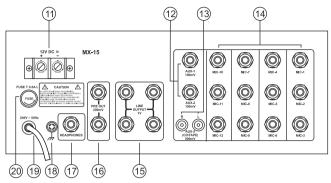
It glows when the power switch is in ON position.

# 10. MASTER Control

All MIC and AUX input signals are mixable and these mixed signals are finally controlled by the Master Control for overall opening of the volume from the mixer. For best performance operate master control say at about '6' to '8' position.

# 11. BATTERY Terminal Strip

For uninterrupted operation of the Mixer, a 12V Car Battery is to be connected from this terminal strip in correct polarity. No battery current is consumed when



the Mixer is working on AC Mains. Changeover to battery operation is automatic in case of AC Mains failure.

# 12. AUX-1 & AUX-2 Input Jacks

For connecting AUX input sources such as a cassette player, additional mixer etc.

# 13. AUX-3 (CD / TAPE) Stereo Input

For connecting higher output level sources such as a CD Player, Stereo Cassette Player, Electronic Keyboard etc.

### 14. MIC-1 to MIC-12 Input Jacks

These jacks are for connecting Lo-impedance Microphones.

### 15. LINE Output Jacks (1Volt)

These four jacks are connected in such a way that they do not load each other. This output is for connecting the mixer to the LINE input of an amplifier.

### 16. PRE Output Jacks (200mV)

These two jacks are for connecting to AUX input of any amplifier or of a cassette recorder for recording the program.

## 17. HEADPHONES Output

Audio output through a 6.3mm stereo jack for monitoring through a stereo headphone.

## 18. EARTH Terminal

### 19. AC Mains Cable

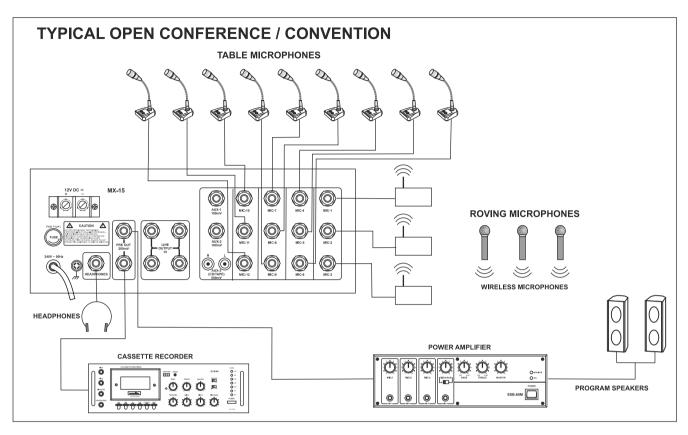
#### 20. AC Fuse

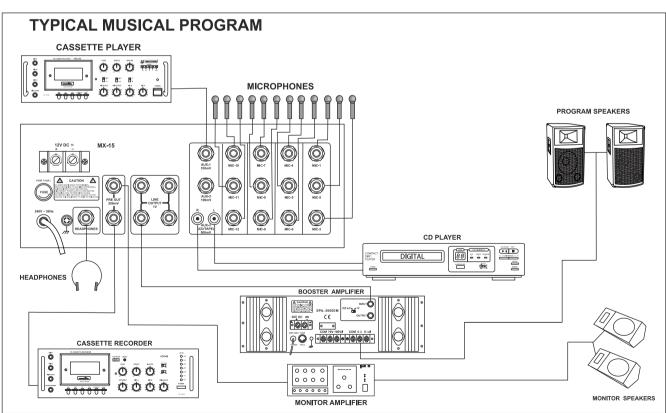
AC Fuse: 0.5Amp. 250V (T 0.5A L)

# Caution

 The equipment must be earthed properly before operating it to avoid electric shock. A wire from the Earth Terminal must be connected to electrical earth for safe operation.

# • Typical Applications....





# Safety Instructions

**Read the Instructions:** Please read all the instructions in this section carefully before installation or use of the product. All the safety instructions must be followed.

**Retain the Instructions:** Please retain this Instruction Manual for future reference.



This symbol, wherever it appears, alerts you to the presence of uninsulated hazardous voltage that may be sufficient to constitute a risk of electric shock. External wiring to any terminal marked with this symbol must be done by a trained and instructed person only.



This symbol, wherever it appears adjacent to a component, alerts you that the concerned component can only be replaced by another of the exact same specifications.

#### WARNING

- To reduce the risk of electric shock, do not remove the top cover. No user serviceable parts inside. Refer all servicing to qualified personnel only.
- Before replacing any fuse, make sure the set is switched off and disconnected from the AC mains or any other power source. Replace a fuse only with another of exactly same specification.

# **CAUTIONS**

**Water & Moisture:** To reduce the risk of fire or electrical shock, do not expose this set to rain or moisture. Do not use this set near water or in a wet location. Do not keep any

object filled with liquid, such as a vase, on top of this set. Do not insert or remove the AC mains plug with wet hands.

**Power Source:** The voltage & frequency of the AC mains supply, and the voltage of the external battery, (if applicable) to which this set can be connected, is marked on the rear panel of the set. Do not connect this set to any power source other than those specified on the rear panel.

**Power Cord Protection:** Do not cut, kink, damage or modify the AC power cord supplied with this set. Keep the AC power cord away from heaters and harmful chemicals. Do not keep any heavy object on the power cord.

**Operation on Generator:** When operating this set on a generator, make sure the set is switched off till the generator voltage has stabilized.

**Ventilation:** This set should be situated so that its location or position does not interfere with its proper ventilation. Do not cover the ventilation holes / slots. Do not insert or drop anything into the ventilation holes / slots.

**Stability:** This set must be kept in a stable and flat horizontal position, and never in a tilted position. Do not place this set on an unstable stand, tripod, bracket or mount. Do not use attachments which are not supplied or explicitly recommended by the manufacturer.

**Earthing:** This set must be earthed properly before use. A wire from the Earth terminal on the rear panel must be connected to electrical earth.

**Cleaning:** Disconnect this equipment from the AC mains and external battery before cleaning. Clean with a damp cloth, but do not allow any liquid to enter the set. Do not clean with liquids or aerosols.

# Specifications

Frequency Response	:	20 - 20,000Hz
Inputs	:	12 × Mic 0.6mV / 4.7kΩ; 2 × Aux 100mV / 470kΩ; 1 × Aux(stereo) 500mV / 100kΩ
Outputs	:	$2 \times \text{Pre out } 200\text{mV} / 600\Omega$ ; $4 \times \text{Line out } 1\text{V} / 1\text{k}\Omega$
Headphone	:	120mV at $8\Omega$
Tone Controls	:	BASS: ±10dB at 100Hz; TREBLE: ±10dB at 10kHz
Distortion	:	< 1%
S/N Ratio	:	50dB
Power Supply	:	AC - 240V, 50Hz DC - 12V Car Battery
Protection	:	AC: Fuse 0.5Amp. (T 0.5A L)
Dimensions	:	W350 x H145 x D200 mm
Weight	:	3.9kg approx.