

# MA-1212 Mixer Amplifier

## 120-Watt, 12 Input Mixer Amplifier



### General Description:

The Electro-Voice® MA-1212 is a 120-watt, twelve-input mixer amplifier designed for commercial sound applications. It features twelve separate input controls which can be used to adjust the level from any of 12 input sources. Figure 1 shows the layout of the front and rear panels.

Input channels 1-10 are designed to either be used as low-Z balance microphone or line level inputs. The combination connector on inputs 1-10 permits use of either XLR or ¼" input connectors. The block diagram shown in Figure 2 outlines the signal flow for the MA-1206. A signal appearing at either input 1 will automatically mute the other channels unless the mute function is defeated via a switch on the rear panel.

Inputs 11 and 12 are for auxiliary line-level sources such as tape or CD players. Mono or stereo signals may be applied to inputs 11 or 12. The left and right components of a stereo signal can be applied to the dual RCA phono jacks of these inputs and mixed together to drive the built-in monaural power amplifier. A rear panel paging input with gain control is provided for the paging output of a telephone system. An audio signal appearing at this input automatically mutes all other inputs. A preamplifier output jack and power amplifier input jack permit the mixed output to be fed to an external signal processor (graphic EQ or compressor), and then returned to the built-in amplifier. The preamp output may be used to drive an additional power amp with its own set of speakers without interrupting the function of the built-in amplifier.

There is also a 24v dc power option to operate the unit off of a 24v emergency power source. The speaker output is available at a barrier strip, which includes terminals for driving low impedance loudspeaker loads, as well as 25, 70.7 or 100 volt distributed systems.

### Architects' and Engineers' Specifications:

The mixer amplifier shall have twelve input channels, with individual mix gain controls. Input channels 1 through 10 shall be configured for either low-Z balanced microphone operation or hi-Z line level signals via switches on the rear panel. A signal present channel 1 shall trigger the muting of channels 2-12. The mute circuit shall be defeatable using a switch on the rear panel. Inputs 1 - 10 shall be available via combination female XLR / ¼" connectors. Inputs 11 and 12 shall accept either monaural or stereo sources. If a stereo source is connected, it shall be properly mixed to mono via a resistor network mounted on the input plate. There shall be a paging input that accepts a 600-ohm line-level feed from a phone system. When a signal is present



at the paging input, it shall automatically mute other input sources. The paging input shall be equipped with its own gain control. There shall be a master level control. Separate bass and treble equalization controls shall be provided. The mixer amplifier shall meet the following performance criteria: output power shall be 120 watts; total harmonic distortion shall be less than 1% at 1 kHz; frequency response shall be within  $\pm 3$  dB from 50 Hz to 15 kHz; input impedance shall be 600-ohms (balanced inputs) or 47 kW (unbalanced inputs); nominal load impedance shall be 4-, 8- or 16-ohms for voice-coil-connected loudspeakers, 25, 70.7 or 100-volt nominal transformer windings for the constant-voltage output.

In addition to a preamplifier output/power amplifier input link, there shall also be a line-level balanced XLR output. The mixer amplifier shall operate from either a standard 120 V ac 50/60 Hz or a 24V dc power source, and measure 13.3 cm (5.2 in.) high x 48.0 cm (18.9 in.) wide x 32.0 cm (12.6 in.) deep. The net weight shall be 11.5 kg (25.4 lb). The mixer amplifier shall be the Electro-Voice® Model MA-1212.

## Technical Specifications:

Power Output (at 1 kHz):	120 Watts
Frequency Response:	50 Hz - 15 kHz, $\pm 3$ dB
Input Sensitivity/Impedance,	
Inputs 1-10 Mic setting:	0.3 mV/600 ohm (balanced)
Inputs 1-10 Line setting:	75 mV/47kohm (balanced)
Paging:	-20 dBm/600 ohm (transformer isolated)
Power Amp In:	1 V/10 kohm (unbalanced)
Aux:	100 mV to 1V/ (unbalanced)
THD (at rated output):	<1% at 1 kHz
Signal-to-Noise Ratio,	
Mic :	>52 dB
Aux:	> 65 dB
Paging:	> 65 dB
Power Amp In:	>90 dB
Line Output Level/Impedance,	
Preamp Output:	1 V/1 kohm (unbalanced)
Balanced Line Output:	500 mV/47 kohm (unbalanced)

Speaker Outputs:	4, 8, 16 ohm, 25, 70.7 and 100-Volt
Tone Controls,	
Bass:	+10 dB at 100 Hz
Treble:	+10 dB at 10 kHz
Muting:	40 dB attenuation
Protection :	3 independent Slo-Blo ® fuses, primary ac and dc
Power Dissipation:	390 watts
Power Supply:	108-132 V ac, 50/60 Hz
Dimensions,	
Height:	13.3 cm (5.2 in.)
Width:	48.0 cm (18.9 in.)
Depth:	32.0 cm (12.6 in.)
Net Weight:	11.5 kg (25.4 lb)
Shipping Weight:	12.7 kg (27 lb)



Rear View

**EV Electro-Voice®**

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[www.electrovoice.com](http://www.electrovoice.com)

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800/392-3497 Fax: 800/955-6831

Europe, Africa, and Middle East only. For customer orders, contact Customer Service at:

+ 49 9421-706 0 Fax: + 49 9421-706 265

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Specifications subject to change without notice.