

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 1/4" 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 / 1/4" 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 ± 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, ± 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

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

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

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Specifications subject to change without notice.