

## Architects Specifications

### MX-508

The unit shall be an eight input stereo mixer having separate transformer-isolated balanced outputs for both left and right channels. There shall be an electronically balanced mono-summed output with separate front panel level control. Each input channel shall have level and stereo-balance controls on one concentric pot. Two aux sends on each channel must be provided with one internally wired pre-fader /EQ and the other post fader/EQ. The Pre/Post determination of the Aux sends shall be configurable via circuit board jumper connections.

Each input channel shall have three-band equalization control with adjustable mid-band frequency sweep. The equalization shall consist of high and low shelving points being fixed at 70Hz and 15kHz, and the mid-band peaking EQ control must be adjustable between 140Hz and 8kHz. Each input channel shall have 40dB of available attenuation and a switch for mic/line selection on the front panel, as well as a 20dB mic input pad on the rear panel. Each input channel shall have in/out insert points on separate 1/4" phone connections, 1/4" phone connectors for balanced line input sources, and XLR electronically-balanced connectors for microphones. Phantom power of +48VDC on

each input must be available via a front panel switch. There shall be two Master Aux Sends provided and two panable Master Aux Returns (one stereo and one mono). There shall be a front panel 3.5mm stereo line input jack, and an additional back panel stereo line input on RCA jacks, both sharing a single level control to the Mains or Aux 1. Separate stereo RCA line outputs must also be provided. There shall be Pre-Master Sub In/Out patch points for left and right and Aux Sub outputs on 1/4" phone jacks for linking other mixers. A selectable Headphone output with level control to monitor either Left and Right or Aux 1 and 2 must be provided on the front panel. Overall gain available from Mic Input to Master Output shall be 84dB, and the Output level shall be +24dBm into 600 ohms. The mixer unit shall be no higher than three rack spaces and must be fully covered under a five year warranty. The mixer must be manufactured in America, with a shipping weight of 20 pounds.

The mixer shall be the model MX-508, manufactured by Ashly Audio, Inc. No other unit shall be acceptable unless data submitted from an independent test laboratory verifies that the above size/performance specifications are met.

### Features:

- 3-Band Channel EQ w/ Sweepable Mid Frequency Center
- +48V Phantom Power
- High gain (84dB Channel Input to Program Output) Ensures Full Output with Low Level or Distant Mics
- Transformer Isolated Outputs +24dBm 600 ohm
- Balanced XLR Stereo Program Outputs w/Left and Right Master Controls and Mute Switching
- Insert Jacks on Each Channel
- Independent Mono Output w/Level Control
- Front Panel 3.5mm Stereo Line Input
- 2 Aux Sends per Channel
- 2 Master Aux Sends
- 2 Master Aux Returns
- (1-Stereo & 1-Mono, both Panable)
- Five Year Worry-Free Warranty
- Safety/Compliance: cTUVus/CE, RoHS, FCC

**Specifications MX-508**

**TOTAL HARMONIC DISTORTION:**

- < 0.05 % @ +4 dBu, 20 Hz-20 KHz.
- < 0.05 % @ +20 dBu, 30 Hz-10 KHz.

**INTERMODULATION DISTORTION (SMPTE IM distortion):**

- < 0.05 % @ +20 dBu.

**HUM & NOISE (20 Hz-20 KHz noise bandwidth):**

- < -127 dBu equivalent input hum and noise
- < -100 dBu residual output noise; TRS outputs, all level controls at min.
- < -80 dBu MAINS LEVEL and one CH. LEVEL at nom.
- < -80 dBu AUX 1 or 2 OUT; AUX MASTER and one CH. AUX at nom.

**MAXIMUM VOLTAGE GAIN:**

**MAIN OUTPUTS**

- 84 ± 2dB—MIC INPUT to MAIN OUTPUT, 600 ohm load.
- 42 ± 2dB—LINE INPUT to MAIN OUTPUT, 600 ohm load.

**AUX SENDS**

- 76 ± 2dB—MIC INPUT to AUX MASTER 1 OUT, pre ch. level.
- 92 ± 2dB—MIC INPUT to AUX MASTER 2 OUT, post ch. level.

**SUB INS**

- 12 ± 1dB—SUB INPUT to MAIN OUTPUT.

**AUX RETURNS**

- 30 ± 2dB—RETURN 1 or RETURN 2 to MAIN OUTPUT.

**STEREO LINE IN**

- 34 ± 2dB—STEREO LINE INPUTS to MAIN OUTPUT.

**FREQUENCY RESPONSE:**

- +0.5/-1.0 dB 20 Hz to 20 KHz.

**EQUALIZATION:**

- LOW ± 12dB at 70 Hz, shelving.
- MID ± 12dB peaking, 140 Hz-8KHz.
- HIGH ± 12dB at 15 KHz, shelving.

**CROSSTALK:**

- < -65 dB, adjacent inputs, 20 Hz-20 KHz.
- < -65 dB, MIC INPUT to MAIN OUTPUT at 1 KHz.

**VU METERS:**

- Two 10-segment LED meters, L/R MAIN or SEND 1/2 selectable. 0 VU = +4 dBu.

**PEAK INDICATORS:**

- Peak CLIP indicator on each input channel and left and right outputs, illuminates 3 dB below clipping.

**PHANTOM POWER:**

- + 48 VDC applied to all MIC INPUTS, switchable on front panel.
- 80mA maximum total current draw
- 14ma maximum single channel current draw
- Gradual power-up and down to eliminate "pops."

**DIMENSIONS:**

- 19" wide x 5.25" high x 8.0" deep.

**SHIPPING WEIGHT:**

- 20 lbs.

**POWER REQUIREMENTS:**

- 100 - 240VAC, 50-60 Hz

Unless otherwise noted, specification conditions are: 150 ohm source, INPUT LEVEL set at "-60", all other controls set at nominal, XLR outputs into 600 ohms or greater.

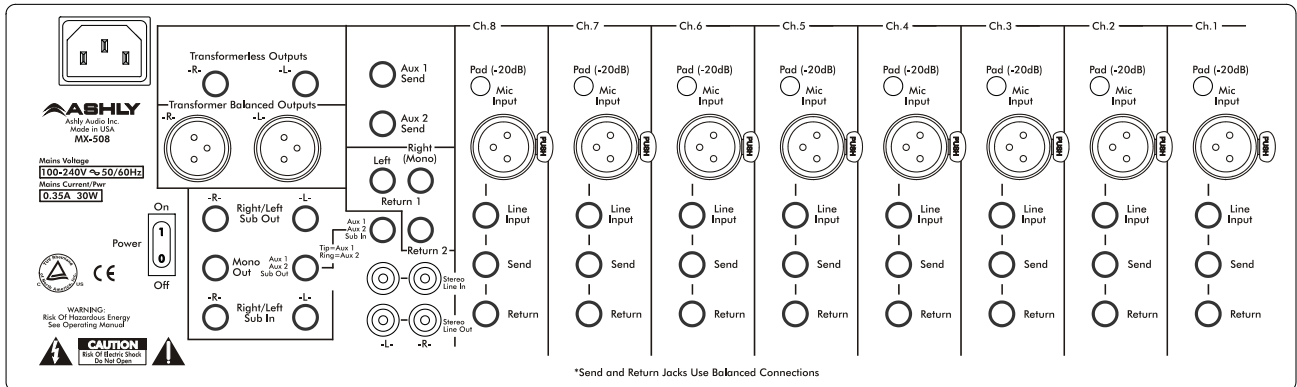
**Input Specifications:**

INPUT	BALANCED/ UNBALANCED	INPUT LEVEL & PAD	LOAD IMPEDANCE	FOR USE WITH NOMINAL	SENSITIVITY	MAX. INPUT LEVEL BEFORE CLIP	CONNECTOR
MIC INPUTS (1-8)	Balanced	Input level @ -60, pad out Input level @ -20, pad out Input level @ -20, pad in	≥ 1 K ohm	50 ohm to 600 ohm mics	-80 dBu -40 dBu -20 dBu	-42 dBu 0 dBu +20 dBu	Female XLR
LINE INPUTS (1-8)	Balanced	Input level @ -24 Input level @ +22	≥ 10 K ohm	600 ohm lines	-38 dBu NA	-2 dBu +24 dBu	1/4" TRS Phone Jack
AUX RETURNS (1,2)	Unbalanced	NA	≥ 10 K ohm	600 ohm lines	-26 dBu	+24 dBu Ret 1 +22 dBu Ret 2	1/4" Phone Jack
SUB INPUTS (L,R, AUX 1,2)	Unbalanced	NA	≥ 10 K ohm	600 ohm lines	-8 dBu	+24 dBu	1/4" Phone Jack
STEREO LINE IN	Unbalanced	NA	≥ 10 K ohm	600 ohm lines	-30 dBu	+15 dBu	3.5mm and RCA Jacks

**Output Specifications:**

OUTPUT	BALANCED/ UNBALANCED	SOURCE IMPEDANCE	FOR USE WITH NOMINAL	OUTPUT LEVEL		CONNECTOR
				NOMINAL	MAX BEFORE CLIP	
MAIN OUT (L,R)	Transformer Balanced	≤ 200 ohm	≥ 600 ohm lines	+4 dBu	+24 dBu	Male XLR
MAIN OUT(L,R) MONO OUT, AUX OUT (1,2)	Servo-balanced	≤ 200 ohm	10 K ohm lines	+4 dBu	+23 dBu	1/4" TRS Phone Jack
SUB OUT (L,R)	Quasi-balanced	≤ 200 ohm	10 K ohm lines	+4 dBu	+23 dBu	1/4" Phone Jack
SUB OUT (AUX 1,2)	Unbalanced	≤ 680 ohm	10 K ohm lines	+4 dBu	+23 dBu	1/4" TRS Phone Jack
STEREO LINE OUT	Unbalanced	≤ 680 ohm	10 K ohm lines	+4 dBu	+12 dBu	RCA Phono Jack

Notes: 1. 0 dBu = .775 Vrms. 2. Sensitivity is input signal level which will produce +4 dBu out with all levels maximum.



Ashly manufactures a complete and comprehensive line of Analog and Digital Signal Processors, Power Amplifiers, Mixers, and Amplifier Input Options. Please call, write or visit our web site for information on any of these Ashly Products.

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