

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 40 dB of available attenuation and a switch for mic/line selection on the front panel, as well as a 20 dB 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 (each input channel shall additionally have the option of internal plug-in transformers).

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 an additional stereo CD/Tape input on RCA jacks with level control to the Mains or Aux 1. Separate stereo RCA tape 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 84 dB, 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 15 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:

- Six Balanced 1/4" - XLR Inputs
- Low-Noise Mic Preamp Circuitry
- High Gain (92dB Channel Input to Program Output) Ensures Full Output with Low Level or Distant Mics
- Two-Band EQ on Each Input
- Input Level and Pan Controls on Each Input
- Clip LED's on Each Input
- Eleven-Step LED Output Level Metering
- 48V Phantom Power for Condenser Mics
- Six Channel Inserts
- Aux Send and Return
- Balanced 1/4" Stereo Outputs
- Transformer Balanced XLR Mono Output
- Stereo Headphone Jack with Level Control
- Auxiliary Tape/CD Inputs and Outputs
- Three Position Input Gain Switch
- 20dB Microphone Pad Switch
- Stereo Aux Input Control
- Aux Master Output Control
- Internal Power Supply

General 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):

- < -129 dBu equivalent input hum and noise.
- < -128 dBu equivalent input hum and noise w/transformer option.
- < -100 dBu residual output noise; TRS outputs, all level controls at min.
- < -90 dBu residual output noise; XLR outputs.
- < -78 dBu MASTER LEVEL at nominal, all CH. LEVEL controls at min.
- < -67 dBu MASTER LEVEL and one CH. LEVEL at nom.
- < -88 dBu AUX 1 or 2 OUT; AUX MASTER at nominal and all CH. AUX levels at min.
- < -67 dBu AUX 1 or 2 OUT; AUX MASTER and one CH. AUX at nom.

MAXIMUM VOLTAGE GAIN:

MASTER

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

AUX RETURNS

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

TAPE/CD IN

- 34 ± 2dB—TAPE/CD INPUT to MASTER 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-8 KHz.
- HIGH ± 12dB at 15 KHz, shelving.

CROSSTALK:

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

VU METERS:

- Two 10-segment LED meters, L/R MASTER 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.
- Gradual power-up and down to eliminate "pops."

DIMENSIONS:

- 19" wide x 5.25" high x 9.6" deep.

SHIPPING WEIGHT:

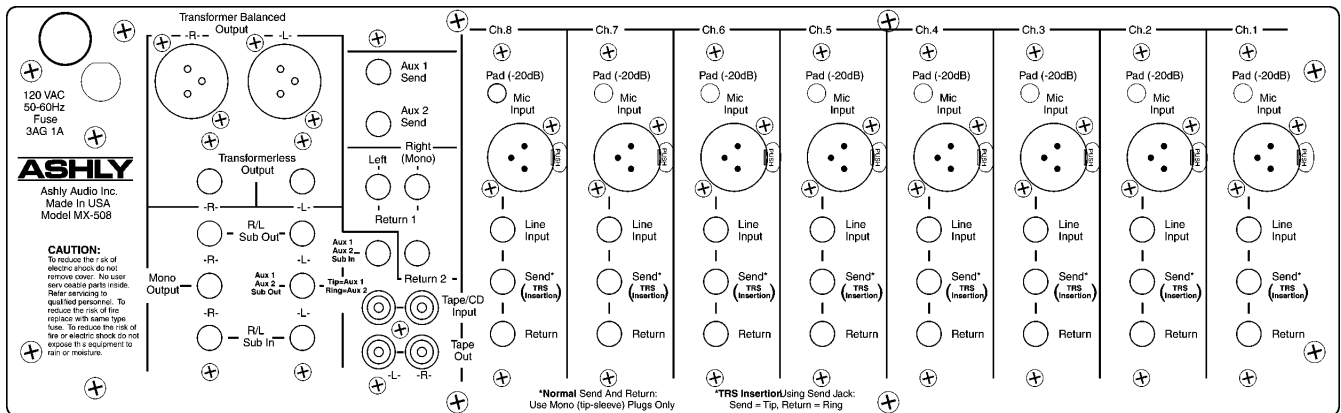
- 22 lbs. maximum with 8 input transformer options.

POWER REQUIREMENTS:

- 120 VAC nominal, 50-60 Hz, 35 watts. 93 VAC minimum (240 VAC available)

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.

MX-508 Rear Panel



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, transformer optional	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
TAPE/CD IN	Unbalanced	NA	≥ 10 K ohm	600 ohm lines	-30 dBu	+15 dBu	RCA Jacks

Output Specifications:

OUTPUT	BALANCED/ UNBALANCED	SOURCE IMPEDANCE	FOR USE WITH NOMINAL	OUTPUT LEVEL CONNECTOR		
				NOMINAL	MAX BEFORE CLIP	
MASTER OUT (L,R)	Transformer Balanced	≤ 200 ohm	≥ 600 ohm lines	+4 dBu	+24 dBu	Male XLR
MASTER OUT (L,R) MONO OUT, AUX OUT (1,2)	Quasi-balanced	≤ 200 ohm	10 K ohm lines	+4 dBu	+22 dBu	1/4" TRS Phone Jack
SUB OUT (L,R)	Unbalanced	≤ 200 ohm	10 K ohm lines	+4 dBu	+22 dBu	1/4" Phone Jack
SUB OUT (AUX 1,2)	Unbalanced	≤ 680 ohm	10 K ohm lines	+4 dBu	+22 dBu	1/4" TRS Phone Jack
TAPE OUT (L,R)	Unbalanced	≤ 680 ohm	10 K ohm lines	-6 dBu	+12 dBu	RCA Phono Jack

Notes: 1. 0 dBu = .775 Vrms. 2. Quasi-balanced output has balanced output impedance with single-ended signal. 3. Sensitivity is input signal level which will produce +4 dBu out with all levels maximum.

Ashly manufactures a complete and comprehensive line of Graphic and Parametric Equalizers, Electronic Crossovers, Power Amplifiers, Compressor-Limiters, 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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