

Architects Specifications

MX-406

The unit shall be a six input stereo mixer having separate balanced outputs for both left and right channels. There shall be a transformer balanced mono-summed output with separate front panel level control. Each input channel shall have level and stereo-balance controls on one concentric pot. An Aux send shall be on each channel factory wired pre-fader /EQ. The Aux send shall be configurable for Pre/Post EQ via circuit board jumper connection. Each input channel shall have a two-band equalization control on one concentric pot located on the front panel. The equalization shall consist of high and low shelving points being fixed at 70Hz and 8KHz with a cut/boost range of +/- 12dB. Each input channel shall have 40dB of available attenuation on the front panel, as well as a 20dB mic input pad on the rear panel. Each input channel shall have an in/out insert point on a single TRS 1/4" phone connection, and a combination 1/4"-- XLR connector for balanced microphone and line input sources. Phantom power of +48VDC for each input must be available via a single rear panel switch. There shall be one Master Aux Output control provided on the front panel. A 1/4" TRS Aux Master Output Jack shall be located on the rear panel. There shall be an additional stereo CD/Tape input on RCA jacks with level control. Separate

stereo RCA tape outputs must also be provided. A TRS 1/4" Headphone Output and Level Control to monitor both Left and Right must be provided on the front panel. Overall gain available from Mic Input to Master Output shall be 84dB, and the Mono Output level shall be +23dBu into 600 ohms. There shall be an eleven stage LED ladder output VU meter located on the front panel indicating signal levels from -21VU to +6VU and clip when the signal level is 3dB below actual clipping. Each individual channel shall have a clip indicator as well. The mixer unit shall be no higher than two rack spaces and must be fully covered under a five year warranty. The mixer shall have an internal power supply with the power switch located on the rear panel. The mixer must be manufactured in The United States of America, with a shipping weight of 15 pounds.

The mixer shall be the model MX-406, 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 Controls
- 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
- Safety/Compliance: cTUVus/CE, RoHS

Specifications MX-406

TOTAL HARMONIC DISTORTION:

< 0.05 % @ +4dBu
< 0.05% @ +12dBu

INTERMODULATION DISTORTION (SMPTE IM)

< 0.05% @ +12dBu

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

< -127 dBu equivalent input hum and noise, TRS Output
< -100dBu residual output noise; TRS outputs, all level controls at min.
< -98 dBu residual output noise; XLR outputs, all controls at min
< -80 dBu Aux Out; Master Level and all Channel Levels at nom.

MAXIMUM VOLTAGE GAIN:

MASTER

+84 ± 2dB—Mic/Line to Mono Output
+84 ± 2dB—Mic/Line Input to Master Output.

AUX SENDS

84 ± 2dB—Mic/Line Input to Aux Master Output, pre Channel Level
99 ± 2dB—Mic/Line Input to Aux Output, post Channel Level

TAPE/CD IN

32 ± 2dB—Stereo/Aux Input to Master Output

FREQUENCY RESPONSE:

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

EQUALIZATION:

LOW ± 12dB at 70Hz, shelving.
HIGH ± 12dB at 8KHz, shelving.

CROSSTALK:

< -65 dB, adjacent inputs, 20 Hz--20 KHz.

VU METERS:

Two 10-segment LED meters, L/R, 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 3.5" high x 8.0" deep.

SHIPPING WEIGHT:

15lbs.

POWER REQUIREMENTS:

100 - 240VAC, 50-60 Hz, 30 watts

Input Specifications:

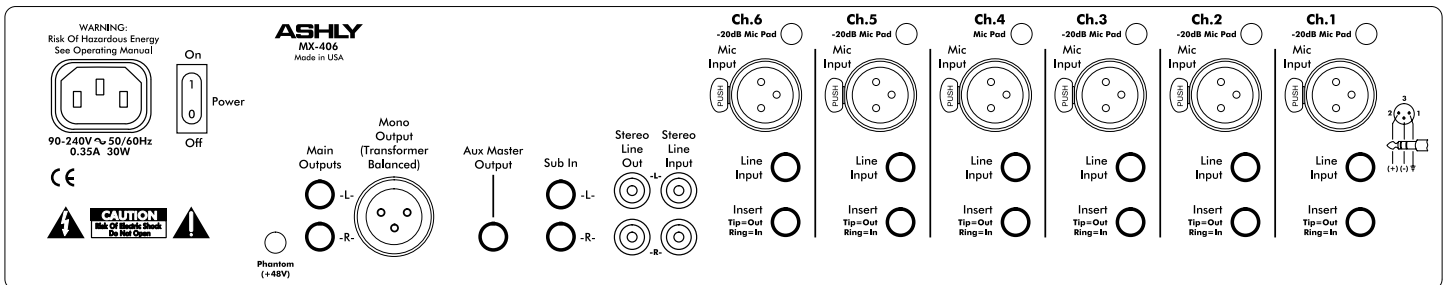
INPUT	BALANCED/ UNBALANCED	INPUT LEVEL & PAD	LOAD IMPEDANCE	FOR USE WITH NOMINAL	SENSITIVITY	MAX. INPUT LEVEL BEFORE CLIP	CONNECTOR
MIC INPUTS (1-6)	Balanced,	Input level @ -60, pad out Input level @ -20, pad out Input level @ -20, pad in	≥ 1K ohm	50 ohm to 600 ohm mics	-80dBu -40dBu -20dBu	-42dBu 0dBu +20dBu	Female XLR--1/4" TRS Combo Jack
LINE INPUTS (1-6)	Balanced	Input level @ -24 Input level @ +22	≥ 10K ohm	600 ohm lines	-38dBu NA	-2dBu +23dBu	Female XLR--1/4" TRS Combo Jack
AUX RETURN	Unbalanced	NA	≥ 10K ohm	600 ohm lines	-26dBu	+23dBu	1/4"
TAPE/CD IN	Unbalanced	NA	≥ 10K ohm	600 ohm lines	-30dBu	+15dBu	RCA Jacks

Output Specifications:

OUTPUT	BALANCED/ UNBALANCED	SOURCE IMPEDANCE	FOR USE WITH NOMINAL	OUTPUT LEVEL		CONNECTOR
				NOMINAL	MAX BEFORE CLIP	
STEREO OUT (L,R)	Pseudo Balanced	≤ 200 ohm	≥ 600 ohm lines	+4 dBu	+24 dBu	1/4" TRS Phone Jack
MONO OUT,	Transformer Balanced	600 ohm	≥ 600 ohm lines	+4 dBu	+24 dBu	Female XLR
AUX OUT	Pseudo Balanced	≤ 200 ohm	≥ 600 ohm lines	+4 dBu	+24 dBu	1/4" Phone Jack
TAPE OUT (L,R)	Unbalanced	≤ 680 ohm	10K ohm lines	-6 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.

MX-406 Rear Panel



Applications:

Live Sound Reinforcement, Field Broadcast Production, Club Installations, Public Address Systems, Restaurants, Boardrooms, Houses of Worship, Lecture Halls, Auditoriums

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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