



# MX-406 6-CHANNEL, STEREO MIC/LINE MIXER

The **MX-406** is a rack-mountable six-input, stereo mic/line mixer designed to be used in fixed or portable installations. Each input will accept either microphone or line-level signals. If microphones are used, a -20dB pad switch is available. The microphone input has an ultra low-noise studio-grade mic preamp with up to 60dB of mic preamp gain. A three-position switch allowing you to set input gain for -20, -40 and -60dB is located on the front panel.

Each input has bass and treble shelving filters with individual control of each filter. An Aux Send on each input can be internally assigned pre or post level/EQ. Level and pan controls complete each input.

Additional front panel controls include: Aux Master Output, Left/Right Stereo Output, On/Off Power switch and 3.5mm stereo line in jack on the front panel offers a convenient input alternative for MP3 players and smartphones. A Mono/Phones output control allows you to adjust the mono output and stereo headphone output. The Stereo headphone output jack is located on the front panel. Front panel LED indicators include channel clip, Phantom power, AC power and an 11-step LED output level meter. Connections on the rear panel include 1/4" TRS and XLR jacks for each input, and an XLR transformer balanced mono output.

The balanced stereo output jacks are 1/4" TRS. Channel inserts are 1/4" TRS. Left and Right Stereo Line Inputs (return) and Stereo Line Out use RCA jacks. A switch turns +48V Phantom Power on or off.

Designed and built in the USA, the MX-406 has an all-steel chassis, contains high-quality components and has a five-year warranty.

### MX-406 Features:

- High-gain mic preamps (60dB)
- Convenient, 3.5mm stereo line in jack on front panel for MP3 players and smartphones
- 2-band EQ on each input
- 6-channel inserts
- 20dB input pad switch
- +48V phantom power
- Universal power supply
- AUX send and return
- Stereo line in/out
- Input level and pan controls on each input
- Safety/Compliance: cTUVus, CE, FCC, RoHS



### Specifications Note: 0dBu = 0.775 VRMS

Distortion, Hum & Noise	
THD @ +4dBu Output, 20Hz–20kHz	<0.05%
THD @ +12dBu Output, 30Hz–10kHz	<0.05%
IMD (SMPTE) @ +12dBu output	<0.05%
Equivalent Input Hum and Noise	<-128dBu
Residual Output Noise (all levels @ min)	<-100dBu
Master Levels (@ nominal all chan levels @ min)	<-90dBu
Aux Master (@ nominal all chan AUX @ min)	<-90dBu
Master Levels & One Channel Level (@ nominal)	<-68dBu
Maximum Voltage Gain: Master (±2dB)	
Mic/Line Input to Master Output	+84dB
Mic/Line Input to Mono Output (600 Ohm load)	+84dB
Maximum Voltage Gain: AUX Sends (dB±2)	
Mic Input to Aux Master Output (Pre-chan level)	84dB
Mic Input to Aux Master Output (Post-chan level)	97dB
Stereo Line In to Master Output	27dB
Frequency Response	
20Hz–20kHz	+0.5/-1.0dB
Equalization	
Bass (@ 70Hz, shelving)	±12dB
Treble (@ 8kHz, shelving)	±12dB
Crosstalk	
Adjacent Inputs (20Hz–20kHz)	<-65dB
Metering	
VU Meters	-21 to +6VU, 0VU = +4dBu (Stereo outputs)
Peak Indicators	Peak Clip indicator on each input channel and L/R outputs, illuminates 3dB below clipping
Weights, Dimensions & Power	
Dimensions	19" W x 3.5" H x 9.4" D (483mm x 89mm x 239mm)
Unit Weight	11lbs (5kg)
Shipping Weight	14lbs (7kg)
Power Requirements	100–240VAC, 50–60Hz, 30W

Unless otherwise stated, specification conditions are: 150 Ohm source, Input set at "-40", all other controls set at nominal, XLR output into 600 Ohm or greater.

©2014 All features, specifications and graphical representations are subject to change without notice.



# MX-406

## ARCHITECT & ENGINEERING SPECS

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 fader/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 separate 1/4" TRS and XLR connectors for line input and balanced microphone 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 Line Input on back panel RCA jacks and a front panel 3.5mm stereo phone jack with level control. Separate stereo RCA line 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 Main Outputs 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 14 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.

The mixer shall be an Ashly model **MX-406**

