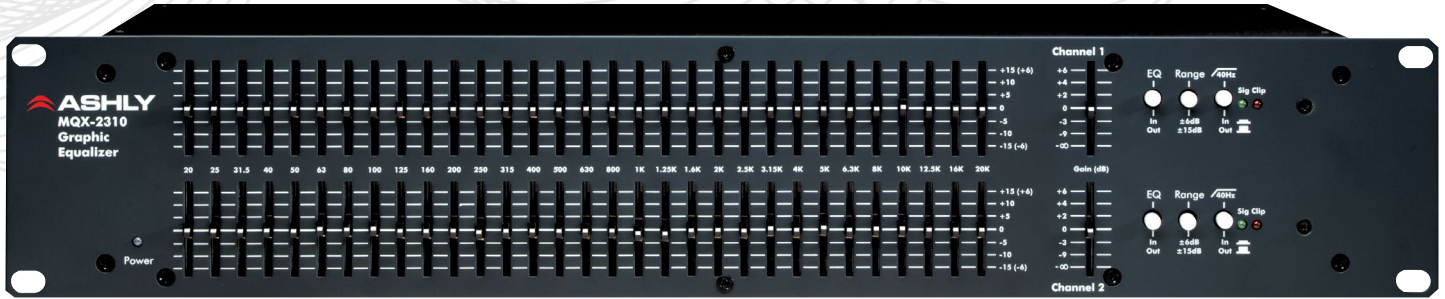




5-Year Warranty



# MQX-2310 2-CHANNEL, 31-BAND GRAPHIC EQUALIZER

The **MQX-2310** uses the same precision filter design and summing circuitry as the GOX Series, with each filter exhibiting true Constant "Q" response. The center-detented position of each fader acts as an on/off switch for its filter, ensuring absolutely flat response and high signal-to-noise ratios. A full 25mm throw makes use of every last bit of panel space so that small panel size doesn't compromise resolution.

The additional range and incredible accuracy of this fader allows for  $\pm 15$  dB of amplitude adjustment on each individual filter. The MQX-2310 features 2-channels of 1/3 octave EQ.

### MQX-2310 Features:

- Ashly Differentiator:  $+15/-15$ dB in 25mm Fader
- 25mm, detented metal shaft faders
- Switchable 40Hz, 18dB/octave hi-pass filter
- Tight tolerance components for precise  $\leq 3\%$  filter accuracy
- Precision Wein-Bridge filters
- Constant "Q" design
- Switchable boost/cut Range of  $\pm 6$  or  $\pm 15$  dB
- Signal and Clip LED
- Balanced inputs
- Servo-balanced outputs
- XLR, TRS and Euroblock connections
- Universal 100–240VAC internal power supply
- Rider-friendly
- Safety/Compliance:  $\tau$ TUVus, CE, FCC, RoHS

Specifications		Note: 0dBu = 0.775 VRMS
Frequency Response	20Hz–20kHz, $\pm 0.25$ dB	
THD	$< 0.01\%$ @ +20dBu	
IM Distortion (SMPTE)	$< 0.01\%$ @ +20dBu	
Output Hum/Noise	-94dBu, Unweighted	
Channel Separation	$> 85$ dB @ 1kHz	
Gain Control	$-\infty$ to +6dB	
<b>Input</b>		
Type	Active Balanced	
Impedance	20k Ohms	
Max Level	+23dBu	
Connectors	1/4" (TRS), XLR, Euroblock	
<b>Output</b>		
Type	Servo-Balanced	
Source Impedance	100 Ohms	
Min Load Impedance	600 Ohms	
Max Level	+23dBu	
Connectors	1/4" (TRS), XLR, Euroblock	
<b>Filters</b>		
Type	Constant Q / Wein-Bridge	
Number	2 x 31	
Bandwidth	1/3 Octave	
Tolerance	$\pm 3\%$	
Range	$\pm 6$ dB, $\pm 15$ dB Switchable	
Subsonic Filter	18dB/Octave @ 40Hz	
<b>Weights &amp; Dimensions</b>		
Dimensions	19" L x 3.5" H x 8" D (483mm x 89mm x 203mm)	
Unit Weight	10lbs (4.54kg)	
Shipping Weight	13lbs (6kg)	
<b>Power Requirements</b>		
Nominal Voltage	100–240VAC (50–60Hz)	
Minimal Voltage	85VAC, 30W	





# MQX-2310

## ARCHITECT & ENGINEERING SPECS

The graphic equalizer shall be stereo (2 channels). Each channel shall consist of 31 bands centered on standard ISO frequencies at intervals of 1/3 octave and covering a frequency range of 20Hz to 20kHz. Individual bands shall be activated by linear slide faders with a 25mm travel, and a tactile center detent. The range of equalization per band shall be either  $\pm 6\text{dB}$  or  $\pm 15\text{dB}$  selected via a 2-position switch. The equalizer shall have a gain of unity with all sliders centered, and shall have a maximum in/ out level of  $+23\text{dBu}$ . Frequency response shall be  $\pm 25\text{dB}$  20Hz to 20kHz. Hum and noise shall be at least  $-94\text{dBu}$ , and SMPTE intermodulation distortion or THD shall be less than  $.01\%$  at  $+20\text{dBu}$ . Input impedance shall be 20k ohm balanced, 10k ohm unbalanced. Output impedance shall be 200 ohm servo-balanced, 100 ohm unbalanced. Inputs shall be active (transformerless) balanced type on XLR, 1/4", and Euroblock connectors. Individual filters shall be Wein-bridge type and connected in a summing circuit optimized for minimum filter interaction and constant bandwidth at any slider setting. Boost and cut characteristics shall be fully symmetrical, with the filter being electrically removed from the circuit in the center (flat) position. Individual filters shall be accurate to within 3% of indicated center frequency and shall be non-adjustable to insure long term accuracy. The equalizer shall also include an 18dB per octave high pass filter at 40Hz equipped with a bypass switch. Green signal presence and red clip indicators shall show critical operating levels. Input gain shall be adjustable from  $-\infty$  to  $+6\text{dB}$ , and an overall EQ bypass switch shall be included. The equalizer shall weigh 8.5 lbs net and mount in a standard 19" rack using 2 spaces (3.5" high). The power requirement shall be 100-240VAC, 50-60Hz, 24W.

The unit shall be an Ashly Audio **MQX-2310**.

