

The MQX-2150 is very useful device for general tone shaping because it is intuitive and easy to adjust. The visual reference provided by the slider position gives an approximate idea of the frequency response generated, with the lower frequencies on the left and higher frequencies on the right. Large rooms tend to suffer from multiple reflections with long time delays, long reverberation times, and "ringmodes", all of which lead to reduced intelligibility and a generally "muddy" sound. As sound travels long distances through the air, high frequencies are attenuated more than low frequencies. In general, large rooms benefit from some low frequency roll-off, high frequency boost, and attenuation of ring mode frequencies.

### ARCHITECTS SPECIFICATIONS

#### MQX-2150

The graphic equalizer shall be stereo (2 channels). Each channel shall consist of 15 bands centered on standard ISO frequencies at intervals of 2/3 octave and covering a frequency range of 25Hz to 16kHz. 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 switchable between  $\pm 15\text{dB}$  or  $\pm 6\text{dB}$ .

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  $-96\text{dBu}$  and SMPTE intermodulation distortion or THD shall be less than 0.01% 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 both 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 20Hz, internally selectable. A green signal presence and red clip indicators shall show critical operating levels. Input gain shall be adjustable over minus infinity to  $+6\text{dB}$ , and an overall EQ bypass switch shall be included. The equalizer shall weigh 6.5 lbs net and mount in a standard 19" rack using 1 space (1.75" high). The power requirement shall be 100-240VAC, 50-60Hz, 24W. The unit shall be an Ashly Audio MQX-2150.

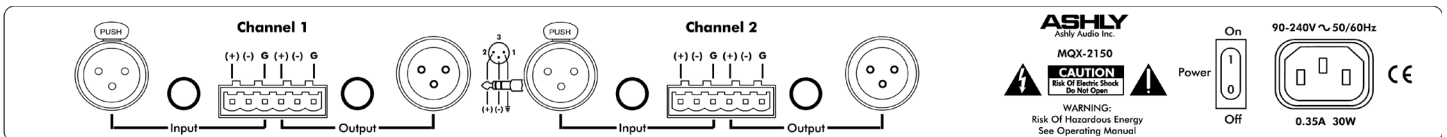
#### Features:

- Constant "Q" design for low ripple and minimum interaction
- Precision Wein Bridge Filters
- Balanced XLR, 1/4" TRS and Euroblock on Inputs and Outputs
- Selectable 15dB or 6dB Range
- 18dB/Octave High Pass Filter
- Low Noise Design
- Silent In/Out Switching
- Signal Present and Clip LEDs
- 25mm Fader with Center-Off Position
- Safety/Compliance: cTUVus/CE, RoHS
- 5-Year Worry-Free Warranty

## Specifications MQX-2150

<b>Input</b>	
Type	Active Balanced
Impedance	20K $\Omega$
Max Level	+23dBu
Connectors	1/4" Phone Jack (TRS), XLR, Euroblock
<b>Output</b>	
Type	Servo-Balanced
Source Impedance	100 $\Omega$
Min Load Impedance	200 $\Omega$
Max Level	+23 dBu
Connectors	1/4" Phone Jack (TRS), XLR, Euroblock
<b>Overall</b>	
Frequency Response	20 Hz - 20 kHz, $\pm$ 0.25 dB
THD	<.01% @ +20dBu
IM Distortion (SMPTE)	<.01% @ +20dBu
Output Hum & Noise (unweighted)	-96dBu
Channel Separation	>95dB @ 1Khz
Gain Control	$-\infty$ to +6dB
<b>Filters</b>	
Type	Constant Q/Wein Bridge
Number	2x15
Bandwidth	2/3 Octave
Tolerance	$\pm$ 3%
Range	$\pm$ 6 dB, $\pm$ 15 dB (switchable)
Subsonic Filter	18dB/Octave @ 20Hz
<b>Power Requirements</b>	
Nominal Voltage	100 - 240 VAC (50-60 Hz)
Power	24W
<b>Physical</b>	
Shipping Weight	14 lbs
Dimensions	19"Lx1.75"Hx8"D

## Rear Panel MQX-2150



## Applications:

General Tone Control, Feedback Control, Console Channel Equalization, Large Room Equalization for Churches, Studios, Concerts, Dance/Night Clubs, PA Systems, Auditoriums, Lecture Halls, Sports Stadiums, Outdoor Festivals

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