

### ARCHITECTS SPECIFICATIONS

#### DPX-200

The device shall consist of two individual processors; a four band parametric equalizer and full function compressor limiter both of which shall be constructed into a single unit that mounts in a standard EIA rack occupying a single rack space (1RU).

There shall be two separate inputs consisting of a microphone preamp and a line input. An input select switch and input level control shall be located on the front panel. The microphone input shall be a low impedance balanced XLR connector. A microphone input pad switch shall be located on the rear panel and shall select either 0dB or (-)20dB levels. The line input shall be assessable via an XLR or 1/4" TRS connector and shall have an impedance of 20k ohm balanced, 10k ohm unbalanced. Input gain for both inputs shall be controlled from a dual concentric potentiometer on the front panel. The gain range for the microphone preamp shall be from +20dB to +55dB. The gain range for the line input shall be minus infinity to +15dB.

The parametric equalizer section shall be capable of being center-frequency-tunable from 20Hz to 20KHz. The section shall have two full bands of parametric equalization. Each band shall have an adjustable bandwidth between 3 1/3 octave and 1/20 octave. The frequency response shall be 20Hz-20KHz, +/-0.2dB. The distortion shall not exceed 0.03% THD at +4dBu, 20Hz-20KHz. Hum and noise shall be below -90dBu with the EQ engaged and -109dBu with the EQ out. The unit shall offer a per band amplitude adjustment of +/- 15dB as well as a master gain adjustment of +/-15dB. The parametric equalizer section shall also include low frequency and high frequency shelving filters covering the range of 40-400Hz and 1.6KHz to 16KHz respectively. The range of shelving frequency shall be +/-15dB. Output impedance shall be 200 ohm pseudo-balanced, 100 ohm unbalanced and outputs shall be on both XLR and 1/4" TRS phone jacks. The maximum in/out level shall be +23dBu or +7dBu at maximum boost, 1/3 octave or greater. Each filter band shall have a filter in/out switch and an LED indicator that lights green when the filter is engaged. A master EQ switch shall be located on the front panel allowing easy comparison between filtered and unfiltered signal.

The compressor/limiter shall provide controls for independent gain, threshold, ratio, attack, release, and output level adjustments. It shall have a detector patch point which allows connection of an external equalizer in the detector loop to produce frequency selective limiting; or allows the connection of an external microphone source to produce voice-over-compression. It shall have front panel mounted switches for engaging/defeating the compressor/limiter functions. It shall have front panel switches for selecting input or output meter display. It shall have both XLR and 1/4" connectors on inputs and outputs. Performance specifications shall meet or exceed the following: Gain control shall be ±15dB. Threshold control shall be adjustable from -40dB to +23dBu. Ratio shall be adjustable from 2:1 to infinite. Attack time shall be adjustable from 200µs to 20ms. Release time shall be adjustable from 100ms to 3 seconds. The output level shall be adjustable from minus infinity to +20dBu. The maximum in-out level shall be +23 dBu. The input impedance shall be 20K ohms balanced. The output impedance shall be 200 ohms pseudo-balanced and outputs shall be on both XLR and 1/4" TRS phone jacks. The frequency response shall be 20Hz to 20KHz ±0.2dB. Distortion shall be <0.01% THD, 1KHz @ 15dBu, and <0.1% THD @ +15dBu from 20Hz to 20KHz. Hum and noise shall not exceed -95dBu @ unity gain.

The device shall have a chain switch located on the rear panel to allow the user to select between operating the unit as two independent processors or in cascaded mode where the parametric equalizer is first in the chain. The power supply shall be internal with a power switch and power indicator on the front panel and operate from 93-120VAC, 50-60Hz and consume a maximum of 10W.

The unit shall be model DPX-200 Parametric Equalizer and Compressor/Limiter manufactured by Ashly Audio Inc. No other unit shall be acceptable unless submitted data from an independent research lab verifies that the above size/performance specifications are met.

#### Features:

- One Rack Space
- Parametric EQ and Full Compressor/Limiter
- Use as Individual Processors or In-Line
- "Chain" Switch Selects Independent or In-Line Operation
- Extremely Low Noise and Distortion Design
- Silent In/Out Switching for Each Processor
- Balanced XLR and 1/4" Connectors on Inputs and Outputs
- 2 Full-Range Parametric Filters
- High and Low Shelf Filters
- EQ In/Out Switch for Each Filter
- Detector Patch Point
- Full LED Metering For Gain Reduction and In/Out Level
- Input/Output Meter Select Switch
- Five Year Warranty

**General Specifications DPX-200:**

**INPUT SECTION**

**Mic Input Impedance:** >= 1K ohm Balanced  
**Line Input Type:** Active Balanced  
**Line Input Impedance:** 20K ohm Balanced, 10k ohm Unbalanced  
**Mic Input Connection:** XLR  
**Mic Gain:** 55dB ± 2dB without pad  
**Line Input Gain:** 15dB  
**Mic Gain Range:** +20dB to +55dB  
**Line Gain Range:** (-) infinity to +15dB  
**Phantom Power:** 48VDC

**PARAMETRIC EQ SECTION**

**Input Impedance:** 20K ohm Balanced, 10k ohm Unbalanced  
**Max. Input Level:** +23dBu  
**Output Type:** Pseudo Balanced\*  
**Output Impedance:** 200 ohm Balanced, 100 ohm Unbalanced  
**Max. Output Level:** +23dBu  
**Bandwidth:** 3 1/3 - 1/20 octave  
**Peaking Frequency:** 20Hz - 20KHz  
**Range:** ±15 dB  
**Low Shelving Frequency:** 40 - 400Hz  
**High Shelving Frequency:** 1.6K - 16KHz  
**Range:** ±15 dB

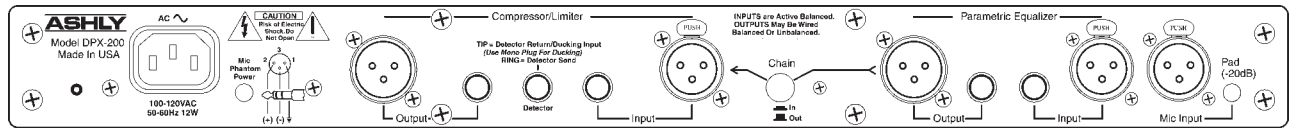
**Frequency Response:** ± .25dB 20-Hz-20kHz  
**Total Harmonic Distortion:** < 0.03% @ +20dBu  
**IM Distortion (SMPTE):** < 0.01% @ +20dBu  
**Output Hum and Noise:** < -95dBu (20Hz-20kHz unweighted)

**COMPRESSOR SECTION**

**CONTROLS:**  
**Gain:** +/-15dB,  
**Threshold:** -40dBu +22dBu  
**Ratio:** 2:1 to infinite  
**Attack Time:** 200uSec - 20mSec  
**Release Time:** 0.1Sec - 3Sec  
**Output:** -40dBu - +20dBu  
**Input Impedance:** 20k Ohms, 10k ohm Unbalanced  
**Output Type:** Pseudo Balanced\*  
**Output Impedance:** 200 ohm Balanced, 100 ohm Unbalanced  
**Frequency Response:** +/- 0.2dB 20Hz-20kHz  
**THD:** <0.01%, +15dBu, 1kHz  
 <0.15%, +15dBu, 20Hz-20kHz  
**Output Hum and Noise:** -95dBu, (typ.) unity gain  
**I/O Connectors:** XLR, 1/4" TRS  
**Power Requirements:** 93-120VAC, 50-60Hz, 10W (240V available)  
**Shipping Weight:** 8lbs.  
**Dimensions:** 19"W x 1.75"H x 6"D

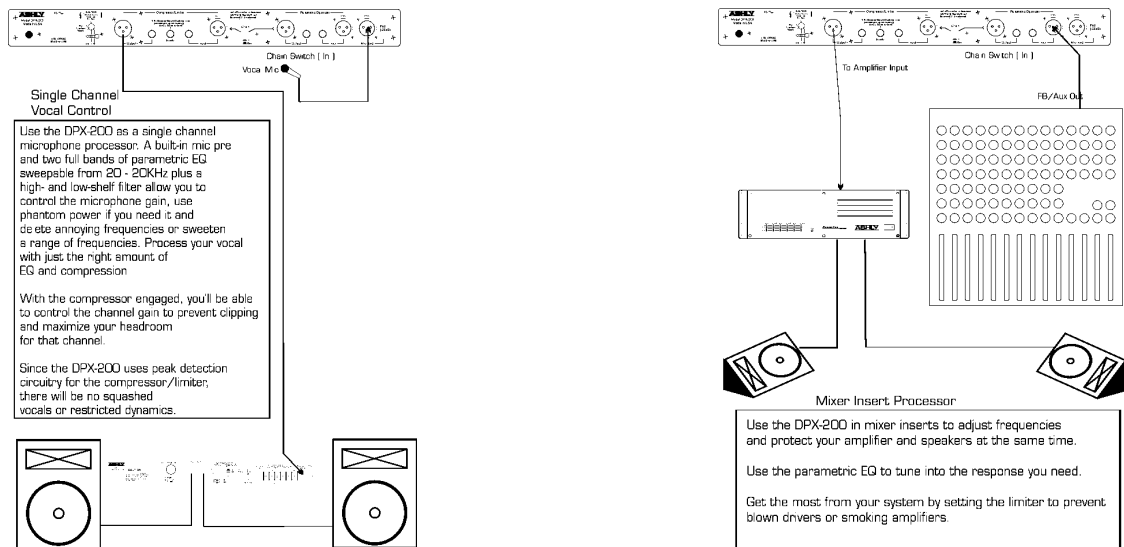
\*Pseudo-balanced output is single ended signal with balanced impedance

**DPX-200 Rear Panel**



**Applications:**

FOH and Monitor Systems, Paging Systems, Project Studio Recording, 70-Volt Systems



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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