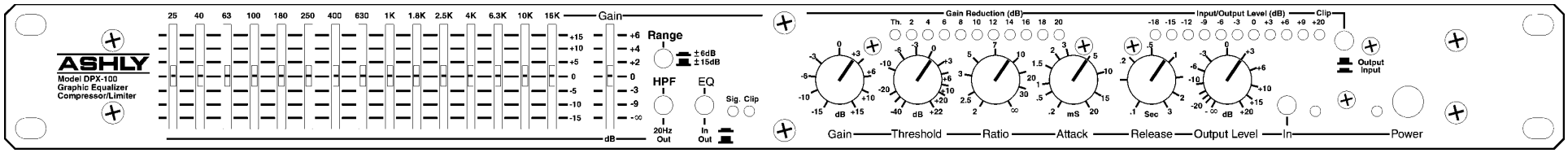


ARCHITECTS SPECIFICATIONS

DPX-100

The device shall consist of two individual processors; a fifteen band graphic 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 singe rack space (1RU).

The graphic equalizer 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 ±15dB or ±6dB. The equalizer shall have a gain of unity with all sliders centered, and shall have a maximum in/out level of +23dBu. Frequency response shall be ±.25dB 20Hz to 20kHz. Hum and noise shall be at least -95dBu and SMPTE intermodulation distortion or THD shall be less than 0.01% at +20dBu. Input impedance shall be 20k ohm balanced, 10k ohm unbalanced. Output impedance shall be 200 ohm balanced, 100 ohm unbalanced. Inputs and outputs shall be active (tranformerless) balanced type on both XLR and 1/4" phone jacks. 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. A green signal presence and red clip indicators shall show critical operating levels. Input gain shall be adjustable over -infinity to +6dB, and an overall EQ bypass switch shall be included.

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 +22dBu. Ratio shall be adjustable from 2:1 to infinite. Attack time shall be adjustable from 200uS 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 balanced. The frequency response shall be 20Hz to 20KHz ±0.2dB. Distortion shall be <0.01% THD, 1KHz @ 15dBu, and <0.15% 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 graphic 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 95-125VAC, 50-60Hz and consume a maximum of 10W.

The unit shall be model DPX-100 Graphic 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**
- **15-Band Graphic 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**
- **25mm EQ Faders with Center-Off Position**
- **Constant "Q" Precision Wein Bridge Filters**
- **Selectable 15dB or 6dB EQ Range**
- **Switchable 20Hz High Pass Filter on EQ Section**
- **Detector Patch Point**
- **Full LED Metering For Gain Reduction and In/Out Level**
- **Input/Output Meter Select Switch**
- **Five Year Warranty**

General Specifications DPX-100:

GRAPHIC EQ SECTION

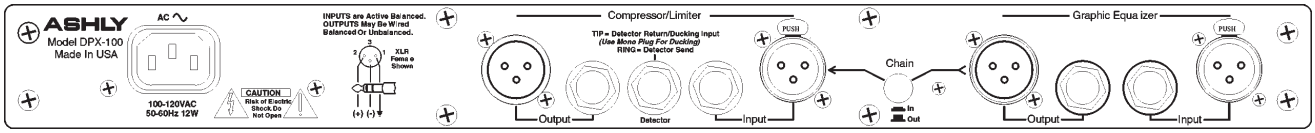
Input Type:	Active Balanced
Input Impedance:	20K ohm Balanced, 10k ohm Unbalanced
Max. Input Level:	+23dBu
Output Type:	Active Balanced
OUTPUT Impedance:	200 ohm Balanced, 100 ohm Unbalanced
Max. Output Level:	+23dBu
Frequency Response:	± .25dB 20-Hz-20kHz
Total Harmonic Distortion:	< 0.01% @ +20dBu
IM Distortion (SMPTE):	< 0.01% @ +20dBu
Output Hum and Noise:	< -95dBu (20Hz-20kHz unweighted)
FILTER Type:	Constant Q/Wein Bridge
Bandwidth:	2/3 octave
Tolerance:	±3%
Range:	±6 or ±15 dB
Subsonic Filter:	18dB/octave @ 20Hz

COMPRESSOR SECTION

CONTROLS:

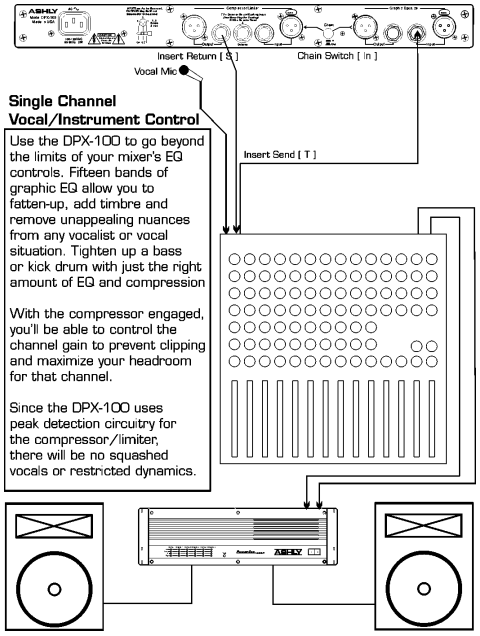
Gain:	+/-15dB,
Threshold:	-40dBu +22dBu
Ratio:	2:1 to infinite
Attack Time:	200uSec - 20mSec
Release Time:	0.1Sec - 3Sec
Output:	-40dBu - +20dBu
Input Impedance:	20k Ohms, 10k ohm Unbalanced
Output Impedance:	200 ohm Balanced, 100 ohm Unbalanced
Frequency Response:	+/- 0.2dB 20Hz-20kHz
THD:	<0.01%, +15dBu, 1kHz
	<0.15%, +15dBu, 20Hz-20kHz
Output Hum and Noise:	-95dBu, (typ.) unity gain
I/O Connectors	XLR, 1/4"TRS
Power Requirements:	90-125VAC, 50-60Hz, 10W (240V available)
Shipping Weight:	8lbs.
Dimensions:	19"W x 1.75"H x 6"D

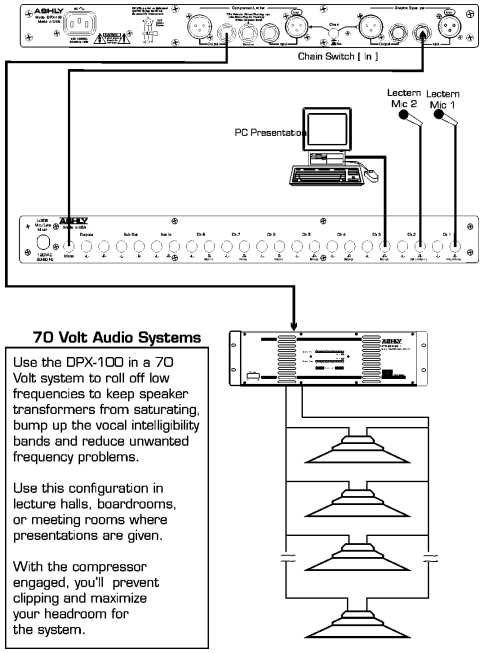
DPX-100 Rear Panel



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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