480 DriveRack™
Complete Equalization & Loudspeaker Management System

dbx® PROFESSIONAL PRODUCTS

VISIONARY DESIGN

The DriveRack™ 480 Complete Equalization & Loudspeaker Management System is the flagship product in the DriveRack™ line. The 480 offers the user four inputs and eight outputs on XLR connectors. Each channel has EQ in the form of a 9-Band Parametric or a 31-Band Graphic and Notch Filters. In addition, the 480 features a filter set that can be used to create a Highpass, Lowpass or Bandpass filter. Dynamics processing is available on all channels with a Compressor/Limiter that emulates the classic dbx 160. The output section of the 480 offers delay, output level and phase compensation. The 480 is also capable of running dual real-time analyzers on channels three and four. A 480 master, a PC GUI, or a 480R remote can control the 480. Any combination of 480s, 481s, 482s and 442s can be controlled on a single DriveRack™ network consisting of up to 100 units.

REVOLUTIONARY ENGINEERING

The DriveRack™ design team set out to create a product that would be able to fulfill all of the requirements of its users by providing a device that would handle all aspects of superior sonic loudspeaker management and equalization. The result of that quest is the 480 DriveRack™, which has been designed with the purpose and vision of providing four independent channels of processing power that includes 31-Band Graphic equalizer, as well as dbx's own industry standard dynamics processing. All aspects of the aforementioned features can be controlled by the included dbx Professional Products Interactive DriveWare™ software. Software updates can also be downloaded instantly from ***www.dbxpro.com*** through the RS 232 port.

FEATURES

- *4 Input and 8 Outputs with routing*
- *31 band graphic or 9 band parametric equalizer on every input (pre-crossover)*
- *Dual Real Time Audio Analyzers*
- *Butterworth, Bessel or Linkwitz-Riley crossover filters*
- *27 Different Crossover Configurations*
- *Time Alignment and Transducer Alignment Delays*
- *Compressor/Limiter on every output*
- *Speaker Compensation EQ (post crossover)*
- *Multi-level Security System*
- *Separate House and Show EQ with individual lockouts*

- *Triple redundant back up of all parameters when running network, 480R and PC GUI*
- *TYPE IV™ Conversion System*
- *Electronically balanced/RF filtered XLR Inputs and Outputs*
- *Proprietary RS-485 Control Network*
- *RS-232 PC Interface for computer display and configuration*

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H A Harman International Company

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SPECIFICATIONS

Number of Inputs:	4 (Inputs 3 or 4 can be selected as an RTA mic input)
Connectors:	Female XLR
Type:	Electronically balanced/RF filtered
Impedance:	>40kΩ
Maximum Input Level:	Hardware selectable for +30, +22, +14, dBu
Max input RTA Level:	-10 dBu
CMRR:	>40 dB typical, >55 dB at 1kHz
Input Gain Range RTA:	10 dB to 70 dB w/60 dB typical
Outputs	
Number of Outputs:	8
Connectors:	Male XLR
Type:	Electronically balanced, RF filtered
Impedance:	120Ω
Output Transformers:	Optional
Max Output Level:	+25.5 dBu into 1kΩ
	+22dBu into 600Ω
A/D Performance	
Type:	dbx Type IV™ Conversion System
Dynamic Range line:	>112 dB unweighted, 115 dB A-weighted
Type IV™ dynamic range:	127 dB with transient material, A-weighted, 22kHz BW
	125 dB with transient material, unweighted, 22kHz BW
	119 dB typical with program material, A-weighted, 22kHz BW
Sample Rate:	48kHz
A/D Wordlength:	24 bits
D/A Performance	
Dynamic Range:	112 dB unweighted, 115 dB A-weighted
Sample Rate:	48kHz
D/A Wordlength:	24 bits
System Performance	
Internal Wordlength:	48 bits
THD + Noise:	0.003% typical at +4dBu, 1kHz, 0dB input gain
Frequency Response:	20Hz- 20kHz, +/-0.5dB
Interchannel Crosstalk:	<-85dB at 1kHz, 0dB input gain
Pre EQ	
Type:	One 31-band Graphic EQ per input channel, or 9 band Parametric EQ per input channel RTA can be substituted for EQ in channels 3 and 4
Range:	+/-12 dB range
Notch Filters	
Number:	1-5 per input channel not to exceed 10 for all input channels

Pre Delay	
Length:	680ms/channel
Crossover	
Type:	1x2, 1x3, 1x4, 1x5, 1x6
	2x3, 2x4, 2x5, 2x6, 2x7, 2x8, 3x4, 3x5, 3x6, 3x7, 3x8, 4x6, 4x8
Filter Type:	Butterworth, Bessel, or Linkwitz-Riley
Slope:	6, 12, 18 or 24 dB/octave for Butterworth or Bessel filters
filters	12, 24, 36 or 48 dB/octave for Linkwitz-Riley
Post EQ	
Type:	Parametric
Number:	4 EQ bands per output channel
Range:	+/-15 dB range
Dynamics	
Type:	Compressor/Limiter with PeakStopPlus™
Attack/Release:	Program Dependent
Linking:	All 8 bands are linkable
Post Delay (Driver Alignment)	
Length:	170 ms per output channel
Pink Noise Generator	
Position:	Pink noise inserted on selected input(s)
Phase Compensation	
Number:	One per output channel
Amount:	0-180 degrees phase shift
Output Polarity:	Reversible
Miscellaneous	
Output Transformers:	Optional
Network:	Proprietary RS-485 Backbone
GUI:	RS-232 interface for computer display and configuration
RTA Microphone:	Optional
ROM Upgrade:	Flash upgradeable through RS-232
Power Requirements	
Watts:	100-240V - 50/60 Hz
	35 Watts
Dimensions	
Dimensions:	Height- 3.5" X Width- 19" X Depth 12.15"
Weight:	11lbs.
Shipping Weight:	12.5lbs.

dbx engineers are constantly working to improve the quality of our products. Specifications are, therefore subject to change without notice.

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The Professional's Choice In Signal Processing