481 DriveRack™
Complete Equalization & Loudspeaker Management System

dbx®
PROFESSIONAL PRODUCTS

VISIONARY DESIGN

The goal was quite simple: design an all-inclusive product that offers a complete integration of all of the elements required to achieve state-of-the-art loudspeaker management. This design goal was reached and exceeded with introduction of the DriveRack™ series. The 481 DriveRack™ includes all of the functionality and features of the 480 DriveRack™. The 481 incorporates 4 inputs and 8 outputs using Euroblock connectors. The 481 DriveRack™ also has a streamlined front panel which makes it ideal for permanent install applications. All programming functions of the 481 DriveRack™ can be performed through a 480 master, the 480R, or via the Windows GUI. By using the DriveRack™ network system, up to 99 DriveRack™ units can be chained together.

REVOLUTIONARY ENGINEERING

The 481 DriveRack™ continues the legacy DriveRack™ series, which has been created by the company that has been redefining the standard of signal processing for more than 30 years. dbx® Professional Products has created a product that caters to numerous applications in tour sound and sound contractor requirements.
The 481 DriveRack™ was designed with the purpose and vision of providing four independent input and eight output channels of processing power that include 31-Band Graphic equalizers, 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 backup of all parameters when running network, 480R and PC GUI**
- **TYPE IV™ Conversion System**
- **Electronically balanced/RF filtered Euroblock Inputs and Outputs**
- **Proprietary RS-485 Control Network**
- **RS-232 PC Interface for computer display and configuration**

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SPECIFICATIONS

Inputs
Inputs:	4
Connectors:	Euroblock
Type:	Electronically balanced/RF filtered
Impedance:	>40kΩ
Max Input Level:	Hardware selectable for +30, +22, +14, dBu
CMRR:	>40 dB typical, >55 dB at 1kHz

Outputs
Outputs:	8
Connectors:	Euroblock
Type:	Electronically balanced, RF filtered
Impedance:	120Ω
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 12, 24, 36 or 48 dB/octave for Linkwitz-Riley filters

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
Remote:	Optional dbx 480R
RTA Microphone:	Optional
ROM Upgrade:	Flash upgradeable through RS-232

Power Requirements
Watts:	100-240V - 50/60 Hz 35 Watts

Dimensions
Dimensions:	Height- 1.75" X Width- 19" X Depth 7.90"
Weight	8 lbs.
Shipping Weight:	9.5 lbs.

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

dbx PROFESSIONAL PRODUCTS

The Professional's Choice In Signal Processing