dbx
by HARMAN

INSTALL

STUDIO

TOUR

FULL LINE CATALOG

HISTORY

It began over 40 years ago with the vision of a single man to create a better way to record audio and that vision has continued into a new millennium. The late David Blackmer, who is universally considered to be the father of modern Compression, had a quest to improve the dynamic range of analog recordings using decibel expansion. This quest produced the decilinear VCA and RMS detector which taken together have changed the sonic landscape and made possible so many of our current audio technologies. In 1971, Mr. Blackmer founded dbx® which has collectively produced over 35 patents that continue to forge and reshape the landscape in the Live Sound, Studio Recording, and Installed Sound professional audio markets today. Our award-winning team of designers and engineers have embraced Mr. Blackmer's passion for audio purity with a vengeance, and continue to design and build the precise and accurate tools necessary for today's audio production. From our rock-solid Analog products like the 20-Series EQs and 10-Series Compressors, to our cutting-edge Performance and Commercial Audio products – our System Core (SC), DriveRack and ZonePRO lines – we provide the tools to accommodate all of your audio needs. This brochure is designed to help you navigate through our many product solutions and find the ones that meet your exact needs.

CONTENTS

DriveRack® 4800 | 4820

COMPLETE EQUALIZATION AND LOUDSPEAKER MANAGEMENT SYSTEM

▲ The 4820 is based on the same operating system as the DriveRack® 4800 without the Full Color QVGA Display Interface

DriveRack® 4800 | DriveRack® 4820

COMPLETE EQUALIZATION AND LOUDSPEAKER MANAGEMENT SYSTEM

Designed to provide incredible flexibility, sonic excellence and intuitive control for performance applications, the DriveRack 4800 is the new flagship of the hugely successful DriveRack family. From the powerful 96 kHz DSP engine and standard analog and digital I/O, to the QVGA display and multiple control surfaces, the 4800 provides all the processing, flexibility and control necessary for both installation and live use.

The DriveRack 4800 is the next generation of the famous DriveRack family, and like its predecessor it is engineered to provide "Everything you need between the mixer and the power amps". In keeping with this philosophy the 4800 includes four inputs and eight outputs with both analog and digital connectivity. The 96 kHz processing engine is capable of offering insert processing functions to customize the processing path for your application, in addition to the standard system processing functions all with extremely low latency and extended frequency response. From Signal Routing, EQ, and Bandpass Filters, to classic dbx® Dynamics and AFS® Advanced

Feedback Suppression, all the processing is available and with the sonic excellence that you would expect from the world's leading system processing manufacturer. With all this processing power available, control is of paramount importance. The DriveRack 4800 provides a full color display to speed manual operation; this combined with intuitive front panel controls, an easy to use GUI and optional wall panel controllers means that whether your application is tour sound or installation, the DriveRack 4800 has what it takes.

- 48 and 96 kHz operation with Wordclock input
- Full Color QVGA Display (4800 only)
- 4 analog and AES/EBU inputs
- 8 analog and AES/EBU outputs
- Optional Jensen® I/O Transformers
- Full Bandpass Filter, Crossover and Routing Configurations with Bessel, Butterworth, and Linkwitz-Riley filters
- 31-Band Graphic and 9-band Parametric EQ on every input

- 6-band Parametric EQ on every output
- Loudspeaker Cluster and Driver Alignment Delays
- Selectable DSP inserts on all inputs and outputs including Classic dbx Compression, PeakStopPlus™, Limiting and AFS® Advanced Feedback Suppression among others
- Ethernet HiQnet networking and control
- dbx ZC wall panel control

DriveRack® 260

COMPLETE EQUALIZATION AND LOUDSPEAKER MANAGEMENT SYSTEM

DriveRack® 260

COMPLETE EQUALIZATION AND LOUDSPEAKER CONTROL SYSTEM

The DriveRack 260 was designed to provide state-of-the-art signal processing, while maintaining a simple and intuitive control interface. This goal has been realized. From the powerful DSP modules to the multiple control surfaces, the 260 provides all the processing and control necessary for both installation and live use. Additionally, the Wizard function enables any user to quickly set up and use the 260 to its full potential by streamlining the setup process and providing a menu-based setup procedure that includes system setup and configuration, Auto-EQ, and Advanced Feedback Suppression (AFS™).

The DriveRack 260 is based on the same unparalleled design philosophy as the other products in the DriveRack family, namely, to provide "Everything you need between the mixer and the power amps." In keeping with that philosophy, the 260 offers 2 inputs and 6 outputs on XLR connectors. Each input channel provides a choice of EQ, either a 9-band Parametric or a 28-band Graphic EQ. Each input channel also boasts two selectable insert

processors with a selection of Notch Filtering, classic dbx® Compression, Auto Gain Control, Sub-Harmonic Synthesis, or our own patented Advanced Feedback Suppression (AFS™). The DriveRack 260 also offers a configurable Delay with 2.7 seconds of total delay time. The 260 provides full Bandpass and Crossover filtering and routing including Bessel, Butterworth and Linkwitz-Riley topologies. There is parametric EQ available on each output as well as dbx PeakStopPlus™ Limiting. The 260 provides a full-time RTA for live sound applications, while contractors will appreciate its control inputs for wall-panel logic and volume control.

"My clients say 'Thanks for a great sounding show with no feedback,' I just say, 'Thanks dbx.' "

- Emerson Jones -Via Facebook

- Feedback Elimination
- 2.7 Seconds of Alignment and Zone Delay
- RS-232 PC GUI control
- Classic dbx Compression and Limiting
- Graphic and Parametric EQ
- Auto-EQ Function
- Full Bandpass, Crossover, and Routing Configurations
- Auto Gain Control
- Pink Noise Generator and full-time RTA
- Setup Wizard with JBL speaker and Crown Power Amplifier Tunings
- Security Lockout
- Wall Panel Control Inputs
- Optional RTA-M microphone

DriveRack® 220i

**SYSTEM PROCESSOR WITH ADVANCED FEEDBACK SUPPRESSION**

DriveRack® 220i

SYSTEM PROCESSOR WITH ADVANCED FEEDBACK SUPPRESSION

Designed from the ground up to provide state-of-the-art signal processing, the DriveRack 220i is the perfect tool for any fixed-install application. With a full complement of processing features and Mic/Line inputs the DriveRack 220i can provide both system and microphone processing. Featuring the new, patented Advanced Feedback Suppression (AFS®) algorithm, equalization, dynamics processing, delay, matrix mixing, and bandpass filters, the DriveRack 220i will exceed your expectations.

The DriveRack 220i is piloted from the intuitive DriveWare GUI that offers both Configuration and Control of the processing modules. Modules can be accessed, edited and saved as part of programs. Processing modules can be linked between the channels for true stereo processing. If independent processing is desired, parameters can be copied from one channel to the next to ensure that setup is quick and easy. Stored programs can be loaded from either the front panel or from wall mounted Zone Controllers. Zone Controllers can also be used for output muting or adjusting output volumes.
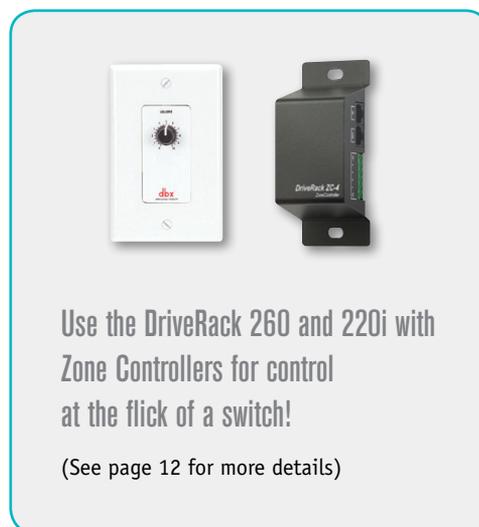
Use the DriveRack 260 and 220i with Zone Controllers for control at the flick of a switch!

(See page 12 for more details)

- Advanced Feedback Suppression (AFS)
- Graphic and Parametric EQ
- Compressor
- PeakStopPlus™ Limiter
- Auto Gain Control
- Noise Gating
- De-Esser
- Ducker
- Bandpass Filters
- 2x2 Matrix Mixer
- 1.3 Seconds of Delay
- RS-232 PC GUI control
- Mic/Line Inputs
- Wall Panel Control
- Security Lockout

DriveRack® PA+

COMPLETE EQUALIZATION AND LOUDSPEAKER MANAGEMENT SYSTEM

DriveRack® PA+

COMPLETE EQUALIZATION AND LOUDSPEAKER CONTROL SYSTEM

The best just got even better! The DriveRack PA, far and away the world's most popular loud speaker management system has now become the DriveRack PA+. Showcasing all the features that users around the world have come to expect, including easy set up, rock-solid reliability and unparalleled sound quality, the new version has gone to great lengths to earn its "plus." With more settings, more control and enhanced circuitry, the sound you seek is right at your fingertips.

Although the DriveRack PA+ is loaded with functions and features, it is easy to set up and use. The dbx exclusive Set Up Wizard walks you through system set up with easy to follow step-by-step instructions. Just pick your speakers and amps from the built-in list on the PA+ and then let the Auto Level™ Wizard fine tune the level settings of each speaker. You can then let the Auto EQ™ Wizard help you further optimize your sound. Finish up by using the AFS® Wizard, which automatically sets filters to eliminate any feedback during performances. Within minutes, your system will sound like it was tuned by a pro. No experience required! Get the most out of your PA with the DriveRack PA+, the worldwide standard in loudspeaker management.

"Don't take chances with the db police - use a designated Driverack."

- Dan Montecalvo -Via Facebook

The optional RTA-M real time audio analyzing mic is the perfect accessory tool for the DriveRack PA and 260. Used in conjunction with the System Setup Wizard, the RTA-M is ideal for optimizing the sound quality of even the most difficult of acoustic environments.

- Setup Wizard Steps Through Speaker and Amp Selection and Levels
- Auto EQ™ Wizard with 28-Band RTA
- Auto Level™ Wizard
- AFS® Wizard
- Stereo Feedback Elimination with 12 feedback notch filters
- dbx 120A Sub-harmonic Synthesizer
- Classic dbx Input Compression
- JBL® Speaker and Crown® Power Amp Tunings included
- USB Firmware and Speaker Tunings Field Updatable With Harman HiQnet® System Architect
- Full time RTA function
- Front-Panel Output Mutes
- Pink Noise Generator (used with Auto EQ and Auto Level Wizards)
- Linked Stereo DSP Processing for ease of use
- 24-Bit ADC/24-Bit DAC, >113 dB Dynamic Range
- 2-Channel XLR Input and 6-Channel XLR Output
- 2x3, 2x4, 2x5, 2x6 Crossover Configurations
- Dual 28-band Graphic EQ- Linked or Dual Mono
- Stereo Multi-band Parametric EQ
- Stereo Output Limiters
- Output Alignment Delay
- Power on/off Mute Circuitry
- Front-panel RTA-M XLR input with phantom power
- 25 User Programs/25 Factory Programs
- Full Graphic LCD Display
- Front Panel Input and Output Meters

DriveRack® PX

POWERED SPEAKER OPTIMIZER

- Optimized for powered speakers
- Support stereo speakers and subwoofer(s)
- Supports JBL® and other popular powered speakers
- Easy-to-use wizards for setup, Auto-EQ™, and AFS®
- dbx® M2 measurement mic included
- Classic dbx compression with graceful PeakPlus™ limiters
- Patented AFS Advanced Feedback Suppression
- 120A Subharmonic Synthesizer
- Auto-EQ optimizes sound quality for any room
- Patented dbx Type IV™ conversion system
- 2 channel XLR input
- 2 channel XLR output
- 2 Channel XLR subwoofer output

DriveRack® PX

POWERED SPEAKER OPTIMIZER

Powered speakers are a beautiful thing. Everything you need bundled into one simple, portable package. Just grab 'em and go, right? Well, you may think your powered speaker system is complete, but you're missing half the picture. DriveRack PX is the other half. In another dbx industry first, we've created a processor specifically tailored for powered speakers. Utilizing our highly-acclaimed DriveRack technology, the PX picks up where your powered speakers leave off.

The DriveRack PX Powered Speaker Optimizer has everything you need to get the most out of your stereo powered speaker system. It even includes stereo or mono subwoofer support. With the included dbx M2 measurement mic, Auto-EQ corrects for audible deficiencies in the room environment. Our patented Advanced Feedback Suppression (AFS) kills nasty feedback, allowing problem-free operation at higher sound levels, while our patented Subharmonic Synthesizer

extends bass response for enhanced bottom end. With all that, you also get classic dbx compression and the protection offered by our graceful PeakPlus™ limiting. Your ears, your audience, and your powered speakers will forever thank you.

In spite of all that sophistication, rest assured we won't overcomplicate the simplicity of your rig. Our exclusive Setup, Auto-EQ, and AFS Wizards, and out-of-the-box support for a host of JBL and other popular powered speakers, make setup a snap. Louder, clearer, better sound from your powered speakers has never been so easy.

"dbx DSP keeps you out of the red zone!"

-Thomas Lê

-Via Facebook

ZonePRO™

DIGITAL ZONE PROCESSORS

ZonePRO™ 1260/m | ZonePRO™ 1261/m
DIGITAL ZONE PROCESSORS

ZonePRO™ 640/m | ZonePRO™ 641/m
DIGITAL ZONE PROCESSORS

Each of the eight members of the ZonePRO family of Digital Zone Processors represents an inexpensive and quickly deployed solution for a diverse range of commercial audio applications. Designed with contractors in mind, the ZonePRO devices feature Euroblock connectors for easy termination of balanced signals and RCA connectors for straightforward connection of consumer equipment. A simple analog bus allows sources to be shared among multiple ZonePRO devices, facilitating scalability of outputs for larger applications.

Input processing features gain control and EQ for all inputs and selectable DSP Inserts for microphone channels. Input Insert options include Automatic Gain Control (AGC), Notch Filter, Compressor, Gate, De-Esser and Advanced Feedback Suppression (AFS™).

The routing section of ZonePRO provides Primary Source Selection, Source Ducking for Paging and Priority Override. Output processing includes AutoWarmth®, a psychoacoustic function that maintains full frequency bandwidth even when the signal level has dropped. Each output also offers Crossover, EQ,

AGC, Compressor, Limiter and Delay for system optimization.

All ZonePRO devices offer a built-in Real Time Clock that can provide programmable system changes at predetermined times. The recently-introduced ZonePRO devices, the 640m, 641m, 1260m and 1261m share the same total numbers of inputs and outputs as their equivalent siblings but feature additional mic/line inputs. This increase in the number of available microphone inputs further extends the suitability of the ZonePRO family into applications such as conference rooms and presentation spaces.

Ambient Noise Compensation (ANC) is also introduced on the ZonePRO 'm' devices. This processing function allows the level of zone outputs to track the ambient noise level, monitored through a microphone and microphone input. This feature is particularly well-suited to applications such as retail environments where the volume of the audio system can be matched automatically to the number of shoppers and their associated noise level.

- Advanced Feedback Suppression (AFS™)
- AutoWarmth®
- Automatic Gain Control (AGC)
- Notch Filter
- Compressor
- Gate
- De-Esser
- Limiter
- Parametric EQ
- Bandpass and Crossover Filters
- Security Lockout
- Wall Panel Control
- RS-232 Control
- Ethernet Control (see table)

ZonePRO devices are configured using ZonePRO Designer, a software application which contains a Configuration Wizard, which guides users through the step-by-step configuration process.

ZonePRO™

DIGITAL ZONE PROCESSORS

ZonePRO Product Matrix

The ZonePRO™ family of Digital Zone Processors consists of eight devices with different functionality (see table below). Each device, with optional control from an extensive range of Zone Controllers, represents an inexpensive and quickly-deployed solution for a diverse range of commercial audio applications. The Configuration Wizard guides you through the step-by-step configuration process, ensuring that you go from requirements to solution in just a few mouse clicks.

	Inputs	Outputs	Front Panel Control	Mic Preamps	S/PDIF	Ethernet	Mix Functionality	ANC*
1260m	12	6	✔	6	✔	✔	✔	✔
1260	12	6	✔	2	✔	✔	✔	
1261m	12	6		6	✔	✔	✔	✔
1261	12	6		2	✔	✔	✔	
640m	6	4	✔	4		✔	✔	✔
640	6	4	✔	2				
641m	6	4		4		✔	✔	✔
641	6	4		2				

*Ambient Noise Compensation

Zone Controllers

The Zone Controllers use analog DC voltages to provide logic control ranging from Volume and Mute control to Contact Closure Program selection and can be used with SC 64 and 32, the DriveRack® 4800, 4820, 260 and 220i, and ZonePRO™ units. Wired with readily available and affordable CAT5 cable with universally accepted RJ-45 connectors, the ZC Zone Controllers offer simple yet elegant solutions to the contractor.

ZC1
Programmable Volume Control

ZC2
Programmable Volume & Mute

ZC3
Programmable Selection

ZC4
Program Selection

ZCBOB
"home-run" or parallel wiring

ZC6
Programmable Volume Control

ZC7
Programmable Push-To-Talk Page Assignment
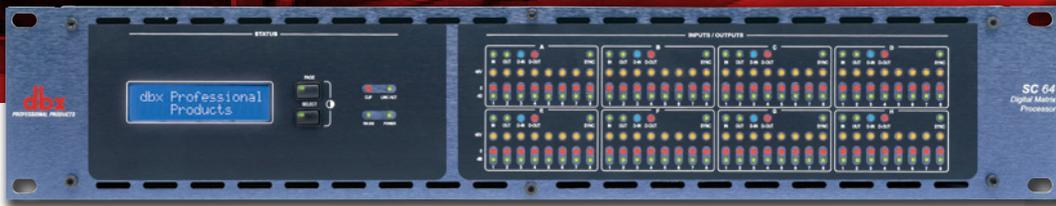
ZC8
Programmable Volume and Source Select

ZC9
Source Selection

ZCFIRE
Fire Safety Interface

SC 64

DIGITAL MATRIX PROCESSOR

SC 64

DIGITAL MATRIX PROCESSOR

The SC 64 (System Core) is one of the first offerings in a new family from dbx® Professional Products. Wizard-driven configuration using HiQnet™ System Architect makes unprecedented DSP power, incredible routing flexibility and a rich palette of processing tools accessible with the minimum of training. The SC 64 represents the professional foundation on which to build even the most demanding integrated system.

The SC 64 has a total analog I/O count of 64, configurable in banks of eight. The chassis supports up to eight analog input and/or analog output cards facilitating nine different fully loaded configurations. Analog input cards accommodate a wide range of sources with mic/line switching and phantom power per input. Two high speed option slots provide facility for adding forthcoming high bandwidth audio transport I/O cards.

With dedicated DSP for common processing functions and insert positions

for specialized processing, the SC 64 offers many processing functions including Advanced Feedback Suppression (AFS™), Ambient Noise Compensation (ANC), priority ducking, parametric equalization (PEQ), delay and dynamics.

The SC 64 has a diverse range of control options including HiQnet™ System Architect custom control panels, Ethernet, serial, contact closure, the popular ZC wall controllers and even automatically scheduled events. With so many methods of control, an SC system can truly be tailored to suit the needs and technical expertise of the intended user.

- 64 channels of analog I/O configurable in banks of 8
- Mic / Line and Phantom Power per channel on Analog Input Cards
- Ethernet / Serial Control
- GPIO
- Rich Palette of Processing Tools
- Selectable DSP inserts on all inputs and outputs including Advanced Feedback Suppression (AFS™), Automatic Gain Compensation (AGC), Compression, De-Essing and Notch Parametric Equalization
- Complete routing flexibility
- Comprehensive configuration, control and monitoring from HiQnet System Architect
- Wizard configuration
- Events Scheduler
- Optional Media Engine for media playback and delayed page
- Optional ZC wall panel control

> "The dbx SC64 is a total solution for matrix routing of multiple audio signals in many of our installations. The HiQ Net interface is second to none. Flawless."
>
> -James Welsh, Project Manager, Welsh Sound
> -Via Facebook

HiQnet is a *communications protocol* or language with which all device-types within the full audio signal path can communicate.

Co-developed and shared by elite engineers from all the brands within the Harman Pro group, HiQnet merges the best features of all previous brand-independent communications protocols and thereby benefits from years of combined experience and is simultaneously optimized for all components of the full professional audio system.

SC 32

DIGITAL MATRIX PROCESSOR
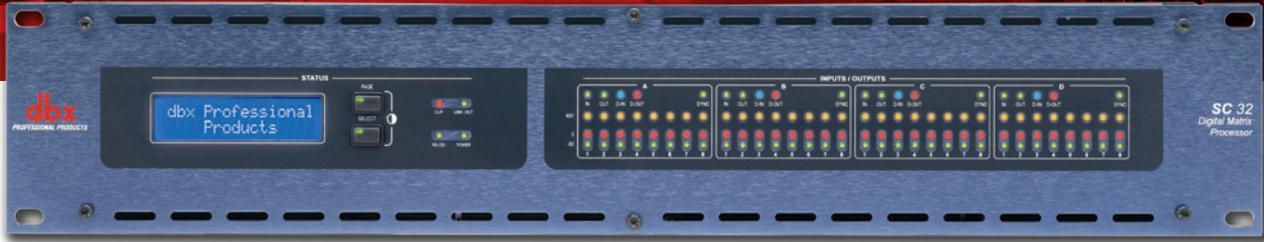
SC 32

DIGITAL MATRIX PROCESSOR

The SC 32 (System Core) is one of the firstofferings in a new family from dbx® Professional Products. Wizard-driven configuration using HiQnet™ System Architect makes unprecedented DSP power, incredible routing flexibility and a rich palette of processing tools accessible with the minimum of training. The SC 32 represents the professional foundation on which to build even the most demanding integrated system.

The SC 32 has a total analog I/O count of 32, configurable in banks of eight. The chassis supports up to four analog input and/or analog output cards facilitating five different fully loaded configurations. Analog input cards accommodate a wide

range of sources with mic/line switching and phantom power per input. One high-speed option slot provides facility for adding forthcoming high-bandwidth audio transport I/O cards. All of these features are housed in a sleek 2U rack chassis.

With dedicated DSP for common processing functions and insert positions for specialized processing, the SC 32 offers many processing functions including Advanced Feedback Suppression (AFS™), Ambient Noise Compensation (ANC), priority ducking, parametric equalization (PEQ), delay and dynamics.

The SC 32 has a diverse range of control options including HiQnet System Architect custom control panels, Ethernet, serial, contact closure, the popular Zone Controller wall controllers and even automatically scheduled events. With so many methods of control, an SC system can truly be tailored to suit the needs and technical expertise of even the scrutinizing contractor.

- 32 channels of analog I/O configurable in banks of 8
- Mic / Line and Phantom Power per channel on Analog Input Cards
- Ethernet / Serial Control
- GPIO
- Rich Palette of Processing Tools

- Selectable DSP inserts on all inputs and outputs including Advanced Feedback Suppression (AFS), Automatic Gain Compensation (AGC), Compression, De-Essing and Notch Parametric Equalization
- Complete routing flexibility

- Comprehensive configuration, control and monitoring from HiQnet System Architect
- Wizard configuration
- Events Scheduler
- Optional Media Engine for media playback and delayed page
- Optional ZC wall panel controllers

Zone Controllers

The Zone Controllers offer extended utility to the SC, DriveRack® and ZonePro families. The nine Zone Controllers use analog DC voltage to provide logic control ranging from zone source selection, volume and muting, to program or scene selection and fire safety interface. Wired with readily available and affordable CAT5 cable with universally accepted RJ-45 connectors at distances up to 1000 ft, the ZC Zone Controllers offer simple yet elegant solutions to the contractor. For more information on Zone Controllers, see page 12.

160SL / 162SL

COMPRESSOR / LIMITER

160SL

COMPRESSOR/LIMITER

The 160SL combines the best features of all the great dbx® compressors, past and present, and gives you more versatile performance than ever before. In addition to having the auto attack and release as well as the hard knee threshold characteristics of the classic dbx 160, the 160SL now offers AutoVelocity manual mode, in addition to our classic OverEasy® mode. dbx AutoVelocity technology allows you to find the exact attack and release effect you are looking for. Still on board is the venerable dbx Auto mode. Now you can set your maximum preferred settings in manual mode, and let the 160SL do the rest. The dbx 160SL features dual proprietary V8 VCA modules.

This state-of-the-art implementation of dbx's original Blackmer decilinear VCA boasts an unheard-of 127dB dynamic range and ultra-low distortion. Encased in a specially designed aluminum-zinc housing for shielding and thermal characteristics, the V8 maintains its superior performance even in the harshest environments. The 160SL offers a plethora of features which include: variable attack and release controls, as well as dbx's latest limiting algorithm PeakStopPlus™, precision 0.1% and 1% resistors, gold-palladium-nickel contacts, Jensen® transformers, gold plated Neutrik® XLRs, and rare earth magnet signal switching relays with gold contacts, housed in a hermetically-sealed nitrogen environment and mounted on military-grade glass epoxy circuit boards. The end result is the most technologically advanced compressor in the world.

162SL

COMPRESSOR/LIMITER

The 162SL combines the best features of all the great dbx compressors, past and present, and gives you more versatile performance than ever before. In addition to having the auto attack and release, and the hard knee threshold characteristics of the classic dbx 160, the 162SL offers AutoVelocity™ manual mode, along with our classic dbx OverEasy® mode, made standard by the legendary dbx 165A. All of the 160SL's features, including variable attack and release controls and dbx's latest limiting

algorithm PeakStopPlus™, are included in the 162SL. Its state-of-the-art implementation of dbx's original Blackmer decilinear VCA boasts an unheard of dynamic range and ultra-low distortion seen only previously in the Blue 160SL. With sonic clarity designed for the studio, the 162SL maintains its superior performance in harsh environment. Like its big brother, the 162SL takes full advantage of the best parts available and dbx's advanced manufacturing, including Jensen® transformers on each output standard. Following in the footsteps of the Blue Series® 160SL with the Purple Series 162SL, dbx continues to create to the most technologically advanced compressors in the world.

Dynamics

160A

COMPRESSOR/LIMITER

The 160A offers such time-tested features as switchable OverEasy® and hard knee compression, extremely wide threshold ranges, and controls for ratio and output gain.

The 160A also includes true RMS level detection, providing the most transparent dynamics processing available–

from smooth, subtle compression to "brick wall" peak limiting. Its electronically balanced output stage is an outstanding driver for long cable runs (an output transformer is optional). With its unique "INFINITY +" inverse-compression mode, the 160A actually decreases the audio output level below unity gain when the input exceeds threshold. You can even stereo-couple two 160A's to process a stereo mix without shifting the left/right image. The dbx 160A is truly the standard for dynamics processing.

- OverEasy® or classic hard knee compression with dbx's® ultra-musical program dependent attack and release times
- Compression ratio variable from 1:1 through infinity :1 to negative compression

- Precision dual RMS LED display monitors input or output and gain reduction over a wide range and calibrates for different operating levels
- Over 60dB of gain reduction available
- Exclusive Infinity+ compression allows negative compression

- Independent balanced and unbalanced outputs can drive 600 loads to +24dBm simultaneously. New floating balanced output stage drives any load
- Optional output transformer capable
- Strappable with another 160A for true RMS stereo summing operation

166xs

COMPRESSOR/LIMITER/GATE

With auto attack and release controls and separate precision LED displays for gain reduction, compression threshold, and gate threshold, the 166xs allows for quick and accurate setup. Using our True RMS Power Summing™ feature, the Stereo Couple mode provides you with a rock solid stereo image The 166xs also makes advanced applications a breeze with full sidechain functionality, the ability to use either hard knee or OverEasy® compression algorithms, and the venerable PeakStop® limiter. The dbx® 166xs is the industry standard compressor/gate at a cost within everyone's reach.

- Goof proof operation to smooth uneven levels, add sustain to guitars,, fatten drums or tighten up mixes
- New gate timing algorithms ensure the smoothest release characteristics
- Program-adaptive expander/gates
- Great sounding dynamics control for any type of program material
- Separate precision LED displays for gain reduction, compression threshold and gate threshold allow quick, accurate setup

- Stereo or dual-mode operation
- Balanced inputs and outputs on 1/4" TRS and XLR
- Side Chain insert
- Classic dbx® "Auto" mode
- dbx PeakStop® Limiter

Dynamics

1066
COMPRESSOR/LIMITER/GATE

Whether you're looking for "heavy" compression or subtle gain leveling, the 1066 stereo compressor/limiter/gate with select-able hard knee or OverEasy® compression is ideal. The 1066's compressor section allows you to set attack and release times manually or automatically using our convenient Auto Mode. In addition, our famous Contour switch allows you to smoothly

compress entire mixes while preventing low frequencies from punching holes in the overall mix.

The 1066's gate section enables you to clean up unwanted frequencies or mic bleed using its frequency-dependent gain control and the Side Chain External button. With the Side Chain Monitor button and an equalizer, you can select which frequencies will trigger the gate. For overall speaker protection, our innovative PeakStopPlus™ technology prevents unwanted transients from blowing your drivers and minimizes the distor-tion common to many other "hard" limiters.

- Selectable auto (classic dbx®) or manual (variable Attack and Release) compression
- Contour switch removes unwanted low frequency information from detector circuit
- Selectable Overeasy® or Hard Knee compression modes

- PeakStopPlus™ limiting for setting maximum allowable level with minimal distortion
- SC Ext and SC Mon for setting up and monitoring external devices for gating function
- True differentially balanced gold-plated XLR and 1/4" inputs and outputs

- True RMS level detection
- Precision metering of input level, output level, and gain reduction
- True stereo or dual mono operation
- Switchable +4dBu or -10dBV operation per channel

1046
QUAD COMPRESSOR/LIMITER

Each of the 1046's four channels allows you to individually select between our classic OverEasy® or hard knee compression, as well as connect each channel for separate purposes. Additionally, our PeakStopPlus™ circuitry is the most comprehensive limiting technology available. For easy interfacing with other devices, each of the 1046's channels also utilizes balanced, gold-plated XLR and ¼" inputs and outputs and switchable +4dBu or -10dBV operating levels. The 1046 incorporates our standard-setting designs, state-of-the-art manufacturing techniques, and of course, our highly sought-after sound quality.

- Four independent channels of operation, stereo linkable in two pairs
- PeakStopPlus™ limiting control for setting maximum allowable level regardless of compressor settings
- Independent Threshold and Release controls
- Switchable OverEasy® or Hard Knee compression
- Classic dbx® compression
- Differentially balanced gold-plated XLR and 1/4" inputs and outputs
- True RMS level detection
- Precision metering of input level, output level, and gain reduction
- Dual True stereo or quad mono operation
- Switchable +4dBu or -10dBV operation per channel

Dynamics

1074
QUAD GATE

The 1074 Quad Gate is the perfect companion to the 1066 and 1046. The 1074 offers 4 channels of gating with threshold, depth and release controls on each channel. The 1074, like the rest of the products in dbx's® 10 Series, is based on the legendary dbx V2 VCA and offers XLR inputs and outputs, and ¼" side-chain input. In addition to an external key input per channel, the 1074 also has an internal filter that can be independently activated and controlled on a channel per channel basis. This filter allows the 1074 to not only clean up tracks but gives you frequency selective control on each gate, to open exactly when you want it to.

- Four independent channels of gating
- Independent key filtering
- Independent Threshold and Release controls
- Differentially balanced gold-plated XLR and 1/4" inputs and outputs
- True RMS level detection
- Stereo Coupling mode
- Switchable +4dBu or -10dBv operation per channel

266xs
COMPRESSOR/GATE

The 266xs delivers everything from mellow "leveling" to aggressive peak limiting.

The 266xs puts pleasing compression and smooth gating within reach of everyone. The classic dbx® compression delivers everything from mellow "leveling," to aggressive peak limiting. In addition, the 266xs's AutoDynamic™ circuitry continuously adjusts attack and release settings in real time in order to optimally match program material. The advanced gating circuitry in the 266xs uses a program-dependent timing algorithm to produce ultra-smooth release characteristics—even with complex signals. Thanks to the dynamic range of the dbx® VCA, the 266xs can provide reliable gating for any circumstance.

The 266xs also includes separate LED ladders measuring gain reduction, compression threshold, and gate threshold, making the 266xs intuitive and easy to use.

- Goof proof operation to smooth uneven levels, add sustain to guitars, fatten drums or tighten up mixes
- New gate timing algorithms ensure the smoothest release characteristics
- Program-adaptive expander/gates
- Great sounding dynamics control for any type of program material
- Separate precision LED displays for gain reduction, compression threshold and gate threshold allow quick, accurate setup
- Stereo or dual-mode operation
- Balanced inputs and outputs on 1/4" TRS and XLR
- Side Chain insert
- Classic dbx® "Auto" mode

Mic Preamps

386

DUAL CHANNEL TUBE MIC PREAMP

The Silver Series 386 dual channel tube mic preamp puts the best of both worlds into one affordable package by combining the warmth of the irreplaceable vacuum tube with the proprietary dbx® Type IV™ conversion system. The 386 boasts many of the same features as other products in the Silver Series, such as +48V phantom power, phase invert switch, and low-cut filtering. In addition, the 386 also offers up to 96kHz, 24-Bit digital output capabilities in both AES/EBU, and S/PDIF formats as standard features.

- Two channel tube microphone preamplifier
- Selectable 96kHz, 88.2kHz, 48kHz, or 44.1kHz sampling rate
- 24, 20, and 16-bit wordlengths
- Selectable dither and noise shaping
- AES/EBU and S/PDIF digital outputs

- Word clock sync input and output
- Separate analog and digital output control
- Type IV™ conversion system
- 60dB of gain and +/- 15dB of output gain

- Selectable mic/line switch
- 48 volt phantom power
- 20dB pad
- 75Hz low cut filter
- Phase reverse
- Segment LED analog/digital

376

TUBE PREAMP CHANNEL STRIP WITH DIGITAL OUT

The 376 has taken the essential tools needed for recording and put them all on a single channel strip. The mic/line section on the 376 provides a 12AU7 vacuum tube and offers +48V phantom power, a phase invert switch, a high impedance ¼" instrument input, 20dB pad, and low-cut filtering. The processing section offers a 3-Band parametric EQ, a classic dbx Compressor, and De-Esser. The 376 also offers digital output capabilities in both AES/EBU, and S/PDIF formats with selectable sampling rates including 44.1 kHz, 48 kHz, 88.2 kHz, or 96 kHz with selectable dithering and noise shaping as standard features. The LED meters provide a clear and concise visual of the signal processing at a glance. We think you'll agree that the 376 lives up to the uncompromising standards of dbx Professional Products.

- Tube microphone pre-amp
- 200V tube plate voltage
- Selectable mic/line switch
- +48 Volt phantom power
- 3-Band Parametric EQ
- Compressor
- De-Esser
- Front panel instrument input
- Drive meter LEDs
- Threshold and De-Esser meters

- 8 segment analog or digital meter
- Type IV™ conversion system
- Selectable sampling rate (96, 88.2, 48, 44.1kHz)
- 24, 20 and 16 bit wordlengths
- AES/EBU and S/PDIF digital outputs
- Selectable dither and noise-shaping algorithms
- Word clock sync input and output

Digital outputs on the 386 and 376 are standard features

2 Series

GRAPHIC EQUALIZERS

The dbx® 2 Series equalizers were designed to make versatile, pro-quality sound available to users of all levels, while offering the simplicity of straightforward controls. The 2 Series represents a major step forward in the performance of entry-level graphic equalizers. From its amazing 10Hz to 50kHz frequency response, to its 108dB dynamic range, the 2 Series offers great specifications with, a down-to-earth price point. Sure to find a home in the studio, on tour and with installed sound venues, the 2 Series is destined to take its rightful place in the lineage of great dbx signal processors that are the professional's choice in signal processing. With such affordable quality, there's no longer any excuse for compromising your sound with a lesser EQ than one from dbx.

The 2 Series represents a major step forward in the performance of entry-level equalizers.

131s SINGLE 31-BAND GRAPHIC EQUALIZER

215s DUAL 15-BAND GRAPHIC EQUALIZER

231s DUAL 31-BAND GRAPHIC EQUALIZER
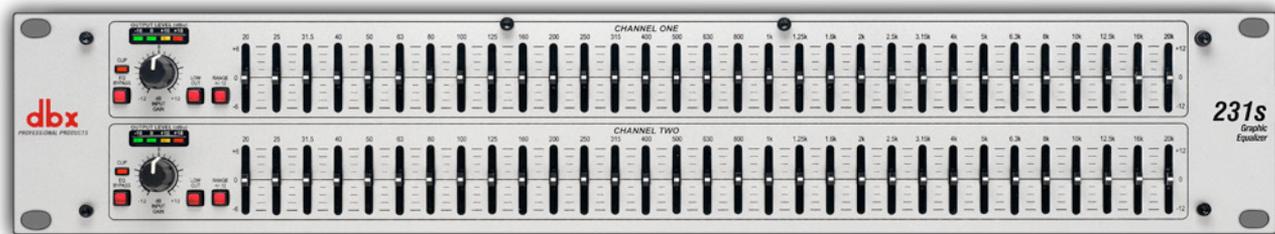
- Constant Q frequency bands
- Switchable boost/cut ranges of ±6 or ±12 dB
- 12dB per octave 40Hz low-cut filter
- Front panel bypass switch

- ±12 dB input gain range
- 4-segment LED ladders for monitoring output levels
- XLR and TRS Inpts and Outputs
- Internal Toroidal Transformer

- Frequency Repsonse of <10Hz to >50kHz
- Dynamic range of greater than 108dB

12 Series

GRAPHIC EQUALIZERS

The dbx® 12 Series Equalizers were designed to make versatile, pro-quality sound available to users of all levels, while offering the simplicity of straightforward controls and providing years of maintenance-free operation in any application. The magnetically-isolated transformer, electronically balanced inputs and servo balanced outputs, RF-filtered inputs and outputs, and power-off hard-wire relay bypass with 2 second power up delay were steps our engineers took to ensure compatibility for all installations. Only the best components were utilized, yielding a 10Hz to 50kHz frequency response, greater than 90dB SNR (ref +4dBu), less than 0.005% THD +Noise (1kHz at +4dBu), and interchannel crosstalk of less than -80dB from 20Hz to 20kHz. All this attention to detail is contained in a sturdy steel/aluminum chassis.

1215 DUAL 15-BAND GRAPHIC EQUALIZER

1231 DUAL 31-BAND GRAPHIC EQUALIZER

- Switchable boost/cut ranges of ±6 or ±15 dB
- Electronically balanced/unbalanced inputs
- Servo balanced/unbalanced outputs
- RF filtered inputs and outputs

- XLR, Barrier Strip, and 1/4" TRS connectors
- -12dB/+12dB input gain range
- 18dB/octave 40Hz Bessel low-cut filter
- Chassis/signal ground lift capability

- Internal power supply transformer
- Power-off hardwire relay bypass with 2-second power-up delay

20 Series

GRAPHIC EQUALIZERS

2215 DUAL 15-BAND GRAPHIC EQUALIZER

2231 DUAL 31-BAND GRAPHIC EQUALIZER

2031 SINGLE 31-BAND GRAPHIC EQUALIZER

Since their introduction, the 20 Series equalizers have become crucial links in the sound systems of countless professionals all over the world. From a value perspective, the 20 Series EQs offer an unequalled feature set. The crowning feature of each model in the 20 Series is our patented Type III™ Noise Reduction, which enables you to increase signal-to-noise ratios by up to 20dB. With Type III, the 20 Series can significantly improve the noise specs for almost any sound system. Add our patented PeakPlus™ limiter topology; XLR, ¼", and Barrier strip inputs and outputs; durable 45mm nylon sliders; a +12dB input gain range; and informative, four-step LED ladders to the mix and you've got three powerful tools that will let you use your system with confidence.

- Revolutionary instant encode/decode Type III Noise Reduction in-circuit at the push of a button. Increases S/N ratio by up to 20dB

- Patented PeakPlus Limiter threshold range from 0dBu to +24dBu (off) can transparently tame the wildest hits or the subtlest nuances of any signal

- An extremely high quality EQ, patented Type III Noise Reduction, and the elegant new PeakPlus Limiter all in one great sounding box

- Four segment LED bar graphs for BOTH Gain Reduction AND Output Level offers the most comprehensive visual feedback available

- Status LEDs offer visual feedback for all settings on the front panel

The 20 Series can significantly improve the noise specs for almost any sound system.

"dbx 2231, D best for foldback equalizer."

- Drix Calimlim -Via Facebook

iEQ
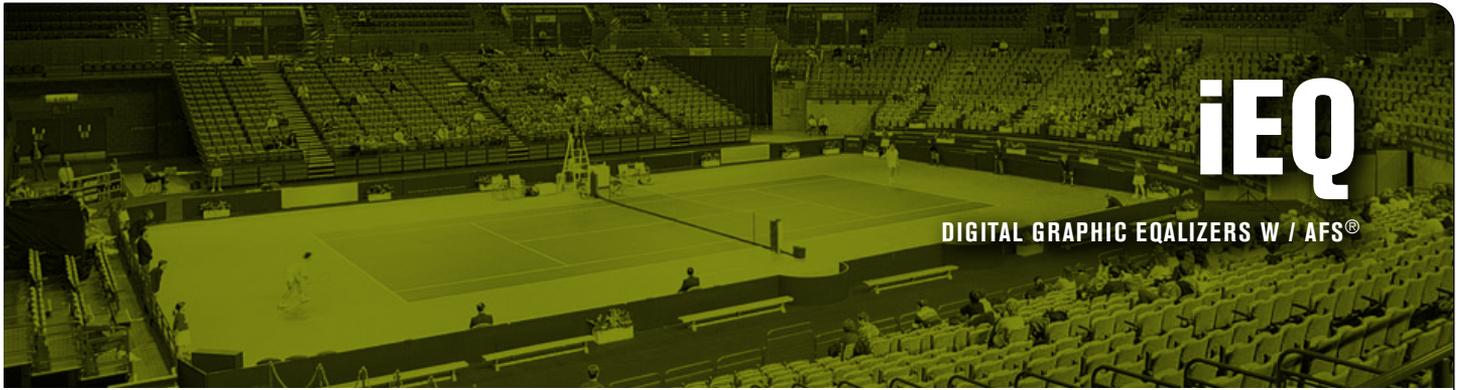
With an EQ heritage that has produced countless industry standard patents and dates back more than 30 years, the dbx® iEQs™ easily live up to the dbx legacy of uncompromising sonic integrity. In addition to unsurpassed Equalization specs, the iEQ also offers the built-in necessities which include patented AFS® Advanced Feedback Suppression (which removes unwanted feedback at the push of a button), Type V™ Noise Reduction and PeakStopPlus™ limiting. The iEQ-Series represents a major step forward in the performance of graphic equalizers. From its amazing 10Hz to 22kHz frequency response, to its 110dB dynamic range the iEQs offer out of this world specifications with a down to earth price point. Sure to find a home in the studio, on tour and with installed sound venues, the iEQs are destined to take their rightful place in the lineage of great dbx signal processors that are the professionals' choice.

iEQ-15 DUAL 15-BAND DIGITAL GRAPHIC EQ/LIMITER

iEQ-31 DUAL 31-BAND DIGITAL GRAPHIC EQ/LIMITER

- Advanced Feedback Suppression (AFS)
- Type V Noise Reduction
- PeakStopPlus Limiting
- 1/3-octave Constant Q frequency bands
- Switchable boost/cut ranges of ±6 or ±15dB

- 18 dB per octave 40Hz low-cut filter
- ±12dB input gain range
- XLR, TRS and Euroblock Inputs and Outputs
- Internal Toroidal Transformer
- Frequency Response of 10Hz to 22kHz

- Dynamic range of greater than 113dB
- User Power Up Features
- Relay Bypass for Power Failure System Protection

Personal Monitor Solutions

TR1616

PERFORMANCE I/O

The TR1616 is a 16 in/16 out analog to BLU link and BLU link to analog audio interface. With 16 precision dbx mic preamps and combo style input jacks, the TR1616 accepts line level or mic level signals. Configurable in 16 channel blocks, the modular design of the TR1616 allows you to create the digital snake or BLU link network that's right for you. As your needs change, additional TR1616s can easily be added to the network, providing expansion of up to 256 channels at 48 kHz (or 128 channels at 96 kHz). And with its plug and play functionality, getting into an audio over Ethernet system no longer requires long hours of training and programming.

- 16 Channel Mixer With Level, Pan, Mute, Solo, & Reverb Send Control
- 16 Preset Locations For Mixer & Effect Parameter Recall
- Lexicon° Courtesy Reverb
- dbx PeakStopPlus™ Limiting
- BLU link Compatibility
- XLR & 1/4" Stereo Or Mono Outputs
- 1/8" & 1/4" Headphone Outputs
- Setup Wizard
- Supports 48 kHz & 96 kHz Sampling Rates
- Channel Linking & Grouping Capabilities
- Supports Up To 60 PMC16s On A Single Network

PMC16

PERSONAL MONITOR CONTROLLER

Whether using headphones, in-ear monitors, powered monitors, or traditional wedge monitors, the PMC16 allows performing musicians to control their own personalized stage monitor mix with ease. Using BLU link, the PMC16 is capable of receiving up to 16 channels of high-end digital audio via CAT5e cable. The PMC16 comprises a 16 channel mixer section with full control of levels, panning, effect send levels, muting, and soloing. Built-in Lexicon© courtesy reverb rounds out the all-star processing power of the PMC16. With a Setup Wizard for ease of configuration, full 16 channel mixer level metering, channel grouping, 16 preset locations for future recall of mixes, and an intuitive yet powerful user interface, PMC16 gives you the power to dial in YOUR mix exactly as YOU want it, in real time.

Crossovers

Crossovers may do nothing more than direct frequencies, but the thought that went into the 223s and 234s is what really elevates the dbx® crossovers above the rest. The 223s and 234s both feature differentially balanced TRS ¼" inputs and outputs. To prevent accidental changes of critical settings during performance (which could be disastrous), several of the 223s and 234s's controls are located on their rear panels. On the 223s, the first of these selects between stereo two-way or mono three-way operation, while on the 234s it selects between stereo two-way, stereo three-way, or mono four-way operation (the selected mode is always visible via two front panel LEDs). Also located on the back panels are switches that allow you to individually select crossover frequency ranges for both channels (again, the front panels feature LEDs to indicate when the back panel x10

switch is activated). The rear panels also allow you to mono-sum the low frequency outs. Both crossovers feature Linkwitz-Riley 24dB/octave filters–the professional standard. Each of the units' channels has a +12dB input gain control and a recessed 40 Hz low-cut (high-pass) filter for removing low frequency rumble. Both the low and high outputs on each channel have phase reverse switches (reconfigurable to operate as mute switches) and gain controls ranging from ∞ to +6 dB, allowing level matching and muting of individual outputs. The 223s and 234s give you great performance, the features you expect from professional crossovers, and the reassurance that you're buying from the company that has been making the world's finest audio gear for over 30 years.

223xs and 234xs XLR versions

To provide you with even more flexibility, the 223s and 234s are also available in the form of the 223xs and 234xs which offer balanced XLR input and output connectors.

223s/223xs STEREO 2-WAY, MONO 3-WAY CROSSOVER

- 1/4" TRS (223s) / XLR (223xs) differentially balanced inputs and outputs
- Mode switch for stereo 2-way or mono 3-way operation
- Stereo/Mono status LEDs indicate the selected mode
- Low frequency summed (subwoofer) output
- x10 range switch on both channels
- 40Hz low-cut (high-pass) filter both channels
- Phase reverse switch on all outputs
- Individual level controls on all outputs
- 24dB per octave Linkwitz-Riley filters
- (the professional standard)
- dbx® 2 year parts and labor as standard
- CSA NRTL/C approved
- CE compliant

234s/234xs STEREO 2/3-WAY, MONO 4-WAY CROSSOVER

- 1/4" TRS (234s) / XLR (234xs) differentially balanced inputs and outputs
- Mode switches for mono 4-way or stereo 2-way/3-way operation
- Low frequency summed (subwoofer) output
- x10 range switch on both channels
- 40Hz low-cut (high-pass) filter both channels
- Phase reverse switch on all outputs
- Individual level controls on all band outputs
- 24dB per octave Linkwitz-Riley filters (the professional standard)
- Stereo/Mono status LEDs indicate the selected mode
- dbx® 2 year parts and labor as standard
- CSA NRTL/C approved
- CE compliant

Direct Boxes

dB10 PASSIVE & dB12 ACTIVE

- Premium performance
- Rugged attractive design
- Stackable chassis w/durable rubber base
- Gold-plated Neutrik® XLR connector
- Recessed chrome toggle switches
- Transformer isolated
- Premium shielded custom dbx transformer
- Hi-Z 1/4" input jack
- Parallel 1/4" thru jack
- Balanced XLR Lo-Z output
- Handles instrument/line/ speaker levels
- Flat/high-cut filter switch
- Output polarity invert switch
- Ground lift switch
- 5 year U.S. warranty!

"When you wanna do it right...dbx it."

- Bart Leggiero

-Via Facebook

At dbx, when we do something, we do it right. So when we decided to create our new direct injection boxes, we didn't settle for the same old tired approach to direct box design. With our dbx name on the line, how could we? One look at our new dB10 Passive and dB12 Active direct boxes will tell you that these are clearly different. With their bullet-proof construction, and extraordinary audio performance to rival their looks, finally there's a direct box worthy of the dbx name.

Utilizing custom dbx mu-metal-shielded audio transformers, high-quality Neutrik® connectors, and low-noise circuitry preserves the sonic integrity and true characteristics of the signal source. Both boxes include a pad switch that accomodates instrument, line and even speaker level signals. Take even more control of your sound by utilizing the polarity invert switch to set the phase relationship between the direct and mic'd sound.

SAMPLE SETUP

Guitar

Output on Rear Panel

Mixer

INPUT   PAD   THRU

Amplifier

Mic

Other Products

AFS® 224

ADVANCED FEEDBACK SUPPRESSION PROCESSOR

The AFS 224 Advanced Feedback Suppression processor has been designed to provide state-of-the-art feedback elimination processing, while maintaining a simple and intuitive control interface. The AFS 224 utilizes a no-nonsense user interface providing all the processing and control necessary for both installation and live use while the AFS is an absolute must for any live sound application. Ten and twelve filter-per-channel feedback elimination processors have become the de facto standard, but the engineering staff at dbx® have never been content residing in the neighborhood of the status quo. So, to raise the bar once again, they developed a dedicated feedback suppression processor that offers up to 24 filters per channel with filter Qs as narrow 1/80 of an octave. With such narrow filter Qs, the AFS 224 is able to remove unwanted feedback, while preserving the sonic integrity with precision and accuracy. To achieve these staggering numbers, dbx utilized their patented AFS technology that had previously only been available in the upper echelon of dbx products and made it available in this stand-alone processor. In addition to the plethora of feedback suppression filters available, the AFS 224 also offers selectable modes, live filter lift, and multiple types of filtration.

- dbx's Patented (Advanced Feedback Suppression) AFS technology
- 24 Programmable Filters per Channel
- Stereo or Dual Independent Channel Processing
- Live and Fixed Filter Modes
- Selectable Filter Lift Times
- Application-specific filter types include Speech and Music Low, Med and High
- Input channel Metering
- 24 LED per Channel Filter Metering
- XLR and 1/4" TRS Inputs and Outputs

120A

SUBHARMONIC SYNTHESIZER

Unlike other attempts at bass synthesis, the 120A's patented subharmonic synthesis process produces smooth, musical low frequencies that don't interfere with mid- or high-band information–even at maximum levels. The result is unmatched low-end punch at levels that won't destroy your system. In fact, the 120A is optimized to allow audio professionals to get the most out of their high-performance, low frequency speaker systems, and includes both a subwoofer output (with its own level control) and main outputs that can be configured as either full-range (including synthesis) or high frequency-only.

- Individual control for two ranges of subharmonic frequencies
- Separate Low Frequency Boost Circuit
- Separate Subwoofer Output
- 1/4" Balanced inputs and outputs
- RCA Input Connectors
- Front panel LEDs that show crossover status and synthesis activity
- Patented circuitry ensures that mid and high frequencies are not affected

- Built-in crossover with choice of 80Hz or 120Hz crossover point
- Enhance bass audio material for use in a variety of professional applications such as:
  - Nightclub and dance mixing
  - DJ Mixing
  - Theater and Film Sound
  - Music Recording
  - Live Music Performance
  - Broadcasting

"dbx - the only choice when every db counts!"

- Seth Zirin -Via Facebook

Other Products

286s

MIC PREAMP PROCESSOR

The dbx® 286s's Mic Preamp and Five processors can be used independently or in any combination. Why mic up vocals and instruments through a noisy, blurry mixer? The dbx 286s's sonically pristine Mic Preamp has all the features you need, including wide-ranging input gain control, switchable 48V phantom power and an 80Hz high-pass filter. Use the 286s's newly designed and patented OverEasy® Compressor to transparently smooth out uneven acoustic tracks or deliver that classic "in your face" rock vocal. Take out vocal sibilance and high frequency distortion in cymbals with the 286s's frequency tunable De-Esser. Fine-tune the Enhancer's HF Detail control to add sparkle and crispness to tracks. LF Detail control adds fullness and depth to vocals and bass instruments while simultaneously cleaning up muddy low midrange frequencies.

And, the Expander/Gate's separate threshold and ratio controls allow you to subtly reduce headphone leakage or radically gate noisy guitar amps.

The dbx 286s's full complement of metering and status LEDs visually guide you to achieving the right sound. The floating balanced XLR mic input accepts balanced or unbalanced inputs. An additional 1/4" TRS phone jack can accept balanced/unbalanced line signals to process live electronic instruments or pre-recorded tracks at mixdown. An insert jack between the 286s's Mic Preamp and signal processing sections can be used to "loop out" to external processors (such as EQ) or to mix the Mic Preamp's signal out to an external destination.

The cost and hassle of patching together multiple processors for use on one track can be frustrating. The dbx 286s gives you all the tools you'll need in one box, with the shortest signal path to help keep your music sounding clean.

PB-48

PATCH BAY

The PB-48 patchbay features 48 front panel and 48 rear panel patch points, with 24 user-adjustable board assemblies that can be configured–without soldering or wire cutting–for

half-normalled or de-normalled operation. Rugged and noise-free, the PB-48 is designed to serve all your patchbay needs. Whether you want clear and easy access to your mixer and studio gear, reduced wear on your equipment's jacks, or the ability to quickly re-route devices within your setup, the PB-48's balanced TRS and unbalanced TS ¼" plugs pave the way.

Mic Preamps & Channel Strips

386	376	286A	
			MICROPHONE INPUT
•	•	•	Connector: Female XLR Pin 2 Hot
•	•	•	Type: Electronically balanced/unbalanced
		•	Maximum Input Level: -10dBu or +10 dBu with 20dB pad engaged
•	•		Maximum Input Level: -9 dBu or +11 dBu with 20 dB pad engaged
		•	Gain Adjustment Range: +10dB to +60dB
•	•		Gain Adjustment Range: +30dB to +60dB
48V	48V	48V	Phantom Power
•	•	•	Pad: 20dB
-120	-120	-120	Equivalent Input Noise: Typically -(dBu) typical with a 150 source load "A-weighted"
			LINE INPUT
•	•	•	Connector: TRS ¼" Jack
•	•		Type: Electronically Balanced/unbalanced
20k-40k	20k-40k	100k	Impedance: bal/unbalanced
			Maximum Input Level: 0 dBu or +20dBu with 20dB pad engaged
•		•	Maximum Input Level: +21dBu balanced or unbalanced
	•		Maximum Input Level: +18dBu balanced or unbalanced
			INSTRUMENT INPUT (Front Panel)
•	•		Connector: TS ¼" Jack
•	•		Type: Unbalanced
•	•		Impedance: 470 k
+21dBu	+18dBu	+21dBu	Maximum Input Level (unbalanced)
•			Insert Connector: TRS ¼"
•			Type: Unbalanced
			LINE OUTPUT
•	•	•	Connector: Male XLR Pin 2 Hot and impedance balanced TRS ¼"
		•	Connector: ¼" TRS phone balanced/unbalanced
•	•	•	Type: Electronically balanced
			Type: transformer balanced/unbalanced
>21	>18	>21	Maximum Output Level: (XLR) +dBu
			DIGITAL OUTPUTS
•	•		Connectors: XLR for AES/EBU, RCA for S/PDIF l = both connector types
			INSERT
TS	•	•	Connector: TRS ¼"
		•	Ring Impedance: >5k
		•	Maximum Level: >+21dBu
			Word Sync Input/Output
•	•		Connectors: BNC
•	•		Input Impedance: 75 terminated by internal jumper
•	•		Input: 96, 88.2, 48, or 44.1kHz word clock
•	•		Output: 96, 88.2, 48, or 44.1kHz word clock
			A/D CONVERSION
•	•		Type: dbx Type IV® A/D Conversion System
•	•		Sample Rate: 96, 88.2, 48, or 44.1kHz selectable
•	•		Wordlength: 24, 20, or 16 bit selectable
•	•		Dither Type: TPDF, SNR2, or none
•	•		Noise Shape: Shape 1, Shape 2, or none
•	•		Output Format: S/PDIF or AES/EBU
107dB	107dB		Converter Dynamic Range: typical, A-Weighted, 22kHz Bandwidth
			D/A CONVERSION
	•		D-A Conversion 24-bit
	•		Dynamic Range: 103 dB typical, A-weighted, 20 kHz bandwidth, 101 dB typical, unweighted, 20 kHz bandwidth
	•		THD+Noise: 0.002% typical at +4 dBu, 1 kHz, output gain at 0 dB
	•		Frequency Response: 20 Hz to 20 kHz, +0/-0.5 dB
	•		Interchannel Crosstalk: < -85 dB at 1 kHz, output gain at 0 dB
			DIMENSIONS
1.75"x 19"x 7.75"	1.75"x 19"x 7.75"	1.75"x 19"x 5.75"	**H x W x D**

DriveRack®, SC, ZonePRO™

PA+	PX	260	4800/4820	220i	SC 64	SC 32	640/641	1260/1261	640m/641m	1260m/1261m	
											INPUTS
2 (1)	2 (1)	2 (1)	4(1)	2	64	32	6	12	6	12	Number of Inputs (RTA Mic Input)
•	•	•	•								Connectors: Female XLR
				•	•	•	•	•	•	•	Connectors, Euroblock
							4	8	2	4	Connectors, RCA
•	•	•	•	•	•	•	•	•	•	•	Type: Electronically bal/RF filtered
•	•	•	•	•							Impedance, >40K
					3.5k	3.5k	>50k	>50k	>50k	>50k	Impedance, balanced, Euroblock
							>75k	>25k	>25k	>25k	Impedance, unbalanced, Euroblock (& RCA 1260/1261)
	•	•	•	•							Max Input Level: Hardware selectable for +30, +22, +14 dBu
•	•						•	•	•	•	Max Input Line Level: +20dBu Mic/Line, +12dBu RCA
					•	•					Max Input Line Level: +22dBu
					•	•	•	•	•	•	CMRR: >40dB typical, >55 dB at 1kHz
•	•	•		•							CMRR: >45dB
					0-48dB	0-48dB	30-60dB	30-60dB	30-60dB	30-60dB	Mic Pre gain
					•	•	•	•	•	•	Mic EIN: <-118dB, 22Hz-22kHz, 150k
			•								Input Gain Range RTA: 10dB to 70dB w/60dB typical
15V DC	15V DC	15V DC	48V DC	48V	48V	48V	15V	15V	15V	15V	RTA Mic Phantom Voltage:
											OUTPUTS
6	4	6	8	2	64	32	4	6	4	6	Number of Outputs
•	•	•	•	•							Connectors: XLR
				•	•	•	•	•	•	•	Connectors: Euroblock
•	•	•	•	•	•	•	•	•	•	•	Type: Electronically balanced, RF filtered
120	120	120	120	120	44	44	120/60	120/60	120/60	120/60	Impedance
			•								Maximum Output Level: +25.5 dBu into 1k , +22 dBu into 600
•	•				•	•	•	•	•	•	Maximum Output Level: +20dBu
		•		•							Maximum Output Level: +22dBu
											A/D PERFORMANCE
•	•	•	•	•			•	•	•	•	Type: dbx Type IV™ Conversion System
110	110	114	115	114	113	113	113	113	113	113	Dynamic Range: (dB) A-weighted
107	107	112	112	112	110	110	110	110	110	110	Dynamic Range: (dB) Unweighted
							l	l	l	l	Type IV dynamic range: >119 dB, A-weighted, 22kHz,BW >117 dB, unweighted, 22kHz BW
48kHz	48kHz	48kHz	96kHz	48kHz	48kHz	48kHz	48kHz	48kHz	48kHz	48kHz	Sample Rate
24	24	24	24	24	24	24	24	24	24	24	A/D Wordlength: (bit)
											D/A PERFORMANCE
112	112	112	115	112	113	113	112	112	112	112	Dynamic Range: (dB) A-weighted
110	110	110	112	110	110	110	109	109	109	109	Dynamic Range: (dB) unweighted
48kHz	48kHz	48kHz	96kHz	48kHz	48kHz	48kHz	48kHz	48kHz	48kHz	48kHz	Sample Rate
24	24	24	24	24	24	24					A/D Wordlength: (bit)
											SYSTEM PERFORMANCE
			48 bits		32 bits	32 bits					Internal Wordlength
							•				Dynamic Range: >109 dB A-weighted, >106dB unweighted
•	•	•	•	•					•		Dynamic Range: >110 dB A-weighted, >107dB unweighted
0.004	0.002	0.002	0.003	0.002	0.004	0.004	0.003	0.003	0.003	0.003	THD + Noise: % typical at +4dBu, 1kHz, 0dB input gain
•	•	•	•	•	•	•	•	•	•	•	Frequency Response: 20Hz - 20kHz, +/-0.5dB
					•	•	•	•	•	•	Interchannel Crosstalk: >80dB typical
					•	•	•	•	•	•	Crosstalk input to output: >80dB typical
							0.6 msec	0.6 msec	0.6 msec	0.6 msec	Propagation Delay
											PRE EQ – (Input)
28-Band	28-Band	28-Band	31-Band	28-Band	9-Band	9-Band			4-Band	4-Band	Type: Graphic EQ per input channel, or PEQ per input channel
•	•	•	•	•	•	•					Range: +/-12dB range
											NOTCH FILTERS
			•								Number: 1-5 per input channel not to exceed 10 for all input channels
		•		•	•	•					Number: 6 per input channel
					•	•					Number: 4 per output channel
											PRE DELAY – (Input)
N/A	N/A	configurable	680	N/A	5120	5120					Length: ms/channel
											POST DELAY (DRIVER ALIGNMENT) – (Output)
10	10	configurable	170	configurable	5120	5120					Length: ms/channel
											TOTAL DELAY TIME
		2.7sec	2.0sec	2.7sec							
											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 - Note: PA+, PX - offer no bessel
•	•	•	•								Slope: 6, 12, 18 or 24 dB/octave for Butterworth or Bessel filters 12, 24, 36 or 48 dB/octave for Linkwitz-Riley filters Note: PA+, PX - offer only 12 and 24 LR
							•				Type: 1x1, 1x2, 1x3, 1x4, 2x2, 2x4, 2x6 and 2x8 - Bessel 6, 12, 18 and 24 dB/Octave Butterworth 6, 12, 18 and 24 dB/Octave - Linkwitz-Riley 12 and 24 dB/Octave
											POST EQ - (Output)
3(2)	3(2)	4(2)	4	4	6	6			6	6	Number: EQ bands per output channel
		•			•	•			•	•	Range: +/-12dB range
											DYNAMICS
	•	•	•	•	•	•	•	•	•	•	Type: Compressor/Limiter with PeakStopPlus®
•	•				•	•	•	•	•	•	Type: Compressor/Limiter with PeakPlus®
									•	•	Ambient Noise Compensation
											Pink Noise Generator
•	•	•	•								Position: Pink noise inserted on selected input(s)
					•	•					Pink/White/Sine
											Phase Compensation
		•	•	•							Amount: 0-180 degrees phase shift
		•	•	•					•	•	Output Polarity: Reversible
											MISCELLANEOUS
			•								Output Transformers: Optional
•											ROM Upgrade: Flash upgradable through USB
		•	•	•							GUI: RS-232 for computer display and configuration
•	•										RTA Microphone: Optional (RTA mic included on PX)
		•	•	•	•	•	•	•	•	•	ROM Upgrade: Flash upgradable through RS-232
1.75"x 19"x 5.75"	1.75"x 19"x 5.75"	1.75"x 19"x 7.7"	3.5"x 19"x 12.25"	1.75"x 19"x 5.75"	3.5"x 19"x 15"	3.5"x 19"x 15"	1.75"x 19"x 5.75"	1.75"x 19"x 5.75"	1.75"x 19"x 5.75"	1.75"x 19"x 5.75"	Dimensions: H x W x D

Graphic EQs

Specification	131s	215s	231s	1215	1231	2031	2215	2231	IEQ15	IEQ31
INPUTS/OUTPUTS										
Connectors: 1/4" TRS, XLR (pin 2 hot), and barrier terminal strip				•	•	•	•	•		
Connectors: 1/4" TRS, XLR (pin 2 hot), and Euroblock									•	•
Connectors: 1/4" TRS, XLR (pin 2 hot)	•	•	•							
Type: Electronically balanced/unbalanced, RF filtered	•	•	•	•	•	•	•	•	•	•
Input Impedance: Balanced 40k , unbalanced 20k	•	•	•	•	•	•	•	•	•	•
Maximum Input Level: >+21dBu balanced or unbalanced	•	•	•	•	•	•	•	•	+22dBu	+22dBu
CMRR: >40dB, typically >55dB at 1kHz	•	•	•	•	•	•	•	•	•	•
Output Impedance: Electronically balanced 200 , unbalanced 100				•	•	•	•	•		
Output Impedance: Electronically balanced 120 , unbalanced 60									•	•
Output Impedance: balanced 100 , unbalanced 50	•	•	•							
Maximum Output Level	+21dBu	>+21dBu	>+21dBu	>+21dBu	>+21dBu	>+21dBu	>+21dBu	>+21dBu	>+20dBu	>+20dBu
SYSTEM PERFORMANCE										
Bandwidth: 20Hz to 20kHz, +/-0.5dB	•	•	•	•	•	•	•	•	•	•
Frequency Response: <10Hz to >50kHz , +0.5/-3dB	•	•	•	•	•	•	•	•	•	•
THD + Noise: <0.004%, at +4dBu 1kHz	•	•	•	•	•				•	•
THD + Noise: <0.04% , 0.02% typical at +4dBu, 1kHz						•	•	•		
Interchannel Crosstalk: <-80dB, 20Hz to 20kHz	•	•	•	•	•	•	•	•	•	•
Dynamic Range: >108dB, unweighted 22kHz measurement bandwidth	•	•	•							
Signal to Noise Ratio: 90dB	•	•	•							
Dynamic Range: >112dB, unweighted				•	•	•	•	•		
Signal to Noise: >94dB, unweighted, ref. : +4dBu, 22kHz measurement bandwidth				•	•	•	•	•		
Dynamic Range: 108dB						•	•	•		
Signal to Noise Ratio: 90dB						•	•	•		
Noise Reduction: Up to 20dB of dynamic broadband noise reduction						•	•	•		
Noise Reduction: Up to 10dB of dynamic broadband noise reduction									•	•
Noise Reduction In (+/-6dB and +/-15dB range)										
Dynamic Range: >120dB , unweighted						•	•	•		
Signal to Noise Ratio: >102dB, unweighted , ref: +4dBu, 22kHz measurement bandwidth						•	•	•		
Dynamic Range: 109dB 115dB				•	•					
Signal to Noise: >94dB, unweighted, ref. : +4dBu, 22kHz measurement bandwidth				•	•	•	•	•		
Digital Resolution: 24 bits									•	•
Sample Frequency: 48kHz									•	•
Latency: 2msec									•	•
FUNCTION SWITCHES										
AFS: Activates dbx AFS™ Advanced Feedback Suppression									•	•
Type V: Activates dbx Type V™ Noise Reduction									•	•
Type III: Activates dbx Type III™ Noise Reduction						•	•	•		
EQ Bypass: Bypasses the graphic equalizer section in the signal path	•	•	•	•	•	•	•	•	•	•
Low Cut (recessed): Active the 40Hz 18dB/octave Bessel high-pass filter				•	•	•	•	•	•	•
Low Cut: Active the 50Hz 12dB/octave high-pass filter	•	•	•							
Range: (recessed) Selects either +/-6dB or +/- 15dB slider boost/cut range				•	•	•	•	•	•	•
Range: Selects either +/-6dB or +/- 12dB slider boost/cut range	•	•	•							
INDICATORS										
4-LED bar graph (Green, Green, Yellow, Red) at -10, 0, +10, and +18dBu	•	•	•	•	•	•	•	•	•	•
Gain Reduction Meter: 4-LED bar graph (all Red) at 3, 6, and 10dB						•	•	•	•	•
Type III™ NR Active: Yellow LED						•	•	•		
Type V™ NR Active: Yellow, Green, Red LED									•	•
AFS™ Advanced Feedback Suppression Active: Red LED									•	•
EQ Bypass: Red LED	•	•	•	•	•	•	•	•	•	•
Clip: Red LED	•	•	•	•	•	•	•	•	•	•
Low Cut Active: Red LED	•	•	•	•	•	•	•	•	•	•
+/-6dB range: Red LED				•	•	•	•	•		
+/-12dB range: Red LED	•	•	•							
+/-15dB range: Red LED				•	•	•	•	•	•	•
POWER SUPPLY										
Operating Voltage: 100VAC 50/60Hz, 120VAC 60Hz - 230VAC 50/60Hz	•	•	•	•	•	•	•	•		
Power Consumption: (watts)	12 w	12 w	15 w	24 w	24 w	12 w	24 w	24 w	17 w	17 w
Mains Connection: IEC receptacle	•	•	•	•	•	•	•	•	•	•
DIMENSIONS: H x W x D	1.75"x 19"x6"	1.75"x 19"x6"	3.5"x 19"x6"	3.5"x 19"x7.9"	5.25"x 19"x7.9"	3.5"x 19"x7.9"	3.5"x 19"x7.9"	5.25"x 19"x7.9"	3.5"x 19"x7.9"	5.25"x 19"x7.9"

Dynamics, Blue/Purple Series

266xs	166xs	160A	1074	1046	1066	160SL	162SL	
								INPUTS
X,T	X,T	X,T	X	X,T	X,T	X,T	X,T	Connectors: X=XLR, T=TRS ¼"
•	•	•	•	•	•	•	•	Type: Electronically balanced/unbalanced, RF filtered
>40k	>50k/>25k	>100k/>50k	>50k/>25k	>40k/>20k	>40k/>20k	>20k/>10k	>50k/>25k	Impedance: Balanced/Unbalanced (ohms)
>+20dBu	>+24dBu	>+24dBu	>+22dBu	>+22dBu	>+22dBu	+30dBu/+26	>+24dBu	Max Input Level: Balanced or Unbalanced
>45	>45	>45	>45	>45	>45	>80	>40	CMRR: Typical @ 1kHz
V1	V1	V1	V2	V2	V2	V8	V8	**VCA TYPE**
T	T	T	T	T	T	X	T	**SIDECHAIN INSERT** Connectors: X=XLR, T=TRS ¼"
								OUTPUTS
X,T	X,T	X,T	X,T	X	X,T	X	X,T	Connectors: X=XLR, T=TRS ¼"
*	•	•	•	•	•		•	Type: Electronically balanced/unbalanced, RF filtered (*266XL is impedance balanced)
						•	•	Type: Transformer balanced/unbalanced, RF filtered
	>120/>60	>30	>60/>30	>30/>15	>30/>15	>50/>25	>30/>15	Impedance: Balanced/Unbalanced (ohms)
>+21	>+21	>+24	>+22	>+22	>+21	>+30	>+24/>+22	Max Output Level: (dBu)
								SYSTEM PERFORMANCE
•	•	•	•	•	•	•	•	Bandwidth: 20 Hz to 20 kHz, +0/-0.5 dB (162SL=+0/-0. dB)
-90	-90	-90	-94	-94	-94	-94	-93	Noise: < (dBu), unweighted, 22 kHz measurement bandwidth
•	•	•	•	•	•	•	•	Stereo Coupling; True RMS Power Summing
								COMPRESSOR
•	•	•		•	•		•	Threshold Range: -40 dBu to +20 dBu
						•		Threshold Range: -40 dBu to +30 dBu
•	•	•		•	•	•	•	Ratio: 1:1 to ∞:1
•	•	•		•	•	•	•	Threshold Characteristic: Selectable OverEasy or hard knee
•	•			•	•	•	•	Attack/Release: Selectable manual or auto
			•	•				Attack/Release: Auto
•	•	•	•	•	•		•	Output Gain: -20 to +20 dB
						•		Output Gain: -25 to +25 dB
								LIMITER
N/A	Peakstop	N/A	N/A	Peakstop Plus®	Peakstop Plus®	Peakstop Plus®	Peakstop Plus®	Type
								(162SL two-stage)
								OPTIONS
						•		704X Digital Output System
		•	•	•	•		•	Output Transformer: Jensen® JT-123-dbx or JT-11-dbx, BCI™ RE-123-dbx or RE-11-dbx; Jensen standard on 160SL/162SL
1.75"x 19"x 5.75"	1.75"x 19"x 6.75"	1.75"x 19"x 6.5"	1.75"x 19"x 9"	1.75"x 19"x 9"	1.75"x 19"x 9"	3.5"x 19"x 10"	3.5"x 19"x 10"	**DIMENSIONS: H x W x D**

Crossovers

223s	223xs	234s	234xs	
				INPUTS
¼" TRS	XLR	¼" TRS	XLR	Connectors
•	•	•	•	Type: Electronically balanced/unbalanced, RF filtered
•	•	•	•	Impedance: Balanced > 50 k , unbalanced > 25 k
•	•	•	•	Max Input Level: > +21 dBu balanced or unbalanced
•	•	•	•	CMRR: > 40 dB, typically > 55 dB at 1 kHz
				OUTPUTS
¼" TRS	XLR	¼" TRS	XLR	Connectors:
•	•	•	•	Impedance: Balanced 200 , unbalanced 100
•	•	•	•	Electronically balanced/unbalanced, RF filtered
•	•	•	•	Max Output Level: > +21 dBu balanced/unbalanced into 2 k or greater
				SYSTEM PERFORMANCE
•	•	•	•	Bandwidth: 20 Hz to 20 kHz, +0/-0.5 dB
•	•	•	•	Frequency Response: < 3 Hz to > 90 kHz, +0/-3 dB
•	•	•	•	Signal-to-Noise: Ref: +4 dBu, 22 kHz measurement bandwidth
•	•			Low Output: > 94 dB (Stereo Mode) > 94 dB (Mono Mode)
		•	•	Low Mid Output: >94 dB (Mono Mode)
		•	•	High-Mid: > 92 dB (Mono Mode)
•	•			Mid Output: > 93 dB (Mono Mode)
		•	•	High-Mid Output: > 92 dB
•	•	•	•	High Output: > 92 dB (Stereo Mode) > 92 dB (Mono Mode)
•	•	•	•	Dynamic Range: > 114 dB, unweighted, any output
•	•	•	•	THD+Noise: < 0.004% at +4 dBu, 1 kHz, < 0.04% at +20 dBu, 1 kHz
•	•	•	•	Interchannel Crosstalk: < -80 dB, 20 Hz to 20 kHz
				CROSSOVER FREQUENCIES
•	•	•	•	Stereo Mode: Low/High: 45 to 960 Hz or 450 Hz to 9.6 kHz (x10 setting)
				Mono Mode: Low/Mid: 45 to 960 Hz or 450 Hz to 9.6 kHz (x10 setting)
				Mid/High: 45 to 960 Hz or 450 Hz to 9.6 kHz (x10 setting)
				Filter Type: Linkwitz-Riley, 24 dB/octave, state-variable
				POWER
•	•	•	•	Operating Voltage: 100 VAC 50/60 Hz; 120 VAC 60 Hz, 230 VAC50 HZ
15 w	15 w	15 w	15 w	Power Requirements (watts)
1.75"x 19"x 6.9"	1.75"x 19"x 6.9"	1.75"x 19"x 6.9"	1.75"x 19"x 6.9"	**DIMENSIONS H x Wx D**

dbx
by HARMAN

Digital Signal Processors

AFS224	
	INPUTS
X,T	Connectors: X=XLR, T=TRS ¼"
•	Type: Electronically balanced/unbalanced, RF filtered
50k/25k	Impedance: Balanced/Unbalanced (ohms)
+20dBu	Max Input Level: balanced or unbalanced
•	CMRR: >40dB at 1kHz, typically >55dB @1kHz
	OUTPUTS
X,T	Connectors: X=XLR, T=TRS ¼"
•	Type: Electronically balanced/unbalanced, RF filtered
•	Balanced: 120 /Unbalanced: 60
•	Max Output Level: +20dBu
	A/D SYSTEM PERFORMANCE
•	A-D Conversion: 24-Bit dbx Type IV™ Conversion System
•	Converter Dynamic Range: >113dB typical, A-weighted, >110 dB typical, unweighted, 22kHz bandwidth
•	Type IV™ Dynamic Range: Up to 127dB with transient material, A-weighted, 22kHz bandwidth Up to 125dB with transient material, unweighted, 22kHz bandwidth Typically 119dB with program material, A-weighted, 22kHz bandwidth Typically 117 dB with program material, unweighted, 22kHz bandwidth
•	Frequency Response: 20Hz to 20kHz, +0/-0.5dB
•	Interchannel Crosstalk: <-80dB at 1kHz, input gain at 0dB
	D/A SYSTEM PERFORMANCE
•	D-A Conversion: 24-Bit
•	Dynamic Range: 112dB typical, A-weighted, 22kHz bandwidth, 109dB typical, unweighted, 22kHz bandwidth
•	THD+ Noise: 0.003% typical at +4 dBu, 1 kHz, input gain at 0dB
•	Frequency Response: 20Hz to 20kHz, +0/-0.5dB
•	Interchannel Crosstalk: <-80dB at 1kHz, input gain at 0dB
1.75"x 19"x 5.75"	**DIMENSIONS: H x W x D**

TR1616

TR1616	
	ANALOG INPUTS
16	Number of Inputs
•	Connectors: Combination Female XLR and ¼" Jack
•	Type: Electronically balanced, RF Filtered
•	Impedance: XLR input: 3k , ¼" input: 20k balanced, 10k unbalanced
•	Max Input Level: XLR Input: +18dBu at minimum gain ¼" Input: +33dBu at minimum gain
•	Gain: XLR Input: 0 to +60dB, ¼" Input: -15 to +45dB
•	EIN: -125dBu, 22Hz-22kHz, 150 source impedance
•	CMRR: >40dB, typically 55dB, 22Hz-22kHz
•	Dynamic Range: 110dB unweighted, 113dB A-weighted
•	Frequency Response: 10Hz to 40kHz, +/- 0.25dB at 96kHz, 10Hz to 20kHz, +/- 0.25dB at 48kHz
•	THD+N: Typically 0.002% at 1kHz, 0dBu XLR input, gain set to minimum
•	Interchannel Crosstalk: <-100dB, 22Hz to 22kHz
•	ADC Latency: 37/Fs (0.77msec at 48kHz)
+48VDC	Phantom Power: applied to XLR pins 2 and 3 through 6.81k resistors
20dB	Pad
•	Low Cut Filter: 2-pole Butterworth filter at 80Hz
•	Polarity: Normal or Reverse
	ANALOG OUTPUTS
16	Number of Outputs
•	Connectors: Male XLR
•	Type: Cross-Coupled Electronically balanced, RF Filtered
•	Impedance: 40 balanced, 20 unbalanced
•	Maximum Output Level: +20dBu into 2kohm load or greater
•	Dynamic Range: 112dB unweighted, 115dB A-weighted
•	Frequency Response: 10Hz to 40kHz, +/- 0.25dB at 96kHz 10Hz to 20kHz, +/- 0.25dB at 48kHz
•	THD+N: Typically 0.006% at 1kHz, 0dBu output
•	Interchannel Crosstalk: <-100dB, 22Hz to 22kHz
•	DAC Latency: 29/Fs (0.60msec at 48kHz)

Direct Boxes

dB10	dB12	
P	A	Circuit Type: A=Active, P=Passive
		INPUTS
1	1	Number of Connectors: Instrument/line/speaker level
•	•	¼" TS Connection (Tip Hot, Sleeve GND)
•	•	Unbalanced, RF Filtered
•	•	Attenuation Pad: Switchable 0, 20, 40 dB
•	•	Filter: Switchable, Low Pass @ 6 kHz (40 dB pad position only)
+33dBu	+10dBu	Max Input Level (0 dB Pad)
+33dBu	+30dBu	Max Input Level (20 dB Pad)
+33dBu	+33dBu	Max Input Level (40 dB Pad)
80k	1M	Input Impedance (0 dB)
65k	65k	Input Impedance (-20 dB)
70k	70k	Input Impedance (-40 dB)
		OUTPUTS
•	•	Main Output: Male XLR Balanced, Pin 2 Hot
•	•	Thru Output: ¼" Unbalanced, TS (Tip Hot, Sleeve GND)
•	•	Main Output Impedance: 600 Typical, balanced
•		Main Output CMRR: 128 dB typical @ 60 Hz, 104 dB typical @ 1 kHz, 98 dB typical @ 10 Hz
	•	Main Output CMRR: 106 dB typical @ 60 Hz, 123 dB typical @ 1 kHz, 108 dB typical @ 10Hz
		PERFORMANCE
•		Bandwidth: 20 Hz to 20 kHz +/-0.1 dB typical
	•	Bandwidth: 20 Hz to 20 kHz +0/-2 typical with 600 load
•		Frequency Response: <10 Hz to 80 kHz, -3 dB
	•	Frequency Response: 10 Hz to 70 kHz, -3 dB with 2 k or higher load
•		Insertion Loss: 21 dB typical
	•	Insertion Loss: 1 dB typical
•		Harmonic Distortion: (THD+N) 0.002% typical @ 1 Hz, 0dBu
	•	Harmonic Distortion: (THD+N) 0.003% typical @ 1 Hz, 0dBu
•		Noise Floor: -120 dBu, 22 Hz to 22 kHz, unweighted
	•	Noise Floor: -112 dBu, 22 Hz to 22 kHz, unweighted
•		Dynamic Range: 153 dB, 22 Hz to 22 kHz, unweighted
	•	Dynamic Range: 122 dB, 22 Hz to 22 kHz, unweighted
		POWER SUPPLY
	•	Voltage: +48 V Phantom Power
	•	Current: < 8 mA
2.20" x 5.44"x 5.82"	2.20" x 5.44"x 5.82"	**DIMENSIONS: H x W x D**

PMC16

PMC16	
	AUDIO PERFORMANCE
•	Frequency Response: +0/-0.2 dB 20 Hz – 20 kHz (Measured at 0 dBu output level)
•	Dynamic Range: >108 dB unweighted 22 Hz – 22 kHz bandwidth >112 dB A-weighted
•	THD+N: <.005% 20 Hz – 20 kHz (Measured at 0 dBu output level)
•	Crosstalk: <97 dB 20 Hz – 20 kHz
	BLU LINK DIGITAL AUDIO BUS
•	Bit Depth: 24-bit
•	Sample Rate: 48 kHz or 96 kHz
•	Connectors: 2 x RJ45 Ethernet connectors
•	Max Cable Length: 100 m/300 ft between devices (Category 5e cable)
60	Max Number of Nodes
•	Latency Per Node: 4/Fs [0.08 ms @ 48 kHz, 0.04 ms @ 96 kHz]
	ANALOG OUTPUTS (XLR & ¼")
20 dBu	Max Output Level
40Ω	Output Impedance
	HEADPHONE OUTPUTS (1/8" & ¼")
•	Power/Impedance: 900 mW per channel at 50Ω (1/8" and ¼" jacks are in parallel)
	POWER
•	Adapter: PS0920DC-01 (100-240 V AC, 50/60 Hz)
18 W	Power Consumption:
•	Power Requirements: 9 V DC 2.0 A
	WEIGHT/DIMENSIONS
2.26 lb (1.03 kg)	Product Weight
0.31 lb (0.14 kg)	Power Supply Weight
2 1/8"(H) 11 5/16"(W) 4 13/16" (D)	Dimensions

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