
INSTALL
STUDIO
TOUR
FULL LINE CATALOG | 2008
dbx
PROFESSIONAL PRODUCTS
FULL LINE


PEAK
20 10 7 5 3 0 3 +
- -25 -20 -15 -10 -5 0
-30
DECIBELS
dbx
PROFESSIONAL PRODUCTS
162SL
COMPRESSOR
LIMITER
METER SELECTION
INPUT
OUTPUT
G.R.
-25 dB +25
OUTPUT GAIN
+12
+17
+25
+4 dBu OFF
STOP LEVEL
BYPASS

## HISTORY

It began more 35 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



FULL LINE

dbx® PROFESSIONAL PRODUCTS


# SC™ 64

## DIGITAL MATRIX PROCESSOR

HiQnet™

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.

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 choice of 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. Eight analog input cards and eight analog output cards facilitate 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 options 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
- Logic I/O
- 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

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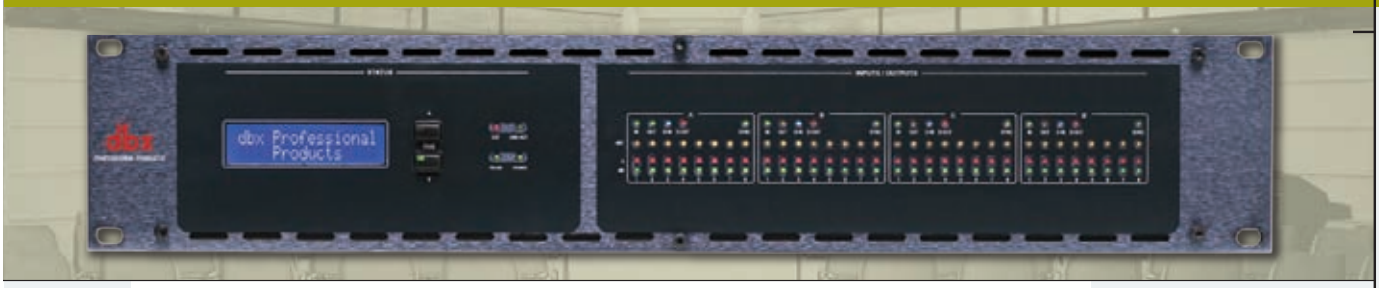
FULL LINE




# SC™ 32

## DIGITAL MATRIX PROCESSOR

The SC 32 (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 32 represents the professional choice of 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. Eight analog input cards and eight analog output cards facilitate 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 options slots provide facility for adding forthcoming high-bandwidth audio transport I/O cards. All of these features are housed in a sleek 1U 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
- Logic I/O
- 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 muting. 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 26.

FULL LINE dbx® PROFESSIONAL PRODUCTS


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

- 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 CobraNet® I/O
- 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, Limiting and Advanced Feedback Suppression among others
- Ethernet HiQnet networking and control
- dbx ZC wall panel control

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 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.

HiQnet™

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# DriveRack® 481 | DriveRack® 482

## COMPLETE EQUALIZATION AND LOUDSPEAKER MANAGEMENT SYSTEM

The 481 and 482 are slave units to the DriveRack 480 and include all of the functionality and features of the 480 .They both incorporate 4 inputs and 8 outputs with Euroblock connectors on the 481 and XLRs on the 482. However, they do not include the front panel programming interface. All programming functions can be performed through the 480, the 480R, or via the Windows GUI. An unlimited number of slaves can be chained together.

- 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 lockout
- Triple redundant back-up 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

# DriveRack® 442

## COMPLETE EQUALIZATION MANAGEMENT SYSTEM

The 442 is based on the same operating system as the DriveRack 480 and offers the user four inputs and four outputs on XLR connectors. Each channel has EQ in the form of a 9-Band Parametric or a 31-Band Graphic and Notch Filters.

- 4 Inputs and 4 Outputs
- 31-band graphic or 9 band parametric equalizer on every input
- Time Alignment Delay
- Compressor/Limiter on every output
- Multi-level Security System
- Separate House and Show EQ with individual lockouts
- Triple redundant back up of all parameters when running network, 480R and 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

FULL LINE

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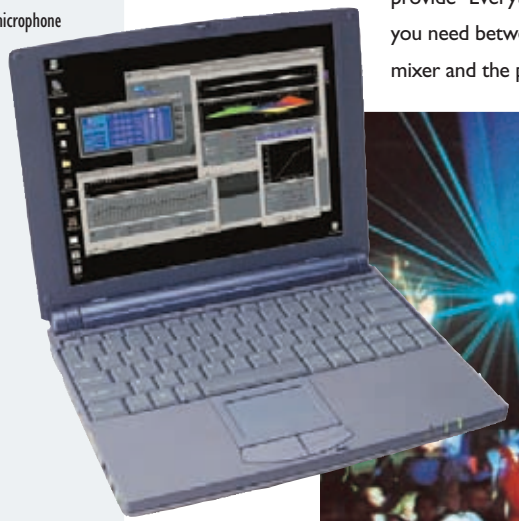
# DriveRack® 260

## COMPLETE EQUALIZATION AND LOUDSPEAKER CONTROL SYSTEM

- 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

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™) setup.

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.



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FULL LINE


# 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.

- Advanced Feedback Suppression (AFS)
- Graphic and Parametric EQ
- Compressor
- 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

Use the DriveRack 260 and 220i with Zone Controllers for control at the flick of a switch!

(See page 26 for more details)


FULL LINE

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# DriveRack® PA

## COMPLETE EQUALIZATION AND LOUDSPEAKER CONTROL SYSTEM

- Patented Advanced Feedback Suppression (AFS)
- Dual 28-band Graphic EQ
- Classic dbx® Compressor
- 120A Sub-harmonic Synthesizer
- 2x3, 2x4, 2x5, 2x6 Crossover Configurations
- Stereo Multi-band Parametric EQ
- Stereo Output PeakPlus™ Limiters
- Alignment Delay
- Pink Noise Generator
- Auto-EQ with 28-band RTA
- JBL® Speaker and Crown Power Amp Tunings with Setup Wizard
- 25 User Programs/25 Factory Programs
- 2 Channel XLR Input and 6 Channel XLR Output
- Front panel RTA-M XLR input with phantom power
- 24-Bit ADC/24-Bit DAC, >110 dB Dynamic Range
- Full Graphic LCD Display

Drive your PA to a whole new level of performance with the DriveRack PA Complete Equalization & Loudspeaker Control System. The DriveRack PA represents a complete integration of the key elements that help ensure optimal loudspeaker system management in PA-specific applications. Capitalizing on the legendary 480 DriveRack technology, the DriveRack PA is able to provide its user with top-tier, pro-level loudspeaker management specifications, yet still remain appealing to the budget-conscious audiophile who requires a tried and true utilitarian workhorse. With its all-inclusive, no-compromise design, the DriveRack PA has been systematically developed and designed to grow with your system needs for years to come by providing state-of-the-art signal processing, while utilizing a simple and intuitive user interface. The inputs combine two independent channels of processing power with a linkable 28-Band Graphic equalizer, industry-standard dbx stereo compressor module, patented Advanced Feedback Suppression and the 120A Subharmonic Synthesizer. The outputs include six channels with parametric EQs, and Peak Plus™ limiters (which are used to provide protection against speaker blowouts) and alignment delay. These features, combined with the Wizard setup system, also include JBL® speaker tunings and Crown® Power Amp settings and represent a methodical design that is guaranteed to deliver optimal, all-inclusive processing in a completely scalable system.

*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.*

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FULL LINE

JBL PROFESSIONAL

crown

# ZonePRO™ 1260 | ZonePRO™ 1261

## COMPLETE EQUALIZATION AND LOUDSPEAKER CONTROL SYSTEM

With 12 inputs and 6 outputs and Ethernet control the dbx ZonePRO 1260 and 1261 are the newest members of the ZonePRO family providing a complete suite of signal processing and control for Commercial Audio applications.

Designed to offer superior system sonic performance and flexibility, the 1260/1261 deliver the highest quality tools available. Input and output connectors were chosen for their standard usage and reliability. The ZonePRO products offer Euroblock connectors for balanced signals and RCA connectors for interfacing with consumer equipment often used in commercial applications; there is also a simple analog input buss that allows inputs to be sent from one unit to the next for unit and job scalability. The 1260 and 1261 provide every necessary processing tool, from the input processing like gain control and EQ available on all inputs to highly sophisticated and specific functions such as selectable paging microphone processing including Gating, De-Essing, Auto Gain Control, Compression and Feedback Suppression. The heart of the ZonePRO products is the Routing module that provides of course Primary Source Selection, but also Source Ducking for Paging and Priority Override. The outputs also offer a wealth of processing designed for commercial applications like our AutoWarmth® function – co-developed with JBL to provide natural low frequency extension at any signal level. Each output also offers EQ, Bandpass and Crossover filters, Limiting and Delay for system optimization. With the ZonePRO every tool is at your disposal to maximize the response of your system.

Beyond processing, the ZonePRO products offer multiple forms of control to further extend the versatility of your system. Control options include easy-to-use wall panel Zone Controllers for standard end-user functions – like source select and volume control – and advanced system control utilizing a built-in Real Time Clock that can provide programmable system changes throughout the day or week. For system setup and monitoring the ZonePRO Designer software provides an intuitive interface and a speedy setup Wizard for configuring and editing all system parameters. The addition of Ethernet control means that not only will it work with standard network equipment, but it can also be accessed from remote dialup locations or from wireless access points.

The ZonePRO 1260 and 1261 will take your Commercial Audio system to the next level with advanced processing, versatility and control.

- Advanced Feedback Suppression (AFS™)
- Autowarmth®
- Auto Gain Control
- Compression
- Limiting
- Noise Gating
- Notch Filtering
- Bandpass and Crossover Filters
- Parametric EQ
- Security Lockout
- Wall Panel Control
- RS-232 Control
- Windows® 2000 and XP GUI
- Ethernet Control
- IEC, UL and CSA Approvals

FULL LINE

dbx® PROFESSIONAL PRODUCTS

# ZonePRO™ 640 | ZonePRO™ 641

## DIGITAL ZONE PROCESSORS

- Patented Advanced Feedback Suppression (AFS™)
- Autowarmth®
- Auto Gain Control
- Compression
- Limiting
- Noise Gating
- Notch Filtering
- Bandpass and Crossover Filters
- Parametric EQ
- Security Lockout
- Wall Panel Control
- RS-232 Control
- Windows® 2000 and XP GUI
- IEC, UL and CSA Approvals

The dbx ZonePRO 640 and 641 products were designed to provide flexible programmable zone processing for Background Music and Paging applications.

With 6 inputs and 4 outputs the dbx ZonePRO 640 and 641 provide flexible signal routing, powerful DSP processing and multiple control interfaces for Commercial Audio applications.

Designed to offer superior system sonic performance and flexibility, the 640/641 deliver the highest quality tools available. Input and output connectors were chosen for their standard usage and reliability. The ZonePRO products offer Euroblock connectors for balanced signals and RCA connectors for interfacing with consumer equipment often used in commercial applications; there is also a simple analog input buss that allows inputs to be sent from one unit to the next for unit and job scalability. The 640 and 641 provide every necessary processing tool, from the input processing like gain control and EQ available on all inputs to highly sophisticated and specific functions such as selectable paging microphone processing including Gating, De-Essing, Auto Gain Control, Compression and Feedback Suppression. The heart of the ZonePRO products is the Routing module that provides of course Primary Source Selection, but also Source Ducking for Paging and Priority Override. The outputs also offer a wealth of processing designed for commercial applications like our AutoWarmth® function – co-developed with JBL to provide natural low frequency extension at any signal level. Each output also offers EQ, Bandpass and Crossover filters, Limiting and Delay for system optimization. With the ZonePRO every tool is at your disposal to maximize the response of your system.

Beyond processing, the ZonePRO products offer multiple forms of control to further extend the versatility of your system. Control options include easy-to-use wall panel Zone Controllers for standard end-user functions – like source select and volume control – and advanced system control including a built-in Real Time Clock that can provide programmable system changes throughout the day or week. For system setup and monitoring the ZonePRO Designer software provides an intuitive interface and a speedy setup Wizard for configuring and editing all system parameters.

The ZonePRO 640 and 641 will take your Commercial Audio system to the next level with advanced processing, versatility and control.

dbx PROFESSIONAL PRODUCTS

FULL LINE


# 160 SL

**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 for you. 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,

- Patent-pending AutoVelocity™ circuit
- 127dB of Dynamic Range
- High-Drive output transformer circuit drives 1000 ft. of Belden® cable at +30dBu with only .007% THD
- Switchable between Hard-knee and OverEasy® Compression
- Program-dependent "Auto," AutoVelocity™ or fully variable attack and release manual modes


# 162 SL

**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.

- Super fast manual attack and release
- High-Drive Jensen® output transformers
- Hard-knee/OverEasy® switchable
- Ultra-low distortion compression for unheard of clarity even under extreme gain reduction
- Program-dependent "Auto,"" Patent-pending AutoVelocity™ Manual, or fully variable attack and release modes

FULL LINE

dbx® PROFESSIONAL PRODUCTS

# Quantum II®

## DIGITAL MULTI-BAND PROCESSOR

- 96kHz, 24 bit A/D, D/A, and Digital I/O on AES/EBU or S/PDIF
- 48 bit internal signal path
- Patented TYPE IV® A/D Conversion System with TSE™
- 4-band stereo compressor-gate-limiter
- 5 band EQ - Hi and Lo shelves, 3-band fully-parametric and MS EQ
- Normalizer
- Stereo adjust
- Sync input/output
- Selectable Output dither from 8, 16, 20, to 24 bits
- Sample rate conversion – full Up/Down

The engineers at dbx® designed the Quantum II™ to be the standard by which all digital mastering processors are measured. With our patented Type IV® Conversion System and TSE™ Tape Saturation Emulation circuitry, the Quantum II allows your signal to retain its analog warmth and character, while delivering the sonic clarity that today's digital environments demand. Other features include four-band Gating, Compression, and Limiting, or MS Gating, Compression, and Limiting. A five-band Parametric EQ is available to change the tonal character of the signal and the EQ can be placed either pre- or post-dynamics processing. The EQ can also be set up as an MS EQ allowing the user to manipulate the character of the Center information (Left + Right) and the Side information (Left – Right). The Quantum II is capable of dual mono or true stereo operation with RMS Power Summing™.

Also available on the Quantum II™ is a Normalizer with flexible gain optimization, stereo adjust, and an output Dither and Noise Shaping option which allows user assigned noise shaping and output dither to 8, 16, 20 or 24 bits. The Quantum II features sample rate conversion and low-jitter synchronized inputs and outputs that use dbx's proprietary clock integrated circuits.

In addition to providing a bevy of state-of-the-art features and specifications, the Quantum II allows you to control the aforementioned items via the included PC GUI interface. This feature in turn allows you to keep your focus on the project at hand, while keeping your hands off of the unit itself.

Whether you are working with DAT, DAW, or analog, the Quantum II provides all the tools that you need to make the most of your mixes.

# 704X

## DIGITAL OUTPUT CARD

The 704X digital output card allows the dbx Blue Series® processors to take advantage of dbx's amazing Type IV™ Conversion System. Its features include 44.1kHz, 48kHz, 88.2kHz, and 96kHz sample rates; 16-, 20-, or 24-bit word length; TPDF or SNR2 noise shaping, dithering at 16 or 20 bits; synchronized outputs with low-jitter, phase-locked loops; selectable noise-shaping algorithms; and gold-plated AES/EBU and S/PDIF output jacks.

- Sample rates: 44.1kHz, 48kHz, 88.2kHz, or 96kHz
- Dither outputs to 16, 20, or 24 bits using TPDF or SNR2 algorithms
- 48 bit internal signal path
- TYPE IV® A/D Conversion System
- Sync input/output
- 2 user-selectable noise shape algorithms
- Gold-plated Neutrik® AES/EBU and S/PDIF connectors
- For use with dbx 160S, 160SL or 786

dbx PROFESSIONAL PRODUCTS

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# iEQ™

## DIGITAL GRAPHIC EQUALIZERS W/ AFS®

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


- Advanced Feedback Suppression (AFS™)
- Type V™ Noise Reduction
- PeakStopPlus™ Limiting
- 2/3-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

## 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

FULL LINE

dbx PROFESSIONAL PRODUCTS

# 20 Series

## GRAPHIC EQUALIZERS

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

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.

### 2215 DUAL 15-BAND GRAPHIC EQUALIZER


### 2231 DUAL 31-BAND GRAPHIC EQUALIZER


### 2031 SINGLE 31-BAND GRAPHIC EQUALIZER


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

dbx® PROFESSIONAL PRODUCTS

FULL LINE

# 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


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

### 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

FULL LINE

dbx® PROFESSIONAL PRODUCTS

# 2 Series

## GRAPHIC EQUALIZERS

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

### 131 SINGLE 31-BAND GRAPHIC EQUALIZER


- Single 31-band, 1/3-octave Constant Q frequency bands
- Switchable boost/cut ranges of ±6 or ±12dB
- 12dB per octave, 3dB down @ 50Hz low-cut filter
- Front panel bypass switch
- ±12 dB input gain range
- 4-segment LED ladders for monitoring output levels
- XLR and TRS Inputs and Outputs
- Internal Toroidal Transformer
- Frequency Repsonse of <10Hz to >50kHz
- Dynamic range of greater than 108dB

### 215 DUAL 15-BAND GRAPHIC EQUALIZER


- Two 31-band, 1/3-octave 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 Inputs and Outputs
- Internal Toroidal Transformer
- Frequency Response of <10Hz to >50kHz
- Dynamic range of greater than 108dB

### 231 DUAL 31-BAND GRAPHIC EQUALIZER


- Two 31-band, 1/3-octave 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

dbx PROFESSIONAL PRODUCTS

FULL LINE

# 386

## MIC PRE

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

Digital outputs on the 386 and 376 are standard features

# 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, 20 dB 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

FULL LINE

dbx PROFESSIONAL PRODUCTS

# 10 Series

## 1066 COMPRESSOR/LIMITER/GATE


Whether you're looking for "heavy" compression or subtle gain leveling, the 1066 stereo compressor/limiter/gate with selectable 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 distortion 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

dbx® PROFESSIONAL PRODUCTS

FULL LINE

## 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


## 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 putput 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

FULL LINE

dbx® PROFESSIONAL PRODUCTS


# 166XL

**COMPRESSOR/LIMITER/GATE**

With auto attack and release controls and separate precision LED displays for gain reduction, compression threshold, and gate threshold, the 166XL 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 166XL 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® 166XL 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


# 266XL

**COMPRESSOR/GATE**

The 266XL 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 266XL'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 266XL 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 266XL can provide reliable gating for any circumstance.

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

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

- 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 PROFESSIONAL PRODUCTS

FULL LINE

# 223/234 Crossovers

Crossovers may do nothing more than direct frequencies, but the thought that went into the 223 and 234 is what really elevates the dbx® crossovers above the rest. The 223 and 234 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 223 and 234's controls are located on their rear panels. On the 223, the first of these selects between stereo two-way or mono three-way operation, while on the 234 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 223 and 234 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.

### 223XL and 234XL XLR versions

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

## 223/223 XL QUAD COMPRESSOR/LIMITER


- TRS differentially balanced ins and outs
- 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

## 234/234 XL QUAD COMPRESSOR/LIMITER


- TRS differentially balanced ins and outs
- 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

FULL LINE

dbx® PROFESSIONAL PRODUCTS


From now on the only feedback you'll be getting is positive.

# 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 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 PROFESSIONAL PRODUCTS

FULL LINE


# 286A

## MIC PREAMP PROCESSOR

The 286A is a complete "channel strip" mic preamp/processor featuring OverEasy® compression, de-essing, enhancing, expanding, and gating all in an incredibly pure signal path. In addition, the 286A boasts a wide-ranging input gain control (+10 to +60dB), switchable +48V phantom power, and an 80Hz high-pass filter. Not to mention that its preamp and five processors can be used independently or in any combination. Its floating, balanced XLR mic input accepts balanced or unbalanced inputs, a ¼" TRS phone jack accepts both balanced and unbalanced line signals.

- dbx® standard internal power supply
- Expanded meter to show heavy De-Essing
- +48VDC Phantom Power
- Frequency control for De-Esser
- Above/Below threshold indicator for gate
- Precision detented controls


# PB-48

## PATCH BAY

The PB-48 patchbay features 48 front panel and 48 rear panel patch points, with 24 user-adjusable 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.


FULL LINE

dbx PROFESSIONAL PRODUCTS

# IEM™

**IN-EAR MONITOR/PROCESSOR**

The IEM™ In-Ear Monitor Processor is the ideal tool for fine-tuning mix monitoring for in-ear monitoring devices. Not only does the IEM provide the legendary dbx effects in the digital domain, such as 4-band stereo compression, PeakStop™ limiting and 5-band parametric EQ, but the IEM also includes stereo adjust, dbx-patented Type IV™ conversion system, and for good measure, we have even raised the playing field by including custom reverb algorithms using industry-standard Lexicon® reverb technology. The IEM was designed with the simple purpose and vision of enhancing the sonic quality of all in-ear monitor applications, while providing the necessary audio level protection that artists and engineers require. The design team at dbx has achieved this vision by building a unit that offers effects including: 4-band stereo compressor with gating and limiting, 5-Band Parametric EQ, PeakStop™ limiting, and Stereo adjust. Additionally, the IEM has been methodically designed with an intuitive user front panel which provides instant access to all of the effects within the unit at the push of a button. The IEM also provides the user with a large custom display which clearly shows all operational information of the unit in a logical manner. The IEM is a unit that is certain to take In-Ear Monitor processing to the next level.

- Industry-Standard Lexicon® Reverb Algorithms
- 48-bit internal signal path for increased head room and low level resolution
- Patented Type IV™ A/D Conversion system with TSE
- 4-band stereo compressor and limiter with classic dbx® compression
- 5-band EQ – Hi and Lo shelves, 3-band fully parametric
- PeakStop™ limiting
- Stereo adjust – to control your stereo image
- 4-band crossover with variable slopes

# 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 products, the DriveRack 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

dbx PROFESSIONAL PRODUCTS

FULL LINE

# DriveRack®, SC, ZonePRO™

| PA | 260 | 442 | 4800/4820 | 481 | 482 | 220i | SC 64 | SC 32 | 640 641 | 1260 1261 | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | | | | | | | | | **INPUTS** |
| 2 (1) | 2 (1) | 4(2) | 4(2) | 4(2) | 4(2) | 2 | 64 | 32 | 6 (4) | 12 | Number of Inputs (RTA Mic Input) |
| • | • | • | • | | • | • | | | | | Connectors: Female XLR |
| | | | | • | | • | • | • | • | • | Connectors, Euroblock |
| | | | | | | | | | | 8 | Connectors, RCA |
| • | • | • | • | • | • | • | • | • | • | | Type: Electronically bal/RF filtered |
| • | • | • | • | • | • | • | | | | | Impedance, >40K |
| | | | | | | | 3.5k | 3.5k | >50kΩ | >50kΩ | Impedance, balanced, Euroblock |
| | | | | | | | | | >75kΩ | >25kΩ | 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 | Mic Pre gain |
| | | | | | | | • | • | • | • | Mic EIN: <118dB, 22Hz-22kHz, 150kΩ |
| | | | • | | • | | | | | | Input Gain Range RTA: 10dB to 70dB w/60dB typical |
| 15V DC | 15V DC | | 48V DC | | 48V DC | | 48V | 48V | 15V | 15V | RTA Mic Phantom Voltage: |
| | | | | | | | | | | | **OUTPUTS** |
| 6 | 6 | 4 | 8 | 8 | 8 | 2 | 64 | 32 | 4 | 6 | Number of Outputs |
| • | • | • | • | | • | • | | | | | Connectors: XLR |
| | | | | • | | • | • | • | • | • | Connectors: Euroblock |
| • | • | • | • | • | • | • | • | • | • | • | Type: Electronically balanced, RF filtered |
| 120Ω | 120Ω | 120Ω | 120Ω | 120Ω | 120Ω | 120Ω | 44Ω | 44Ω | 120/60 | 120/60 | Impedance |
| | | • | • | • | • | | | | | | Maximum Output Level: +25.5 dBu into 1kΩ, +22 dBu into 600Ω |
| • | | | | | | | • | • | • | • | Maximum Output Level: +20dBu |
| | • | | | | | • | | | | | Maximum Output Level: +22dBu |
| | | | | | | | | | | | **A/D PERFORMANCE** |
| • | • | • | • | • | • | • | | | • | • | Type: dbx Type IV™ Conversion System |
| 110 | 114 | 115 | 115 | 115 | 115 | 114 | 113 | 113 | 113 | 113 | Dynamic Range: (dB) A-weighted |
| 107 | 112 | 112 | 112 | 112 | 112 | 112 | 110 | 110 | 110 | 110 | Dynamic Range: (dB) Unweighted |
| | | | | | | | | | 1 | 1 | Type IV dynamic Range: >119 dB, A-weighted, 22kHz, BW >117 dB, unweighted, 22kHz BW |
| 48kHz | 48kHz | 48kHz | 48kHz | 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 | 115 | 115 | 115 | 115 | 112 | 113 | 113 | 112 | 112 | Dynamic Range: (dB) A-weighted |
| 110 | 110 | 112 | 112 | 112 | 112 | 110 | 110 | 110 | 109 | 109 | Dynamic Range: (dB) unweighted |
| 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | 48kHz | Sample Rate |
| 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | | | A/D Wordlength: (bit) |
| | | | | | | | | | | | **SYSTEM PERFORMANCE** |
| | | 48 bits | 48 bits | 48 bits | 48 bits | | 32 bits | 32 bits | | | Internal Wordlength |
| | | | | | | | | | • | | Dynamic Range: >109 dB A-weighted, >106dB unweighted |
| | | | | | | | • | • | | | Dynamic Range: >110 dB A-weighted, >107dB unweighted |
| 0.002 | 0.002 | 0.003 | 0.003 | 0.003 | 0.003 | 0.002 | 0.004 | 0.004 | 0.003 | 0.003 | THD + Noise: % typical at +4dBu, 1kHz, 0dB input gain |
| • | • | • | • | • | • | • | • | • | • | • | Frequency Response: 20Hz - 20kHz, +/-0.5dB |
| | | | | | | | • | • | • | • | Interchannel Crosstalk: >80dB typical |
| | | | | | | | • | • | • | • | Crossalk input to output: >80dB typical |
| | | | | | | | | | 0.6 msec | 0.6 msec | Propagation Delay |
| | | | | | | | | | | | **PRE EQ – (Input)** |
| 28-Band | 28-Band | 31-Band | 31-Band | 31-Band | 31-Band | 28-Band | 9-Band | 9-Band | | | Type: Graphic EQ per input channel, or 9 band PEQ per input channel (5-Band PA,Studio, 260) |
| • | • | • | • | • | • | | | | | | Range: +/-12dB range |
| | | | | | | | | | | | **NOTCH FILTERS** |
| | | | • | • | • | | | | | | Number: 1-5 per input channel not to exceed 10 for all input channels |
| | | • | | | | | | | | | Number: 4 fixed per channel |
| | | | | | | | • | • | | | Number: 6 per input channel |
| | | | | | | | • | • | | | Number: 4 per output channel |
| | | | | | | | | | | | **PRE DELAY – (Input)** |
| N/A | configurable | N/A | 680 | 680 | 680 | configurable | 5200 | 5200 | | | Length: ms/channel |
| | | | | | | | | | | | **POST DELAY (DRIVER ALIGNMENT) – (Output)** |
| 10 | configurable | 340 | 170 | 170 | 170 | configurable | 5200 | 5200 | | | Length: ms/channel |
| | 2.7sec | | | | | 2.7sec | | | | | **TOTAL DELAY TIME** |
| | | | | | | | | | | | **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 - offers no bessel |
| • | • | • | • | • | • | | | | | | Slope: 6, 12, 18 or 24 dB/octave for Butterworth or Bessel filters<br>12, 24, 36 or 48 dB/octave for Linkwitz-Riley filters Note: PA - offers only 12 and 24 LR |
| | | | | | | | • | • | | | Type: 1x1, 1x2, 1x3, 1x4, 2x2, 2x4, 2x6 and 2x8 - Bessel 6, 12, 18 and 24 dB/Octave<br>Butterworth 6, 12, 18 and 24 dB/Octave - Linkwitz-Riley 12 and 24 dB/Octave |
| | | | | | | | | | | | **POST EQ - (Output)** |
| 4 | 3(2) | 4 | 4 | 4 | 4 | 2 | 6 | 6 | | | Number: EQ bands per output channel |
| | | | • | • | • | | • | • | | | Range: +/-12dB range |
| | | | | | | | | | | | **DYNAMICS** |
| | • | • | • | • | • | • | | | | | Type: Compressor/Limiter with PeakStopPlus® |
| • | | | | | | | • | • | | | Type: PeakStopPlus® |
| | | | | | | | | | | | **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 |
| | | • | • | • | • | | | | | | Network: Proprietary RS-485 Backbone |
| | • | • | • | • | • | • | | | | | GUI: RS-232 for computer display and configuration |
| • | • | • | • | • | • | | | | | | RTA Microphone: Optional |
| | • | • | • | • | • | • | • | • | | | ROM Upgrade: Flash upgradable through RS-232 |
| 1.75"x 19"x 5.75" | 1.75"x 19"x 7.7" | 3.5"x 19"x 12.25" | 3.5"x 19"x 12.25" | 1.75"x 19"x 12.15" | 3.5"x 19"x 12.15" | 1.75"x 19"x 5.75" | 3.5"x 19"x 15" | 1.75"x 19"x 15" | 1.75"x 19"x 5.75" | 1.75"x 19"x 5.75" | **Dimensions: H x W x D** |

FULL LINE

dbx® PROFESSIONAL PRODUCTS

# Graphic EQs

| 131 | 215 | 231 | 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 40kΩ, unbalanced 20kΩ |
| • | • | • | • | • | • | • | • | | | Maximum Input Level: >+21dBu balanced or unbalanced |
| • | • | • | • | • | • | • | • | • | • | CMRR: >40dB, typically >55dB at 1kHz |
| | | | • | • | • | • | • | | | **Output** Impedance: Electronically balanced 200Ω, unbalanced 100Ω |
| | | | | | | | | • | • | **Output** Impedance: Electronically balanced 120Ω, unbalanced 60Ω |
| • | • | • | | | | | | | | **Output** Impedance: balanced 100Ω, unbalanced 50Ω |
| +21dBu | >+21dBu | >+21dBu | >+21dBu | >+21dBu | >+21dBu | >+21dBu | >+21dBu | >+20dBu | >+20dBu | Maximum Output Level |
| | | | | | | | | | | **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 |
| 12 w | 12 w | 15 w | 24 w | 24 w | 12 w | 24 w | 24 w | 17 w | 17 w | Power Consumption: (watts) |
| • | • | • | • | • | • | • | • | • | • | Mains Connection: IEC receptacle |
| 1.75"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" | 1.75"x 19"x6" | 1.75"x 19"x6" | **DIMENSIONS: H x W** |


dbx PROFESSIONAL PRODUCTS

FULL LINE

# Compressors/Limiters/Gates

| 266XL | 166XL | 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 | | **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 |
| | | • | • | • | • | | â | Output Transformer: Jensen® JT-123-dbx or JT-11-dbx, BCI™ RE-123-dbx or RE-11-dbx |
| | | | | | | | | **DIMENSIONS: H x W** |

# Crossovers

| 223 | 223XL | 234 | 234XL | |
|---|---|---|---|---|
| | | | | **INPUTS** |
| ¼" TRS | XLR | ¼" TRS | XLR | Connectors |
| • | • | • | • | Type: Electronically balanced/unbalanced, RF filtered |
| • | • | • | • | Impedance: Balanced > 50 kΩ, unbalanced > 25 kΩ |
| • | • | • | • | 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 |
| | • | | • | Electronically balanced/unbalanced, RF filtered |
| • | • | • | • | Max Output Level: > +21 dBu balanced/unbalanced into 2 kΩ 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)<br>Mono Mode: Low/Mid: 45 to 960 Hz or 450 Hz to 9.6 kHz (x10 setting)<br>Mid/High: 45 to 960 Hz or 450 Hz to 9.6 kHz (x10 setting)<br>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** |

FULL LINE

dbx® PROFESSIONAL PRODUCTS

# Digital Signal Processors

| IEM | QUANTUM II | AFS224 | |
|---|---|---|---|
| | | | **INPUTS** |
| X,T | X,T | X,T | Connectors: X=XLR, T=TRS ¼" |
| • | • | • | Type: Electronically balanced/unbalanced, RF filtered |
| >18k/>9k | >18k/>9k | 50k/25k | Impedance: Balanced/Unbalanced (ohms) |
| +24dBu | +24dBu | +20dBu | Max Input Level: balanced or unbalanced |
| • | • | • | CMRR: >40dB at 1kHz, typically >55dB @1kHz |
| • | • | | Input Gain Range: -∞ to +16dB |
| • | • | N/A | MIDI: 5 Pin DIN MIDI Input Jack |
| | | | **OUTPUTS** |
| X,T | X,T | X,T | Connectors: X=XLR, T=TRS ¼" |
| • | • | • | Type: Electronically balanced/unbalanced, RF filtered |
| • | • | • | Balanced: 120Ω/Unbalanced: 60Ω |
| | | • | Max Output Level: +20dBu |
| • | • | | Max Output Level: +21dBu,>+20 dBm into 600Ω, balanced or unbalanced |
| • | • | | Output Gain Range: ∞ to +16 dB |
| • | • | N/A | MIDI: 5 Pin DIN MIDI Out/thru Jack |
| • | • | N/A | PC COMM: RS232 |
| | | | **COMPRESSOR** |
| Multi-band | Multi-band | N/A | Type |
| | | | **LIMITER** |
| Multi-band | Multi-band | N/A | Type: Peakstop™, PeakstopPlus® |
| | | | **EXPANDER/GATE** |
| Multi-band | Multi-band | N/A | Type |
| | | | **A/D SYSTEM PERFORMANCE** |
| • | • | • | A-D Conversion: 24-Bit dbx Type IV™ Conversion System |
| • | • | | Converter Dynamic Range: >114dB typical, A-weighted, >112dB typical, unweighted, 22kHz bandwidth |
| | | • | Converter Dynamic Range: >113dB A-weighted, >110dB unweighted, 22kHz bandwidth |
| | • | • | Type IV™ Dynamic Range: Up to 127dB with transient material, A-weighted, 22kHz bandwidth<br>Up to 125dB with transient material, unweighted, 22kHz bandwidth<br>Typically 119dB with program material, A-weighted, 22kHz bandwidth<br>Typically 117 dB with program material, unweighted, 22kHz bandwidth |
| | | • | Type IV™ Dynamic Range: >119 A-weighted, >117dB unweighted, 22kHz bandwidth |
| • | • | • | Frequency Response: 20Hz to 20kHz, +0/-0.5dB |
| • | | | Interchannel Crosstalk: <-85dB at 1kHz, input gain at 0dB |
| | | • | Interchannel Crosstalk: <-80dB at 1kHz, input gain at 0dB |
| | | | **D/A SYSTEM PERFORMANCE** |
| • | • | • | D-A Conversion: 24-Bit |
| • | • | | Dynamic Range: 115dB typical, A-weighted, 22kHz bandwidth |
| | | | 112dB typical, unweighted, 22kHz bandwidth |
| | | • | Dynamic Range: 112dB typical, A-weighted, 22kHz bandwidth |
| | | | 109dB typical, unweighted, 22kHz bandwidth |
| • | • | | THD+ Noise: 0.002% typical at +4 dBu, 1 kHz, input gain at 0dB |
| | • | • | THD+ Noise: 0.003% typical at +4 dBu, 1 kHz, input gain at 0dB |
| • | • | • | Frequency Response: 20Hz to 20kHz, +0/-0.5dB |
| • | • | | Interchannel Crosstalk: <-85dB at 1kHz, input gain at 0dB |
| | | • | Interchannel Crosstalk: <-80dB at 1kHz, input gain at 0dB |
| | | | **DIGITAL I/O** |
| • | • | N/A | Word Clock: 96kHz, 88.1 kHz, 48 kHz and 44.1 kHz - (internal) INT96, INT88.2, INT48, INT44.1, (SuperClock) SC48, SC44.1, Word, AES/EBU, and S/PDIF. The SuperClock frequencies are 256 times the sample frequency |
| • | • | | SRC (sample rate conversion): INT44.1 and INT48, Word, SC48, SC44.1 |
| 1.75"x 19"x 10" | 1.75"x 19"x 10" | 1.75"x 19"x 5.75" | **DIMENSIONS: H x W** |

# 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 |
| | | | Type: Transformer Balanced |
| | | • | 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 150Ω source load "A-weighted" |
| | | | **LINE INPUT** |
| • | • | • | Connector: TRS ¼" Jack |
| • | • | | Type: Electronically Balanced/unbalanced |
| 20k-40kΩ | 20k-40kΩ | 100kΩ | 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 kΩ |
| +21kΩ | +18kΩ | | 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** |
| • | RCA | | Connectors: XLR for AES/EBU, RCA for S/PDIF 1 = both connector types |
| | | | **INSERT** |
| • | | • | Connector: TRS ¼" |
| • | | • | Ring Impedance: >5kΩ |
| • | | • | Maximum Level: >+21dBu |
| | | | **Word Sync Input/Output** |
| • | | | Connectors: BNC |
| • | | | Input Impedance: 75Ω 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** |


FULL LINE

dbx PROFESSIONAL PRODUCTS

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