

223s/234s Crossovers

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.

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.

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
- 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



FULL LINE

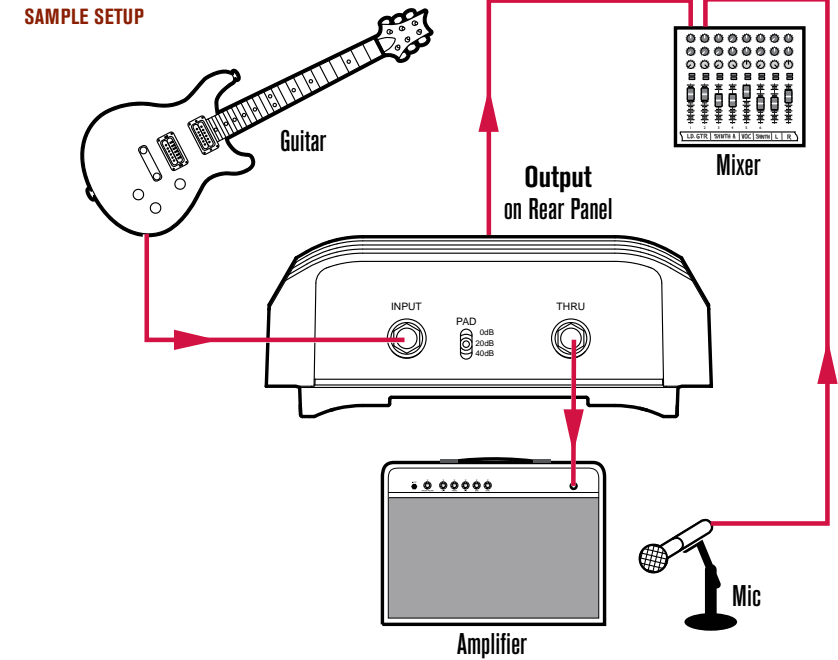
dB10 Passive | dB12 Active

DIRECT BOXES



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.



- 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



FULL LINE



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.



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



FULL LINE



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.

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



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.



FULL LINE

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

- Seth Zirin

-Via Facebook

266SL	166SL	160A	107A	1046	1066	160SL	162SL	Compressors/Limiters/Gates
X,T	X,T	X,T	X	X,T	X,T	X,T	X,T	INPUTS
•	•	•	•	•	•	•	•	Connectors: X=XLR, T=TRS ¼"
								Type: Electronically balanced/unbalanced, RF filtered
								Impedance: Balanced/Unbalanced (ohms)
								Max Input Level: Balanced or Unbalanced
								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"
X,T	X,T	X,T	X,T	X	X,T	X	X,T	OUTPUTS
•	•	•	•	•	•	•	•	Connectors: X=XLR, T=TRS ¼"
								Type: Electronically balanced/unbalanced, RF filtered (*266XL is impedance balanced)
								Type: Transformer balanced/unbalanced, RF filtered
								Impedance: Balanced/Unbalanced (ohms)
								Max Output Level: (dBu)
								SYSTEM PERFORMANCE
								Bandwidth: 20 Hz to 20 kHz, +0/-0.5 dB (162SL=+0/-0. dB)
								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
								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
								DIMENSIONS: H x W x D
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"	

223S	223SL	234S	234SL	Crossovers
¼" TRS	XLR	¼" TRS	XLR	INPUTS
•	•	•	•	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)
				DIMENSIONS H x Wx D
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"	

AFS224	Digital Signal Processors
X,T	INPUTS
•	Connectors: X=XLR, T=TRS ¼"
	Type: Electronically balanced/unbalanced, RF filtered
	Impedance: Balanced/Unbalanced (ohms)
	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

db10	db12	Direct Boxes
P	A	Circuit Type: A=Active, P=Passive
		INPUTS
1	1	Number of Connectors: Instrument/line/speaker level
•	•	1/4" 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: 1/4" 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 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



386	376	286A	Mic Preamps & Channel Strips
			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 I = both connector types
			INSERT
			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
			H x W x D
1.75"x	1.75"x	1.75"x	
19"x	19"x	19"x	
7.75"	7.75"	5.75"	

