

# 160SL

## STEREO COMPRESSOR / LIMITER WITH AUTO VELOCITY™

**dbx**<sup>®</sup>  
PROFESSIONAL PRODUCTS



### AutoVelocity™

Since its inception the 160SL has become the mark for which other compressors reach. As the leader in VCA and compressor design and engineering, we at dbx are always seeking to improve our products and give you the best possible compression solutions. With the newly improved 160SL, we introduce the patent-pending AutoVelocity™ technology. With AutoVelocity™ it is now easier than ever to dial up the exact attack and release effect you are looking for, via the program-dependent, or non program dependent manual mode. 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, depending on your program material.

### VISIONARY DESIGN

The same striking blue front panel machined from 1/4" aircraft aluminum, handcrafted solid aluminum knobs, LEDs mounted individually in machined stainless steel housings, custom VU meters with peak indicators, and heavy gauge chassis still mark the 160SL as the leader for decades to come. 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, made standard by the classic dbx 165A. And speaking of the 165A, all of its features, including variable attack and release controls, as well as dbx's latest limiting algorithm PeakStopPlus™, are included in the 160SL.

### REVOLUTIONARY ENGINEERING

The heart of any dynamics processor is its VCA. The dbx 160SL is no different. It 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 in harsh environments. The new 160SL takes full advantage of the most technologically superior components available today. Premium active electronics, precision 0.1% and 1% metal film resistors, great sounding temperature stable polypropylene capacitors, high-reliability board-to-board connectors with gold-palladium-nickel contacts, Jensen® transformers, gold plated Neutrik® XLRs, rare earth magnet relays with gold contacts in a hermetically sealed nitrogen environment, military grade glass epoxy circuit boards, to mention a few, contribute to the most technologically advanced compressor in the world.

### FEATURES

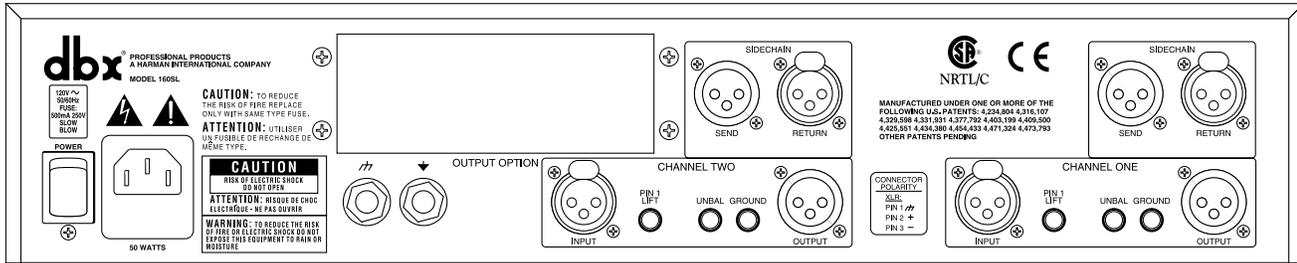
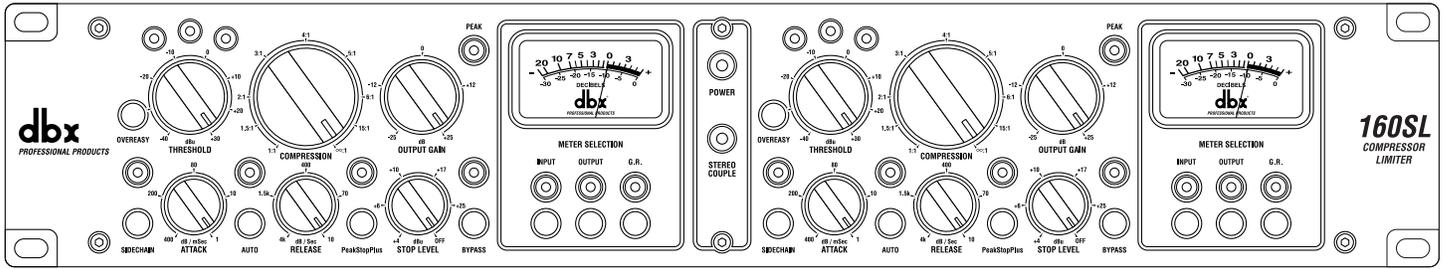
- New patent-pending AutoVelocity™ circuit
- 127dB Dynamic Range
- High-Drive output transformer drives 1000 ft. of Belden at .007% THD
- Hard-knee/OverEasy® switchable
- Program-dependent "Auto", AutoVelocity™ Manual, or fully variable attack and release modes

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# 160SL

## STEREO COMPRESSOR / LIMITER WITH AUTOVELOCITY™



## ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The dbx160SL is a 2U stereo Compressor/Limiter in the tradition of the industry standard dbx160. The signal path consists of a high precision input stage followed by the worlds widest dynamic range voltage controlled amplifier - the dbx V8™ VCA - and then an output stage with phenomenal performance. Each stage is small signal square wave compensated to assure precise phase alignment at all audio frequencies. The unit features hard knee and classic dbx Overeas® compression threshold functions. The dbx160SL also has attack and release controls as well as program dependent time constants selectable with an auto switch.

The dbx160SL has a low distortion, its high CMRR, wide bandwidth and wide input common mode range amplifier configuration for it's input stage.

The dbx V8 VCA is a state-of-the-art implementation of the David Blackmer deci-linear VCA. This VCA topology is used by nearly all dynamics processor manufacturers and has been the dominant VCA topology in the audio industry for 25 years. It has maintained this position for several reasons. It has extremely wide dynamic range, low distortion, low noise, low control voltage feed thru, maintains this performance over time and temperature and most importantly, it inherently sounds (or rather doesn't have a sound) very transparent.

The dbx160SL has a high precision, high drive transformer coupled output stage capable of performing with incredible accuracy and sonic transparency in virtually any audio environment. The custom designed transformer coupled with a discrete distortion canceling driver circuit is capable of driving 1000 feet of Belden 8451 cable terminated with a 150 ohm load at remarkably low distortion levels.

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

## SPECIFICATIONS

<b>The dbx160SL</b>		THD + Noise:	< 0.008% at +4 dBu, 1 kHz, unity gain
<b>Inputs</b>		Frequency Response:	+0/-3 dB 2 Hz - 200 kHz +0/-0.1 dB 20 Hz - 20 kHz
Type:	Electronically balanced/unbalanced, RF filtered	Deviation from Linear Phase:	< 1° 20 Hz - 20 kHz
Input CMRR:	> 100 dB at 60 Hz	Power Supply Rails:	+/- 24 Volts low noise regulated supply
Max Input Level:	30 dBu balanced	Power Transformer:	60 VA toroidal in > 20 dB mu-metal enclosure
Bandwidth:	>200 kHz		
<b>V8 VCA</b>		<b>Compressor</b>	
Dynamic Range:	> 127 dB	Threshold Range:	-40 to +30 dBu
THD + Noise:	< 0.007%	Ratio:	1:1 to ∞:1
Bandwidth:	>200 kHz	Threshold Characteristic:	Selectable, Overeas™ or hard knee
<b>Outputs</b>		Attack/Release:	Selectable manual or auto
Type:	Transformer balanced /unbalanced, RF filtered		
Output Drive Capability:	> 30 dBm	<b>Limiter</b>	
Output Stage THD:	Unmeasurable	Threshold range:	+4 to +30 dBu (off)
Earth Potential Isolation:	> 200 VoltsDC	Ratio:	∞:1
Output CMRR:	> 110 dB	Limiter type:	PeakStopPlus® 2 stage limiter
Bandwidth:	> 200 kHz		
<b>Overall Unit Specifications</b>		<b>Options</b>	
Dynamic Range:	>122 dB	Type IV™ digital output module	
Head Room:	26 dB reference = +4 dBu	Analog output module	
Signal to Noise:	96 dB, reference = +4 dBu		

### FOR MORE INFORMATION CONTACT:

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