

# 286s Mic Preamp

Channel Strip Processor

**dbx**<sup>®</sup>  
by HARMAN



## All the mic processing you need.

The dbx<sup>®</sup> 286s is a full featured Channel Strip Processor that delivers a studio quality microphone/instrument preamplifier and four processors that can be used independently or in any combination. Why mic up vocals and instruments through a noisy, blurry mixer? The sonically pristine dbx 286s Mic Preamp has all the features you need, including wide-ranging input gain control, switchable +48V phantom power, and an 80Hz high-pass filter to remove low frequency hum, rumble or wind. Use the patented dbx OverEasy<sup>®</sup> compressor to transparently smooth out uneven acoustic tracks or deliver that classic “in your face” vocal performance that only a dbx compressor can. Eliminate vocal sibilance and high frequency distortion from instruments such as cymbals with the frequency tunable De-Esser. Fine-tune the Enhancer HF Detail control to add sparkle and crispness to your tracks and make adjustments to the LF Detail control to add fullness and depth to vocals and bass instruments while cleaning up the muddy low midrange frequencies. And, the separate threshold and ratio controls on the Expander/Gate allow you to subtly reduce headphone leakage or radically gate noisy guitar amps.

The dbx 286s offers a full compliment of metering and status LEDs to visually guide you to achieving the right sound. The floating balanced XLR Mic Input accepts balanced or unbalanced inputs to easily connect to professional and home studio microphones. The additional 1/4" TRS Line Input can accept balanced/unbalanced signals to process live electronic instruments or pre-recorded tracks at mixdown. Use the Insert jack to interface between the Mic Preamp and the signal processing sections to “loop out” to external processors (such as EQ or delay unit) or to mix the Mic Preamp’s signal out to an external destination.

## Features

- ▶ Studio quality Mic Preamp/Channel Strip Processor
- ▶ Classic dbx Compression puts great sound within easy reach
- ▶ Program adaptive Expander/Gate
- ▶ Frequency tunable De-Esser reduces sibilance and high frequency distortion
- ▶ Enhancer increases the detail and definition of the high and low frequencies
- ▶ Full compliment of meters and status LEDs
- ▶ Insert jack allows you to add an external processor
- ▶ +48V Phantom Power
- ▶ Precision detented controls

Who uses this product:



BROADCAST



LIVE SOUND



STUDIO

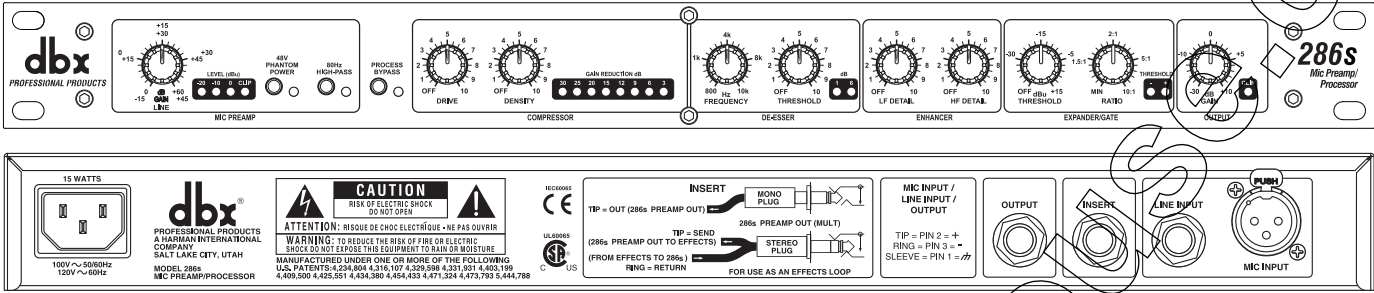
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## Specifications

**MIC INPUT:** Floating balanced, Pin 2 Hot  
 Impedance ~ 4.2kΩ Balanced  
 Maximum Level 0.25Vrms, Gain = 30dB  
 Gain Adjustment Range +0dB to 60dB  
 Phantom Power +48VDC, applied to XLR pins 2 and 3 through 6.81kΩ resistors  
 CMRR >40dB, typically 55dB  
 EIN -125dBu, 22Hz-22kHz, 150Ω source impedance

**LINE INPUT:** Floating balanced, TIP Hot  
 Impedance 10kΩ unbalanced, 20kΩ balanced  
 Maximum Level >+21dBu, balanced or unbalanced  
 Gain Adjustment Range -15dB to +45dB  
 CMRR >40dB, typically 55dB

**INSERT (1/4" TRS):** Normalled: tip is Send, ring is Return  
 Ring: Impedance >5kΩ  
 Maximum Level >+21dBu  
 Tip: Impedance 100Ω  
 Maximum Level >+21dBu, >+20dBm (600Ω load)  
 Noise <-89dBu, unweighted (20Hz-20kHz)  
 Distortion <0.01% THD, 20Hz-20kHz, +10dBu  
 LINE GAIN Control set to 0dB

**LINE OUTPUT (1/4" TRS):** Balanced/Unbalanced  
 Impedance 100Ω unbalanced, 200Ω balanced  
 Maximum Level >+21dBu, >+20dBm (600Ω load)  
 Gain Adjustment Range -30dB to +10dB  
 Noise <-85dBu unweighted (20Hz-20kHz); Both Gain Controls set for 0dB, all processing controls OFF  
 Frequency Response 20Hz < 20kHz, +0.5/-0.5dB  
 Distortion <0.08% THD, 20Hz-20kHz, +10dBu, all Processing Controls OFF

**COMPRESSOR:**  
 Threshold Range -40dBu to +20dBu  
 Threshold Characteristics OverEasy®  
 Compression Ratio >4:1 For input levels beyond 20dB above threshold  
 Maximum Compression 30dB

Attack Time Program-Dependent; >1s for small level increases, down to 10ms for large increases  
 Release Time Program-Dependent; adjustable between approximately 1dB/Sec and 75dB/Sec  
 Distortion Typically <0.05%THD, 20Hz-20kHz, 15dB G/R, +10dBu Output, DENSITY @ 0  
 SMPTE Intermodulation Distortion <0.05%; 60Hz/7kHz 4:1, 15dB G/R, +10dBu Output Level, DENSITY @ 0

**DE-ESSER:**  
 Characteristic Wideband Gain Reduction  
 Frequency Range 800Hz to 10kHz High Pass, 12dB/octave  
 Release Time Program-Dependent approximately 1ms/dB

**ENHANCER:**  
 HF Detail Characteristic Program-controlled shelving equalizer, approximately 15dB maximum HF boost  
 LF detail Characteristic Bell-shaped boost @ 80Hz, bell-shaped cut @ 250Hz, ratio is approximately 2:1

**EXPANDER/GATE:**  
 Threshold Range OFF to +15dBu  
 Expansion Ratio Adjustable 1.5:1 to 10:1  
 Maximum Depth >50dB  
 Attack Time Program-Dependent, approximately 2ms (at maximum attenuation)  
 Release Time Program-Dependent, approximately 10ms/dB

**DYNAMIC RANGE:** Typically 105dB

**POWER SUPPLY:**  
 Power Requirements 15 Watts  
 Operating Voltage USA: 120VAC 60Hz, 100VAC 50/60Hz; EU: 230VAC 50/60Hz  
 Operating Temperature 0°C to 45°C (32°F to 113°F)

**PHYSICAL:**  
 Dimensions 1.75" x 5.75" x 19" (4.5cm x 14.6cm x 48.5cm)  
 Weight Net Weight: 4.5 lbs/2.04 Kg  
 Shipping Weight: 6.54 lbs/2.97 Kg

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