

286s Mic Preamp

Channel Strip Processor

dbx
by HARMAN



All the mic processing you need.

The dbx® 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® 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

dbx Professional
Products

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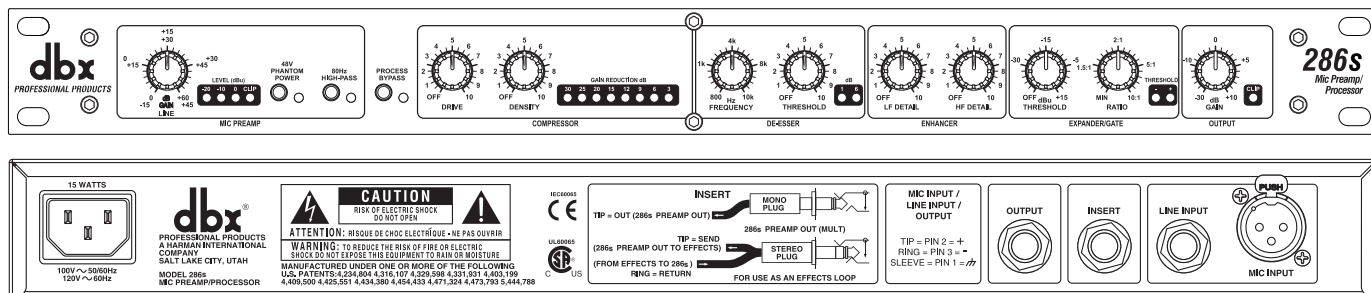
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Specifications

MIC INPUT:

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

LINE INPUT:

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

INSERT (1/4" TRS):

Ring: Impedance	Normalised: tip is Send, ring is Return >5k Ω
Maximum Level	>+21dBu
Tip: Impedance	100 Ω
Maximum Level	>+21dBu, >+20dBm (600 Ω load)
Noise	<-89dBu, unweighted (20Hz-20kHz); LINE GAIN Control set to 0dB
Distortion	<0.01% THD, 20Hz-20kHz, +10dBu

LINE OUTPUT (1/4" TRS):

Impedance	Balanced/Unbalanced 100 Ω unbalanced, 200 Ω balanced
Maximum Level	>+21dBu, >+20dBm (600 Ω 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

Release Time

Distortion

SMPT E Intermodulation Distortion

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

DE-SSER:

Characteristic
Frequency Range
Release Time

Wideband Gain Reduction
800Hz to 10kHz High Pass, 12dB/octave
Program-Dependent approximately 1ms/dB

ENHANCER:

HF Detail Characteristic
LF detail Characteristic

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

EXPANDER/GATE:

Threshold Range
Expansion Ratio
Maximum Depth
Attack Time

Release Time

OFF to +15dBu
Adjustable 1.5:1 to 10:1
>50dB
Program-Dependent, approximately 2ms (at maximum
attenuation)
Program-Dependent, approximately 10ms/dB

DYNAMIC RANGE:

Typically 105dB

POWER SUPPLY:

Power Requirements
Operating Voltage
Operating Temperature

15 Watts
USA: 120VAC 60Hz, 100VAC 50/60Hz;
EU: 230VAC 50/60Hz
0°C to 45°C (32°F to 113°F)

PHYSICAL:

Dimensions
Weight
Shipping Weight:

1.75" x 5.75" x 19" (4.5cm x 14.6cm x 48.5cm)
Net Weight: 4.5 lbs/2.04 Kg
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.

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