

242 PARAMETRIC EQUALIZER

dbx
Project 1



The **dbx 242** is the first equalizer to deliver absolute contouring control, digital-ready sound, and the power of a parametric — for less than you'd pay for many graphics.

THE PARAMETRIC ADVANTAGE

Unlike graphic equalizers, parametrics allow you to zero in on the exact frequency you want to boost or cut. An additional bandwidth control also allows you to minutely tailor how neighboring frequencies will be shaped. Even the EQ on most mid-range mixers lack this essential bandwidth control. The **dbx 242** provides three fully parametric bands each with separate wide-ranging controls for frequency, bandwidth and boost/cut. To sculpt high and low end you'll also find two extremely flexible shelving bands.

ADD OR DETRACT TO PERFECTION

The **dbx 242** gives you the detailed control you need in any stage or studio situation. Smooth out bass guitar boom. Eliminate ringing in snares and toms. Add punch to the kick drum and sparkle to cymbals. Take the whistle out of sibilant vocals. Improve clarity and definition in acoustic guitars.

If noise is a nuisance, the **dbx 242's** notch filtering circuitry lets you pinpoint and remove it in seconds. Hum from ground loops. Ear-splitting feedback. Buzzes from fluorescent lights. And with the 242's low and high pass filters you can silence traffic rumble and tape hiss forever.

NO OTHER EQUALIZER GIVES YOU SO MUCH

It's all here, in one feature-packed package. Overlapping bands of EQ. Flexible bandwidth control ranging from 2 octaves for tone shaping up to .05 octave for notch filtering. There's up to 16dB of boost and over 40dB of cut at any bandwidth. Plus high and low frequency shelving EQ with switchable 6 and 12dB per octave slopes. And **dbx's** patented Variable Mode Slope Selection™ (VMSS) filters progressively "morph" the shelving bands into high and low pass filters. Best of all, you can count on the same easy operation, musical performance and superior specs you get from every **dbx** product.

Shape your sound to perfection.

dbx PROFESSIONAL PRODUCTS

8760 South Sandy Pkwy.
Sandy, Utah 84070
Phone (801) 568-7660
Fax (801) 568-7662
Int'l Phone (219) 462-0938
Int'l Fax (219) 462-4596
E-Mail: customer@dbxpro.com
Home Page: <http://www.dbxpro.com>

H A Harman International Company

242 PARAMETRIC EQUALIZER



FEATURES

- Three fully parametric reciprocal filter bands offer variable cut/boost, variable frequency, variable bandwidth (Q).
- Each can be set to produce a very narrow, very deep (40dB) notch to eliminate unwanted whistles or noises without affecting the music.
- Clip indicator to warn of potential overload.
- Balanced input.
- More precise control than a graphic.
- Two shelving bands (high and low) are switchable 6dB or 12dB octave).
- When shelf is set to infinite cut, dbx's patented circuit acts as a high or low pass filter to provide better control at the frequency extremes.

SPECIFICATIONS

INPUT: Balanced 1/4" TRS Phone Jack; Accepts Balanced or Unbalanced Sources
Impedance: 10k Ω
Maximum Level: +27dBu, Balanced or Unbalanced
CMRR: >45dB (58dB Typical)
Input Gain: ∞ to +16dB

OUTPUT: Unbalanced 1/4" TRS Phone Jack; Drives Balanced or Unbalanced Inputs
Impedance: 47 Ω
Maximum Level: +19dBm

PERFORMANCE: (Cut/Boost=0)
Frequency Response: 20 - 20,000Hz, ± 0.5 dB, -3dB 200kHz
Total Harmonic Distortion: 0.005% at +4dBu; 0.03% at Maximum Output Level
SMPTE Intermodulation Distortion: 0.003%
Noise: 20 - 20,000Hz; -94dBu
Clipping Indicator: Monitors All EQ Stages, Lights when 242's Internal Amplifiers are within 1dB of its Clipping Level

FREQUENCY RANGES:
Low: 20 - 680Hz

Low-Mid: 31 - 800Hz
Mid: 0.25 - 6.3kHz
High-Mid: 0.63 - 16kHz
High: 1.25 - 20kHz

Other Band Controls: +16dB Maximum Boost, >40dB Maximum Cut
Low: Shelving Filter: Switchable 6dB or 12dB/Octave Low Slope
Low-Mid, Mid, Mid-High, Peak Dip Filter, +16dB Boost, >40dB Cut at any bandwidth setting.

HIGH: Shelving Filter: Switchable 6dB or 12dB/Octave Slope; +16dB Maximum Boost, >40dB Maximum Cut

POWER CORD: 18VAC, Provided by External Power Supply included with unit. Specify mains voltage when ordering.

Operating Temperature: 0° C to 45° C (32°F to 113°F)
DIMENSIONS: (H x W x D) 1.75" x 19" x 4" (4.5 cm x 48.5 cm x 10.16 cm)
Rack Space: 1 Rack Unit (1U High)
Weight: Net Weight: 5 lbs. (2.3kg) Shipping Weight: 7lb. (3.2 kg.)

Architects' and Engineers' Specifications

The five band parametric equalizer shall have one channel of processing with an audio frequency response of 20Hz to 20kHz, ± 0.5 dB, a balanced input impedance of not less than 10k Ω , with a maximum input level of not less than +27dBu and a 1/4" TRS input connector. The unit shall employ patented technology with reciprocal, symmetrical filters. The output impedance shall be no more than 47 Ω (unbalanced) with a maximum output level of not less than +20dBu, a minimum load impedance of not less than 600 Ω and the connector type shall be 1/4" TRS. Total Harmonic Distortion shall be less than 0.03% at maximum output and Intermodulation Distortion shall be less than 0.003% SMPTE. The unit shall have Residual Noise level at unity gain of less than -94dBu (20Hz to 20kHz bandpass) and a dynamic range of not less than 114dB. Input gain will be adjustable from -Infinity to +16. All five frequency bands shall have a cut/boost control adjustable from -Infinity to +16. The low and high bands shall each have a switchable shelf slope of 6dB or 12dB per octave and a shelf frequency control labeled with ISO frequencies. The mid-low, mid, and mid-high bands shall each have a frequency control labeled with ISO center frequencies, and a bandwidth control labeled from .05 octaves to 2 octaves. The unit's equalization processing can be bypassed via the front panel BYPASS switch. The following LED indicators shall be visible on the control panel: Clip, Bypass, 12dB Shelf Slope (Low), 12dB Shelf Slope (High), Power. The power requirement shall be 18VAC provided by included power supply and dimensions shall be 1.75"x4"x19" (4.45cm x 10.16cm x 48.5cm). The net weight shall be 5 lbs. (2.3kg) and the shipping weight shall be 7 lbs. (3.2kg). The unit shall be a dbx 242 Parametric Equalizer.

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