

3031 SINGLE CHANNEL 31 BAND GRAPHIC EQUALIZER

dbx[®]
PROFESSIONAL PRODUCTS

VISIONARY DESIGN

The dbx 3031 Graphic Equalizer is a high performance multifunctional unit designed to deliver all the flexibility and power that professional users demand. Featuring long-throw precision sliders, switchable high- and low-pass filters, balanced / unbalanced connectors, and ultra low-noise performance, the 3031 is more than equal to any critical audio task requirements. The 3031 offers 31 ISO standard center, 1/3 octave constant Q frequency bands in a single package. Selectable 6 or 12dB of boost/cut gives the user superior signal processing control, while the use of low tolerance components yields accurate frequency centers. Features variable high pass and switchable low pass filters. The unit also includes a passive bypass system that completely removes the equalizer from the audio path when power is off. Also included is an active bypass that allows comparison of the equalized signal with the original.

REVOLUTIONARY ENGINEERING

XLR, barrier strip, and 1/4 inch tip-ring-sleeve connectors make the unit easy to integrate into any type of balanced or unbalanced audio system.

Housed in a rugged 2U EIA standard 19" cold-rolled steel chassis, the 3031 will stand up to years of abuse, making it a valuable asset for permanent installations or touring companies.

Recording studios, broadcast facilities, sound reinforcement engineers, musicians, and sound contractors alike will find that the straightforward design and versatile signal control options make the 3031 a powerful audio tool.

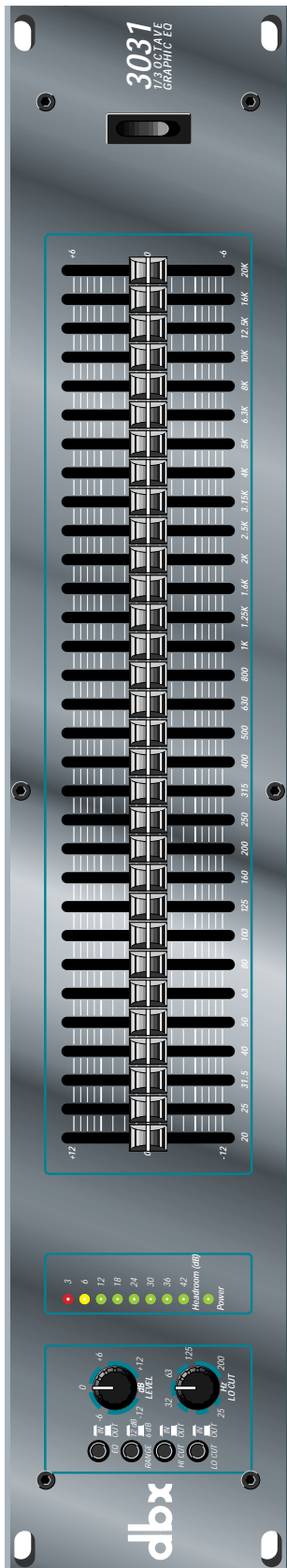
dbx uses only the highest quality, low tolerance components, ensuring excellent reliability and uncompromising sound quality. From permanent installations to sound contracting, critical audio to sound reinforcement, the dbx 3031 delivers total performance.

FEATURES

- 31 ISO standard center 1/3 octave constant Q frequency bands
- Variable high pass and switchable low pass 12dB/octave filters
- Electronically balanced inputs, servo balanced outputs
- XLR, barrier strip, and TRS connectors
- Switchable 6 or 12dB boost/cut
- -12/+15dB of input gain
- Passive bypass removes equalizer from signal path when power is off
- 8 segment LED headroom bar graph
- Chassis ground lift capability
- Toroidal power supply transformer

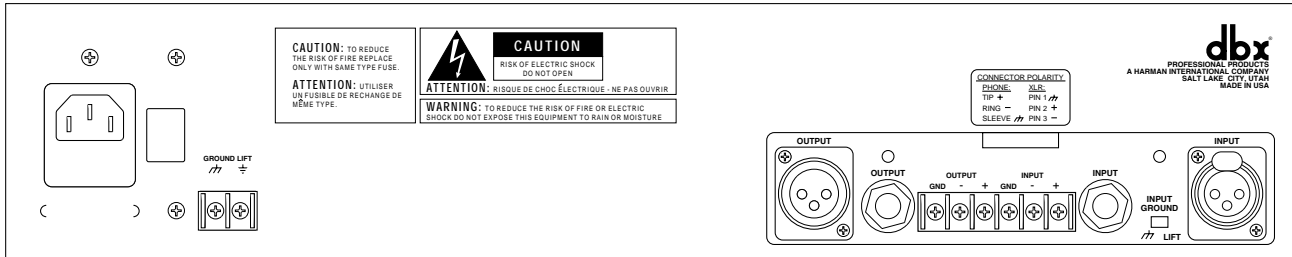
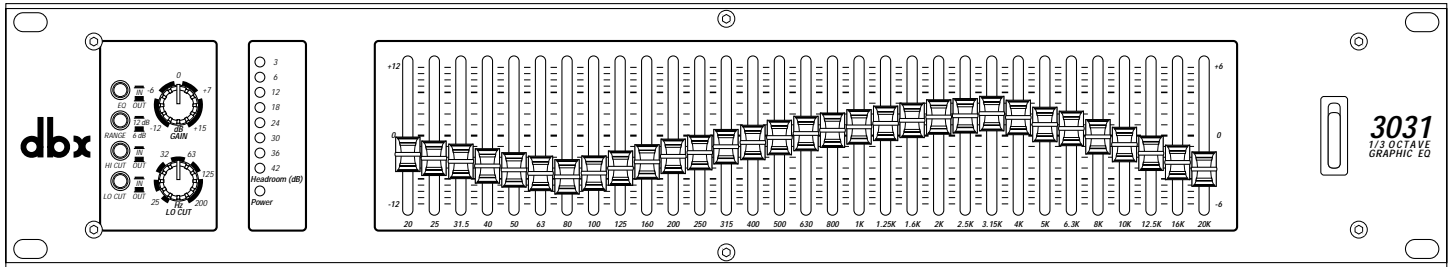
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H A Harman International Company



3031

SINGLE CHANNEL 31 BAND GRAPHIC EQUALIZER



ARCHITECTS' AND ENGINEERS' SPECIFICATIONS

The graphic equalizer shall have one channel, with an audio frequency response of 20Hz to 20kHz, ± 0.1 dB, an unbalanced input impedance of not less than 50k Ω and a balanced input impedance of not less than 75k Ω with a maximum input level of not less than +22dBu. The unit shall have rear panel 1/4" TRS phone jacks, barrier strip and XLR jacks for inputs and outputs, accepting either balanced or unbalanced signals. The output impedance shall be no more than 100 Ω balanced, 50 Ω unbalanced with a maximum output level of not less than +22dBu into an unbalanced or balanced load with a minimum load impedance of not more than 600 Ω . Total Harmonic Distortion plus Noise shall not be more than 0.003% at +4dBu input level and 1kHz, all faders flat. The unit shall have a Noise level of not more than -92dBu at the ± 6 dB boost/cut range setting with all faders flat across a test bandwidth of 22Hz to 22kHz. The unit's operating dynamic range shall be not less than 114dB.

The unit shall have 31 constant Q frequency band filters with center frequencies on 1/3 octave ISO standard centers ranging from 20Hz to 20kHz; a High Pass filter with a 12dB per octave slope and a selectable corner frequency with a range from 25Hz to 200Hz; and a Low Pass filter with a 12dB per octave slope and a corner frequency of 15kHz. Each of the unit's 31 filter bands shall be controlled by front panel, 45mm linear sliders with a maximum boost per frequency band of not less than +12dB and a maximum cut per band of not more than -12dB.

There shall also be a master attenuator for each channel with a range from -12dB to +15dB. The unit shall have a front panel Power switch and the following controls: range selector switch for either ± 6 dB maximum cut and boost or ± 12 dB maximum cut and boost per band; EQ In/Out switch; High Cut Filter In/Out switch; Low Cut filter In/Out switch. The following front panel indicator LEDs shall exist: Power, and Headroom Level (8) at 3, 6, 12, 18, 24, 30, and 36dB. The unit shall have separate chassis and signal ground lift lugs on the rear panel, a relay bypass and be capable of accepting the optional installation of certain specified input and output transformers. The power requirements shall be 100, 120, 230, 240VAC, 50/60Hz, at 30 watts via a detachable IEC type AC cable. The 2U high, full rack width graphic equalizer shall be a dbx 3031.

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

SPECIFICATIONS

Frequency Response: 20 Hz to 20 kHz, ± 0.1 dB (all faders flat)	Input Impedance: 75K ohms balanced, 50K ohms unbalanced
Control Centers: 31 ISO Standard, 1/3 octave bands per channel from 20 Hz to 20 kHz: 20, 25, 31.5, 40, 50, 63, 80, 100, 125, 160, 200, 250, 315, 400, 500, 630, 800, 1k, 1.25k, 1.6k, 2k, 2.5k, 3.15k, 4k, 5k, 6.3k, 8k, 10k, 12.5k, 16k, and 20k.	Maximum Input Level: +22 dBu (ref.:0.775 Vrms)
High Pass Filter (LO CUT): 12 dB/octave, variable from 25 Hz - 200 Hz.	Output Impedance: 100 ohms balanced, 50 ohms unbalanced
Low pass filter (HI CUT): 12 dB/octave, 15 kHz.	Maximum Output Level: +22 dBu (ref.:0.775 Vrms)
Nominal Control Range: ± 6 dB or ± 12 dB cut/boost	Dynamic Range: 114 dB
Noise Level: <-92 dBu @ ± 6 dB boost/cut range (faders flat, test bandwidth 22 Hz to 22 kHz)	Headroom Indicator: 3 to 42 dB, 8 segments.
	THD + Noise: <.003% (at 1 kHz, +4 dBu input, test bandwidth 22 Hz to 22 kHz).
	Power Requirements: 100, 120, 230, 240 VAC 50/60 Hz, 30 watts
	Dimensions: 7.9" x 3.5" x 19" (D) (H) (W)
	Weight: 8.5 lbs

FOR MORE INFORMATION CONTACT:

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