

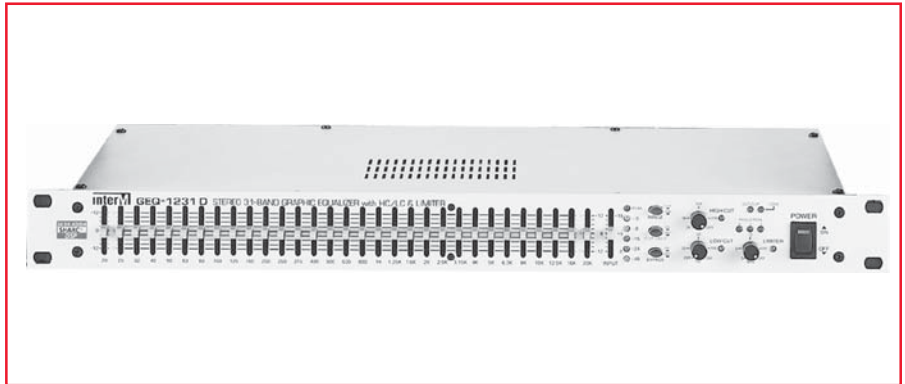


Graphic Equalizer Digital Stereo 31-Band

GEQ-1231D

Features

- Digital Stereo Operation via a Single Set of Analog-Style Controls
- DSP Stereo 31-Band 1/3-Octave Graphic EQ with Limiter
- EQ Range: (± 12 dB or ± 6 dB) or Cut Only (-24 dB), Bypass Switchable
- Slider EQ Level Controls
- 24-Bit AD/DA Converters, 64kHz Sampling Frequency
- High Cut (2kHz-25kHz) and Low Cut (15Hz-200Hz) Control
- EQ Bypass Switch
- XLR and 1/4" Balanced In and Out
- Constant Q Filters, 1/3 Octave
- Output Clip Indicator
- Five-LED Signal Level Display with Peak Indicator
- Optional Remote Control via MIDI
- Rack Mount (1RU)



Description

The digital stereo GEQ-1231D graphic equalizer is designed for permanent installation in commercial and professional sound reinforcement applications, or for portable entertainment systems. It provides a traditional analog feel with state-of-the-art digital signal processing. The heart of the EQ is a high-resolution DSP processing engine and 24-bit AD/DA converters with a 64kHz sampling frequency. Slider controls allow accurate boost/cut band settings of ± 6 dB, ± 12 dB, or -24 dB (cut only). It features an adjustable low-cut filter to help eliminate subsonic noise. An adjustable high-cut filter is also included for HF reduction. A peak limiter with threshold adjustment is included with a three-LED gain reduction meter. The equalizer features balanced line level inputs and outputs via three-pin XLR or 1/4" phone connectors. Ground-lift switches for both inputs and outputs are provided to isolate signal ground in case of hum or ground loop problems. A front-panel EQ bypass switch (or lack of AC power) will bypass the equalization circuitry. The GEQ-1231D is packaged in a low-profile single rack-height (1RU) enclosure. The unit is powered by 100-120VAC or 220-240VAC 50/60Hz (depending on country requirements).

Technical Specifications

ELECTRICAL	GEQ-1231D
Analog Input	
XLR and 1/4" TRS, Electronically Balanced, RF Filtered	
Impedance	> 10k Ω
Maximal Input Level	22dBu
Analog Output	
XLR and 1/4" TRS, Electronically Balanced, RF Filtered	
Impedance	<100 Ω
Maximum Output Level	22dBu
Graphic Equalizer	
31-Band 1/3-Octave Constant-Q Filter	
Selectable Boost/Cut Range	± 6 dB, ± 12 dB, -24 dB (Cut Only)
Input Gain Control	± 12 dB
6-LED Input Level Meter	-3dBu - +12dBu, Clip (> +18dBu)
Cut Filters	
Low-Cut Frequency Range	15Hz - 200Hz
High-Cut Frequency Range	2kHz - 25kHz
Slope	12dB/Octave Butterworth
Peak-Limiter	
Type	Maximizer with Soft Clip
Threshold	0 - 18dBfs
3-LED Gain Reduction Meter	1, 3, 5dB
Output Clip Indicator	> 20dBu
System Performance	
Frequency Response	10Hz - 30.5kHz
Dynamic Range	> 94dB
THD	< 0.006%
GENERAL	
Power Source	100-120VAC or 220-240VAC 50/60Hz
Power Consumption	20W
Weight	9.4lbs. 3.5kg
Dimensions (W x H x D)	19" x 1.75" x 11" 482mm x 44mm x 280mm

GEQ-1231D Architects and Engineers Specifications

The stereo graphic equalizer shall offer a high-resolution DSP processing engine and 24-bit AD/DA converters with a 64kHz sampling frequency. It shall provide 31-band active equalization on standard ISO center frequencies (20, 25, 32, 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, 20kHz). Analog-type slider controls shall allow accurate boost/cut band settings of $\pm 6\text{dB}$, $\pm 12\text{dB}$, or -24dB (cut only). Inputs and outputs shall be line level, and inputs shall be balanced, with both three-pin XLR and 1/4" phone jacks provided. An adjustable low-cut filter shall be included to eliminate subsonic noise. An adjustable high-cut filter shall be included for HF reduction. A peak limiter with threshold adjustment shall be included with a three-LED gain reduction meter.

An EQ bypass function shall be front-panel switch selectable. Optional remote control shall be made available via MIDI. An automatic signal bypass circuit shall be incorporated in case of unit shutdown. Ground-lift switches (frame or float) shall be provided for both inputs and outputs to separate signal ground from chassis ground in case of hum or ground loops.

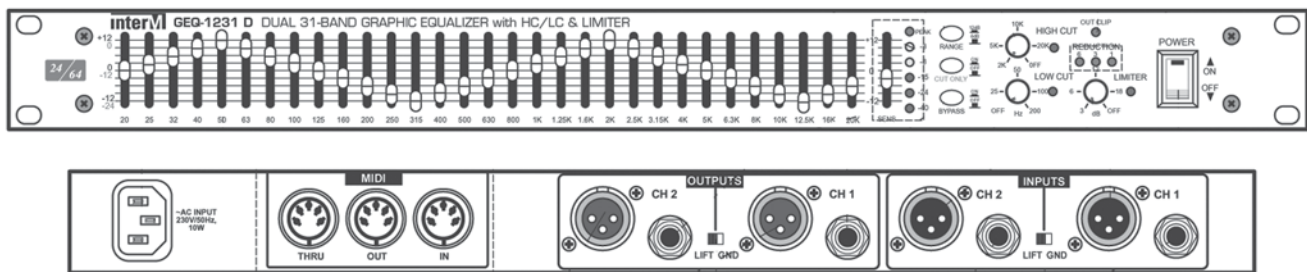
The stereo graphic equalizer shall meet the following performance criteria:

Frequency response shall be from 10Hz to 30.5kHz $\pm 0.5\text{dB}$; total harmonic distortion shall be less than 0.006%; and signal-to-noise ratio shall exceed 94dB. Input sensitivity and impedance shall be 1V@10k Ω .

The stereo graphic equalizer shall measure 19" (482mm) wide x 1.75" (44mm) high x 11" (280mm) deep and shall mount in a standard 19" rack. The power source shall be 100-120VAC or 220-240VAC 50/60Hz (depending on country requirements). The power shall be controlled from a front-panel mounted push on/push off switch with an integral power indicator LED.

The stereo graphic equalizer shall be an Inter-M model GEQ-1231D.

GEQ-1231D Front and Rear Views



Inter-M Americas, Inc. • 1 E. Beacon Light Lane • Chester, PA 19013

Tel: 610-874-8870 • Fax: 610-874-8890 • E-mail: info@inter-m.net

Website: www.inter-m.net

Inter-M Corp. (Korea) • 653-5 Banghak-Dong • Dobong-Ku • Seoul • Korea

Tel: 82-2-2289-8140~8 • Fax: 82-2-2289-8149 • E-mail: export@inter-m.com

Website: www.inter-m.com