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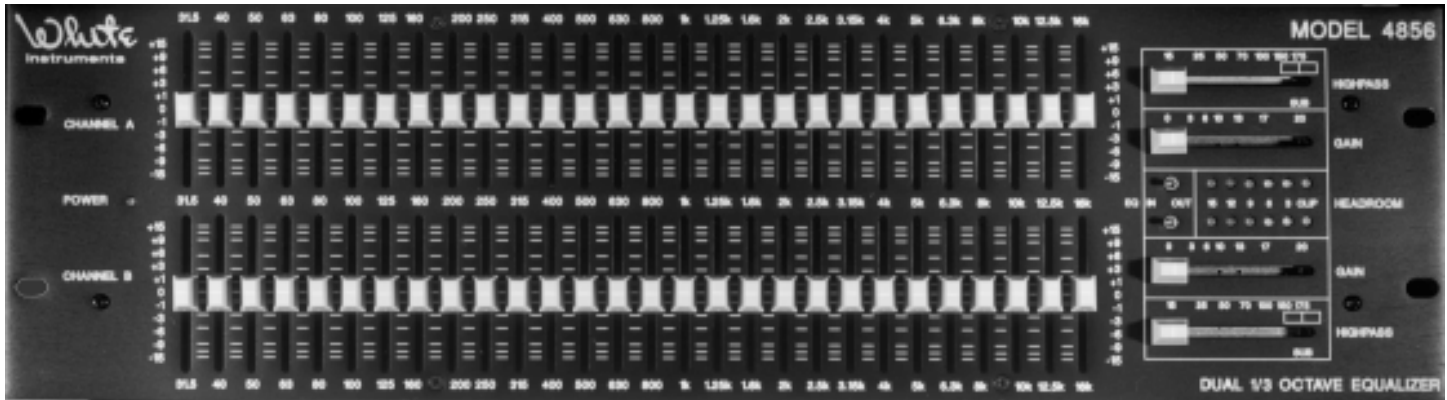
**Our Mailing and Shipping Address:**

White Instruments Div. C Van R, Inc.  
1514 Ed Bluestein Blvd., Suite 201 (for U.S. Mail)  
Austin, TX 78721 U.S.A.  
Phone: 512-389-5358  
Fax: 512-301-3932  
Main Email Address: [cvanr@whiteinstruments.com](mailto:cvanr@whiteinstruments.com)  
World Wide Web Site: <http://www.whiteinstruments.com/>

**Note:** Repairs and packages should be shipped to Suite 202

# Model 4856

## Dual Channel, R-C Active, One-Third Octave Graphic Equalizer



## System Features

- ❖ Engineered for Ease of Operation, Reliability and Performance.
- ❖ Quality Electronic Components and Construction.
- ❖ Three Year Limited Warranty
- ❖ Ultra Low Noise
- ❖ Latching XLR & Parallel TRS Connectors
- ❖ Internal 90-130 or 180-260 VAC Factory Set Power Supply
- ❖ CE Compliant
- ❖ Made in The USA by the Company that Pioneered Equalization.

### Features + Economy + Minimum Package:

The Model 4856 is a two channel 28-band, R-C active graphic equalizer requiring only three (3RU) rack spaces. It features a separate sub-woofer output that can be assigned to either channel A or both channels. A level control with up to 20dB gain; EQ in/out switch; adjustable high-pass filter and fixed low-pass filter; and 6 LED bargraph headroom indicator are provided for each channel. The filter and level controls are 45mm slide faders.

### 28 One-Third Octave Filters, 31.5Hz - 16kHz:

On I.S.O. standard frequency centers. Minimum phase type,  $\pm 15\text{dB}$  range. Close center frequency tolerances,  $\pm 5\%$ . Adjacent filters sum with less than 0.125dB ripple. The low noise specification is not degraded with adjustment of the filters.

### Sub-Woofer Output:

The separate sub-woofer output is a 12dB/octave Butterworth low-pass filter fixed at 100Hz. It can be setup to derive its signal from channel A or A+B. The A+B setting is implemented as  $(-(A+B))/2$  with respect to the main outputs.

### EQ In/Out Switch:

Operates silently for convenient comparison.

### High and Low-Pass Filters:

Band-limit unwanted subsonic and ultrasonic noise. Continuously adjustable, 12dB/octave high-pass 15Hz - 175Hz and fixed low-pass at 31kHz.

### High Current, Balanced, Differential Output Stage:

Will drive 600 ohms to +19dBu while maintaining 0.02% THD.

*White*  
instruments

1514 Ed Bluestein Blvd.  
Austin, TX 78721 USA  
512-389-3800 • Fax: 512-389-1515  
<http://www.whiteinstruments.com>  
Email: [info@whiteinstruments.com](mailto:info@whiteinstruments.com)

# Specifications:

## Safety Certification:

CE.

## Number of Channels:

Two.

## Frequency Range:

20Hz (-1dB) through 20kHz (-0.5dB), typical with all 1/3 octave filters set at center.

## Dynamic Range:

109dB

## Recommended Operating Level:

0dBu (0.775 volts rms).

## Maximum Operating Level:

+19dBu into 600 ohms.

## Noise:

Better than -89dBu (re. 0.775 volts) at unity gain, 20kHz bandwidth. Worst case (-93dBu A-weighted).

## Distortion:

Less than 0.02% THD into 600 ohms, 20kHz bandwidth.

## Filter Type:

R-C active, MFB.

## Filter Control Centers:

Each Channel. 28 one-third octave filters on I.S.O. standard frequency centers from 31.5Hz through 16kHz.

## Filter Center Frequency Tolerance:

±5%.

## Filter Controls:

45mm linear potentiometers.

## Filter Control Range:

±15dB at center frequency.

## EQ In/Out Switch:

Each Channel. Front panel mounted. Bypasses 1/3 octave filters only. Silent operation.

## High-Pass Filter:

Each Channel. -3dB point adjustable from 15Hz -175Hz, 12dB/octave response.

## Low-Pass Filter:

Each Channel. -3dB point fixed at 31kHz, 12dB/octave response.

## Gain:

Each Channel. 0dB to +20dB. Continuously variable.

## Headroom Indicator:

Each Channel. Multicolor 6 LED bargraph display, 3dB resolution.

## Connectors:

Each Channel. Latching XLR-3 with chassis grounded shells and parallel 1/4" TRS. Sub-Woofer XLR-3.

## Input/Output Circuits:

Active servo-balanced differential. Can operate unbalanced with no change in gain.

## Common Mode Rejection:

Greater than 85dB at or below 1kHz and greater than 65dB at 10kHz.

## Input Impedance:

30 kilohms, balanced. 10 kilohms, unbalanced.

## Output Impedance:

100 ohms, balanced. 50 ohms, unbalanced.

## Power Requirements:

Factory set: 90-130 VAC, 50/60Hz.  
(specify) 180-260 VAC, 50/60Hz.  
750mA, Slo-Blo, 1.25" fuse.  
Captive AC cord.

## Mute Relay:

Mutes audio on power-up and power-down.

## Dimensions and Weight:

5.2" by 19" (rack mount 3RU) by 12"  
13.2cm by 48.3cm by 30.5cm  
9.5 lbs. - 4.31kg

## Finish:

Black painted brushed aluminum.  
White nomenclature.

## Options:

4856M: Metal Security Cover  
4856C: Clear Security Cover



**Please Note:** White Instruments reserves the right to improve our products and to change features and specifications without notice.

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