

**U**NDER DEMANDING FRONT-OF-HOUSE OR MONITOR CONDITIONS, good equalization is vital to flawless audio performance. That is why we developed the 533E Graphic Equalizer - as a high quality, value driven alternative to the mediocre “affordable” equalizers available today.

In fact, the 533E is a purist’s dream - audio-ophile sound quality, an uncluttered control surface, and rugged reliability in one package. It offers thirty-one filter bands per channel on ISO 1/3rd-octave centers. Through the use of a global range switch, each band delivers either +/- 6dB or +/- 12dB of cut or boost. The grounded center detent position on each band serves as an on/off switch that completely removes that band from the audio signal path. In addition, it sports 12dB per octave High Cut and Low Cut filters. Each has a sweepable cutoff frequency and a control range that extends well into the sub/ultrasonic.

Of course, the features and controls are secondary to the all-important question: How does it sound? Our design team believes that no one should have to settle for “good enough”, so they threw out all the conventional circuit designs and started from scratch. The result: a highly advanced filter topology that delivers extremely low distortion and noise, even at very high signal levels. Consider the following facts. Our proprietary filter technology delivers an extremely low noise floor, ultra-accurate summing, and minimal ringing and phase shift. The total harmonic distortion is less than 0.002%. Translation: the 533E is clean, clear, and musical-sounding.

To ensure the highest level of performance, we build the 533E to touring standards. Double sided, glass epoxy circuit boards; metal shaft, plastic film slide potentiometers; gold-plated XLR connectors, and a heavy duty all-steel chassis deliver rugged reliability. You don’t have to treat *this* EQ with kid gloves.

The details are worth noting, too. High-contrast front panel graphics make your control settings easy-to-read - even in a darkened concert hall. Servo-balanced outputs remove all DC offset voltage from the output. This eliminates the need for DC blocking capacitors in the signal path while improving noise, distortion, and low-frequency performance. Of course, both units incorporate a high current, internal power supply with an IEC-type detachable power cord.

Whether you are a professional concert sound engineer, system designer, or musician, contact your nearest Symetrix dealer today. Discover for yourself why the 533E is the right choice for any professional sound reinforcement application. •

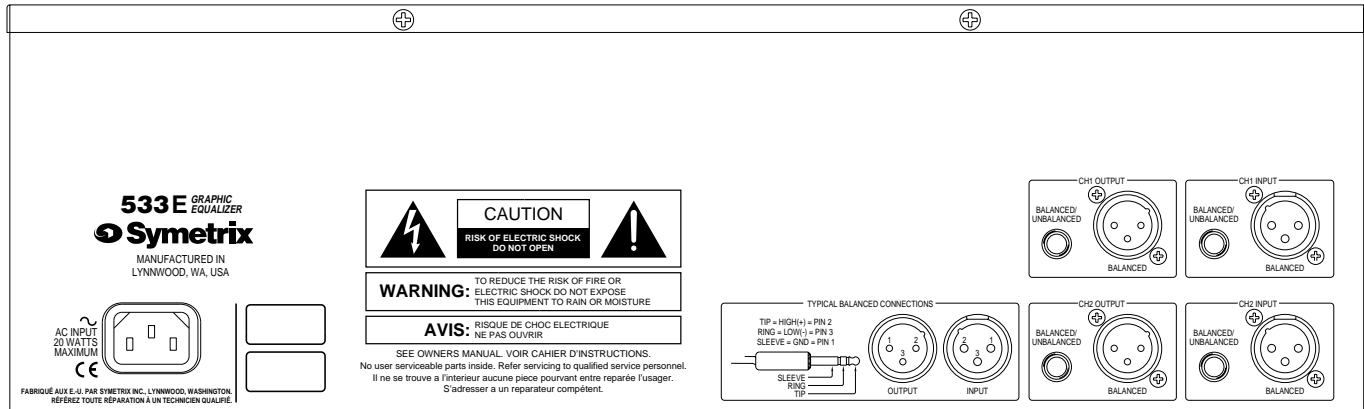
**APPLICATIONS**

- Sound Reinforcement
- Installed Sound Systems

**FEATURES**

- 45mm metal shaft faders for precision control
- Proprietary topology delivers extremely low noise and distortion
- 31 constant Q bands
- High cut and low cut filters
- Servo balanced output (eliminates DC offset)
- Direct coupled inputs and outputs (superb low frequency response)
- Internal power supply with detachable cord

**533E**



## SPECIFICATIONS

Input/Output	
Number of Audio Channels	Two
Maximum Input Level	+21 dBu Balanced
Maximum Output Level	+21 dBu Balanced, +17 dBu Unbalanced
Input Impedance	10k Ohms Balanced, 5k Ohms Unbalanced
Output Impedance	400 Ohms Balanced, 200 Ohms Unbalanced

Performance Data	
Frequency Response	10 Hz - 38 kHz (+0 dB, -1 dB)
Dynamic Range	>112 dB
Signal to Noise Ratio	>94 dB (unweighted, ref to +4 dBu, eq in, all bands flat)
THD+Noise (1 kHz - +4 dBu)	<0.002% (10 Hz to 30 kHz measured bw, eq in, all bands flat)

Graphic EQ Controls	
Frequency Control Range	20 Hz - 20 kHz (31 bands, ISO 1/3rd octave centers)
Cut/Boost Range	±12 dB (Mode switch up), ±6 dB (Mode switch down)

Specifications subject to change without notice.

Cut Filters	
Low Cut Filter Slope	12 dB/octave
Cutoff Frequency Range	6 Hz - 260 Hz
High Cut Filter Slope	12 dB/octave
Cutoff Frequency Range	3 kHz - 65 kHz

Physical	
Size (hwd)	5.22 x 19 x 8.25 inches, 13.26 x 48.26 x 20.955 centimeters
Weight	10.2 lbs net

Electrical	
Power requirements	117V nominal, 105 to 130V AC, 50 to 60 Hz, 20 watts 230V nominal, 207 to 253V AC, 50 Hz, 20 watts

## 533E ARCHITECTS AND ENGINEERS SPECIFICATIONS

The Graphic Equalizer (EQ) shall be a dual channel unit that provides 31 filter bands per channel, on ISO 1/3rd octave centers. The lowest band shall be centered on 20Hz, the highest on 20kHz. There shall be a front panel mode switch which selects the cut/boost range of the eq band faders, and acts as a bypass. The eq band controls shall be 45mm metal shaft faders. There shall also be separate, sweepable-frequency high-pass and low-pass filters on each channel. The unit shall occupy three rack spaces (3U).

The high-pass filter shall have a 12dB/octave slope with a user-adjustable cutoff

frequency range of 6Hz to 260 Hz. The low-pass filter shall also have a 12dB/oct slope with a user-adjustable cutoff frequency range from 3kHz to 65 kHz. A front panel input level control shall provide -∞ (infinity)dB to +15dB of gain adjustment. When the unit is rendered inoperative by loss of power, the inputs and outputs will be wired together by a fail-safe bypass relay.

The frequency response with all filter bands flat, EQ in, high-pass and low-pass set to the outside extremes of their ranges, shall be 10Hz to 38kHz (+0dB, -1dB). The total harmonic distortion plus noise shall be less than 0.002% (10Hz - 30kHz, EQ in, all bands flat). The dynamic range shall be greater than 112 dB. The EQ shall accept a

maximum input signal of +21 dBu and have a maximum output level of +21 dBu. There shall be a four-segment LED level meter.

The inputs shall be direct-coupled, active balanced designs terminated with 3-pin XLR (AES/IEC standard wiring), and ¼" TRS. The input circuitry shall incorporate RFI filters. There shall be a servo-balanced, direct-coupled output that shall terminate in 3-pin XLR (AES/IEC standard wiring) and ¼" TRS.

The EQ shall be capable of operating by means of its built-in power supply connected to 117V nominal AC, 105-130V, 50-60 Hz (230V nominal AC, 207-253V, 50 Hz where applicable). Power consumption

shall be 20 watts maximum. There shall be a rear panel receptacle for an IEC-type detachable power cord. The EQ shall be UL and CE approved.

The unit shall be a Symetrix Incorporated model 533E Graphic Equalizer.

# 533E