

**S**UPERIOR FIDELITY, FLEXIBILITY, POWER, AND PRECISION. That's what sets the 551E Five Band Parametric Equalizer apart from the rest. Delivering an unbeatable combination of wide dynamic range, ultra-low distortion, minimal phase shift and ringing, easy to use controls, and rock-solid construction, the 551E is a leap forward in equalizer technology.

The five, fully parametric EQ bands are identical in function. Each delivers up to 12 dB of boost and 20 dB of cut, and each has an adjustable bandwidth control (from .05 octaves to 2 octaves) and a frequency control range from 10 Hz to 20 kHz. Use each band anywhere in the audio spectrum, not just the pre-selected ranges you find on most equalizers. This can be very useful in sound system work, among other things. For instance, you can use three bands to correct low frequency problems and still have two bands left for midrange and high frequency work.

You'll find the 551E is just as useful for recording and broadcast applications. The wide control range allows you to perform creative as well as corrective equalization. Sweetening vocal tracks, getting that huge drum sound, disk mastering, or perfecting your radio station's signature sound are the kinds of tasks that are well within the 551E's capability.

As for sonic quality... Our proprietary topology delivers extremely low noise audio performance

- the kind you would normally expect only from a much more expensive unit. We've also included a servo balanced output that completely removes all DC offset. Direct-coupled input and output stages maximize the 551E's low-frequency response while minimizing noise and distortion.

Inside and out, the 551E is designed to stand up to the worst road abuse. The tour-worthy all steel chassis houses a double-sided fiberglass circuit board - unlike the flimsy phenolic PCBs found in most budget priced units. Gold plated XLR connectors, a bypass relay, and high precision components ensure accuracy and reliability. Last, but not least, the 551E has an internal power supply with a detachable cord.

If you are an engineer in concert sound, installed systems, recording, or broadcast, contact your nearest Symetrix dealer today. See for yourself why the audiophile performance and uncompromising design of the 551E Five Band Parametric Equalizer make it the right choice for any professional audio application. •

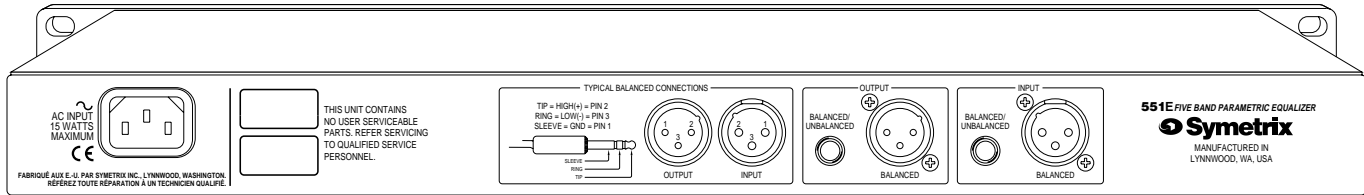
## APPLICATIONS

- Studio recording
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- Mastering
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- Feedback suppression in sound systems
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- Room tuning
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- Radio and TV broadcast
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- Post production sweetening
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## FEATURES

- Proprietary topology delivers extremely low noise and distortion
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- Five identical, fully overlapping EQ bands
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- High cut and low cut filters
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- Servo balanced output (eliminates DC offset)
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- Direct coupled inputs and outputs (superb low frequency response)
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- Internal power supply with detachable cord
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# 551E



## SPECIFICATIONS

Specifications subject to change without notice.

### Input/Output

Maximum Input Level	+22 dBu Balanced
Maximum Output Level	+22 dBu Balanced, +18 dBu Unbalanced
Input Impedance	20k Ohms Balanced, 10k Ohms Unbalanced
Output Impedance	300 Ohms Balanced, 150 Ohms Unbalanced

### Performance Data

Frequency Response	+0 dB, -3 dB (20 Hz to 62 kHz)
Dynamic Range	>114 dB
Signal to Noise Ratio	>96 dB (unweighted, ref to +4 dBu, eq in, all bands flat)
THD+Noise (1 kHz at +4 dBu)	<0.002% (<10 Hz to 30 kHz measurement bw, eq in, all bands flat)

### EQ Band Control

Frequency Control Range	10 Hz - 20 kHz (inc. Frequency Switch)
Cut/Boost Range	-20 dB, +12 dB
Bandwidth	.05 oct - 2.0 oct

### 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)	1.72 x 19 x 8.25 inches, 4.37 x 48.26 x 20.955 centimeters
Shipping Weight	8 lbs, 3.64 kg

### Electrical

Power requirements	117V nominal, 95 to 130V AC, 50 to 60 Hz, 15 watts 230V nominal, 165 to 255V AC, 50 Hz, 15 watts
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## 551E ARCHITECTS AND ENGINEERS SPECIFICATIONS

The Parametric Equalizer (EQ) shall be a single channel unit that shall provide five independent bands of proportional-Q type filtering. There shall also be separate high-pass and low-pass filters. The unit shall occupy one rack space (1U).

The EQ shall incorporate five identical filter bands. Each band shall have the following controls and control ranges: a cut/boost control with a -20 dB - +12dB range, a frequency sweep control with a 100 Hz - 2kHz range, a frequency range multiplier switch with X10, X1, and X.1 settings, and a bandwidth control with a .05 octave - 2.0 octave range. There shall also be a 12 dB/Oct high-pass filter with a user adjustable cutoff frequency range 1Hz to 250 Hz, and

a 12 dB/Oct low-pass filter with a cutoff frequency range from 2.5 kHz to 60 kHz. A front panel input level control shall provide  $\pm 15$  dB of gain adjustment.

When the unit is inoperative (either by loss of power or via the BYPASS switch), the inputs and outputs will be wired together by a 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 20Hz - 62 kHz (+0, -3dB). The total harmonic distortion plus noise shall be less than 0.002% (EQ in, all bands flat). The dynamic range shall be greater than 114 dB. The EQ shall accept a maximum

input signal of +22 dBu and have a maximum output level of greater than +22 dBm. There shall be a front panel clip indicator that will illuminate at 1dB below clipping. It shall monitor the input, output and each EQ band.

The inputs shall be direct coupled, active balanced designs terminated with 3-pin XLR (AES/IEC standard wiring), and 1/4" TRS female. 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 1/4" TRS.

The EQ shall be capable of operating by means of its built-in power supply

connected to 117V nominal AC, 95-130V, 50-60 Hz (230V nominal AC, 165-255V, 50 Hz where applicable). Power consumption shall be 15 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 551E Five Band Parametric Equalizer.

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