

Reference 250 SE

Monaural Amplifier



The concept of a large monoblock amplifier is to provide control to a speaker. The difficult part of the job is maintaining finesse and musicality while doing it. Audio Research has produced some of the most critically acclaimed products during its 42-year history and the new Reference 250 SE aims to break new ground.

From the moment the music begins, the foundation of an exceptional musical experience is evident. Sound emerges from an inky black background, revealing microdetails and performance cues typically reserved for the live performance. Substantial, fundamental bass underscores the event with resolution and textural accuracy. Space around performers and groups of instruments stretch before you onto a lifelike stage with scale and body. Dynamics swing from silent passages to grand fortissimos without effort or strain. This is high definition listening.

The Reference 250 SE features new enhancements outside as well as major performance advances inside. First, you will notice a more modern, monochromatic appearance, including a new front panel with a small aluminum power button. An analog meter with adjustable illumination is set in the front panel is capable of displaying power output and tube bias settings. A new low turbulence fan provides effective yet silent cooling. Internally, the Reference 250 SE is outfitted with the KT150 output tubes and a substantial bulk power supply. Connections include accommodation for 4, 8 or 16 ohm speakers, an XLR input as well as 12 volt trigger connections.



Specifications

Power Output: 250 watts per channel continuous from 20Hz to 20kHz. 1kHz total harmonic distortion typically 0.5% at 250 watts, below .04% at 1 watt. Approximate actual power available at "clipping" 270 watts (1kHz). (Note that actual power output is dependent upon both line voltage and "condition" i.e.: if power line has high distortion, maximum power will be affected adversely, although from a listening standpoint this is not very critical)

Power Bandwidth: (-3dB points)
5Hz to 70kHz

Frequency Response: (-3dB points
at 1 watt) 0.5Hz to 110 kHz

Input Sensitivity: 2.4V RMS Balanced for rated output. (25.5 dB gain into 8 ohms)

Input Impedance: 200K ohms Balanced

Output Polarity: Non-inverting.
Balanced input pin 2+ (IEC-268)

Output Taps: 16 ohms, 8 ohms, 4 ohms

Output Regulation: Approximately 0.9dB 16 ohm load to open circuit (Damping factor approximately 10)

Overall Negative Feedback: 8.8dB

Slew Rate: 20 volts/microsecond

Rise Time: 1.5 microseconds

Hum & Noise: Less than 0.2mV RMS – 110dB below rated output (IHF A-weighted, input shorted, 16 ohm output)

Power Supply Energy Storage: Approximately 900 joules

Power Requirements: 105-130VAC 60Hz (210-250VAC 50Hz) 770 watts at rated output, 1000 watts maximum, 380 watts at "idle," 1 watt off

Tubes required: 3 Matched pair KT150 (Power output V1-6); 1 Matched pair KT150 (Driver V7-8); 2 6H30 (Gain stage V9 and Regulator Driver V11); 1 6550C (Regulator V10)

Dimensions:

width 19" (48.3 cm)

height 8.75" (22.2 cm)

depth 19.5" (49.5 cm)

Handles extend 1.5" (3.8 cm) forward

Weight:

47 lbs. (21.3 kg) Net

63 lbs. (28.6 kg) Shipping