



# Press Release

# There is only One Reference®



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-FINE SOUNDS-

The current Reference Series amplifiers are some of the most awarded amplifiers Audio Research has created - each amplifier has been designated Amplifier of the Year or Component of the Year from major trade magazines. In spite of such great success, the engineers and designers at Audio Research have been hard at work creating the new state-of-the-art in music reproduction.

After announcing that the GS150 amplifier would feature the new KT150 output tube, we were asked whether we would incorporate them in our Reference amplifiers. Not satisfied with merely changing output tubes, we decided to also include substantial performance upgrades in the Reference amplifiers to coincide with the changeover to the KT150.

In addition to changing from the KT120 to the KT150 output tube, there are a number of active and passive parts changes in the SE amplifiers that result in dramatic sonic improvements. Simply put, they are better in every way: purity and lack of grain, resolution, micro- and macro-dynamics, separation and instrumental focus, phase and time coherence, and greatly improved bass weight, authority and control. These improvements are immediate and gratifying.

Reference 75, 150, and 250 amplifiers can be fully upgraded to include all SE enhancements, adding further value and performance for owners of existing amplifiers. Upgrades for the U.S. and Canada will be performed as a factory upgrade, while customers outside North America can contact their distributor to schedule their upgrade.

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The Reference 250 SE sporting KT150 vacuum tubes

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### Reference 75 SE



**Power Output:** 75 watts per channel continuous from20Hz to 20kHz. 1kHz total harmonic distortion typically 0.6% at 75 watts, below 0.05% at 1 watt.

Power Bandwidth: (-3dB points) 7Hz to 60kHz

Frequency Response: (-3dB points at 1 watt) 0.7Hz to 75 kHz

Input Sensitivity: 1.4V RMS BAL for rated output. (25 dB Bal gain into 8 ohms)

Input Impedance: 300K ohms Balanced

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

Output Taps: 8 ohms, 4 ohms

**Output Regulation:** Approximately 1.0dB 8 ohm load to open circuit (Damping factor approximately 8)

Overall Negative Feedback: 15dB

Slew Rate: 10 volts/microsecond

Rise Time: 4.0 microseconds

Hum & Noise: Less than 0.06mV RMS – 112dB below rated output (IHF weighted, input shorted)

Power Supply Energy Storage: Approximately 520 joules

#### **Tubes Required:**

2 – Matched pair KT150 – Power Output 2 – 6H30 Driver

#### 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



**Power Output:** 150 watts per channel continuous from20Hz to 20kHz. 1kHz total harmonic distortion typically 0.6% at 150 watts, below 0.03% at 1 watt.

Power Bandwidth: (-3dB points) 5Hz to 80kHz

Frequency Response: (-3dB points at 1 watt) 0.5Hz to 120 kHz

Input Sensitivity: 2.0V RMS BAL for rated output. (24 dB Bal gain into 8 ohms)

Input Impedance: 300K ohms Balanced

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

Output Taps: 16 ohms, 8 ohms, 4 ohms

**Output Regulation:** Approximately 0.6dB 16 ohm load to open circuit (Damping factor approximately 14)

Overall Negative Feedback: 14dB

Slew Rate: 13 volts/microsecond

Rise Time: 2.0 microseconds

Hum & Noise: Less than 0.1mV RMS – 114dB below rated output (IHF weighted, input shorted)

Power Supply Energy Storage: Approximately 1040 joules.

#### **Tubes Required:**

4 – Matched pair KT150 – Power Output 4 – 6H30 Driver

#### 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:

75 lbs. (34.2 kg) Net 90 lbs. (41 kg) Shipping

## HIGH DEFINITION®

### Reference 150 SE

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### Reference 250 SE



**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.

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

#### **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