

1.2 SPECIFICATIONS

1.2.1 STEREO SPECIFICATIONS

Output Power	155 watts per channel minimum RMS (both channels operating) into an 8 ohm load over a bandwidth of 1 Hz-20KHz at a rated RMS sum total harmonic distortion of 0.05% of the fundamental output voltage.
Frequency Response	±0.1dB DC-20KHz at 1 watt into 8 ohms; ±1dB DC-100KHz.
1 KHz Power	180 watts RMS into 8 ohms, per channel, both channels operating, 0.1% total harmonic distortion.
Harmonic Distortion	Less than 0.001% from 20Hz-400Hz, and increasing linearly to 0.05% at 20KHz at 155 watts RMS per channel into 8 ohms.
I.M. Distortion (60Hz-7KHz 4:1)	Less than 0.05% from 0.01 watts to 0.25 watts and less than 0.01% from 0.25 watts to 155 watts into 8 ohms, per channel.
Slewing Rate	8 volts per microsecond (slewing rate is the maximum value of the first derivative of the output signal, or the maximum slope of the output signal).
Damping Factor	Greater than 750, DC-400Hz into 8 ohms.
Output Impedance	Less than 7 milliohms in series with less than 3 microhenries.
Load Impedance	Rated for 8 ohm usage; safely drives any load including completely reactive loads.
Voltage Gain	20.6±2% or 26.3±0.2dB at maximum gain
Input Sensitivity	1.75 volts ±2% for 155 watts into 8 ohms.
Output Signal	Unbalanced, dual channel

1.2.2 MONAURAL SPECIFICATIONS

Output Power 310 watts minimum RMS into a 16 ohm load over a bandwidth of 1Hz-20KHz at a rated RMS sum total harmonic distortion of 0.05% of the fundamental output voltage.

Frequency Response	$\pm 0.15\text{dB}$, DC-20KHz at 1 watt into 16 ohms; $+1\text{dB}$, DC-60KHz at 1 watt into 16 ohms.
1KHz Power	360 watts RMS into 16 ohms.
Harmonic Distortion	Less than 0.001% from 20Hz-400Hz and increasing linearly to 0.05% at 20KHz at 310 watts into 16 ohms.
I.M. Distortion	Less than 0.05% from 0.01 watts to 0.25 watts and less than 0.01% from 0.25 watts to 310 watts into 16 ohms.
Slewing Rate	16 volts per microsecond
Damping Factor	Greater than 700, DC-400Hz into 16 ohms.
Output Impedance	Less than 15 milliohms in series with less than 6 microhenries.
Load Impedance	Rated for 16 ohm usage; safely drives any load including completely reactive loads.
Voltage Gain	41.2 $\pm 2\%$ or 32.3 $\pm 0.2\text{dB}$ at maximum gain
Input Sensitivity	1.75 volts for 310 watts into 16 ohms.
Output Signal	Balanced, single channel.

1.2.3 GENERAL SPECIFICATIONS

Hum and Noise (20Hz-20KHz)	110dB below rated output
Phase Response	-0, -15° Zero to 20KHz at 1 watt
Input Impedance	100K ohms at minimum gain, 10K ohms at maximum gain.
Amplifier Output Protection	Short, mismatch, and open circuit proof. Limiting is instantaneous with no flyback pulses, thumps, cutout, etc. No premature limiting on transients.
Overall Protection	AC line fused. Thermal switch in AC line protects against overheating caused by insufficient ventilation. Controlled slewing rate voltage amplifiers protect overall amplifier against RF burn-outs. Input overload protection is furnished by internal resistance at inputs of amp.
Turn-on	Instantaneous, with minimum thumps and no program delay.
Circuit	Wideband multiple feedback loop design utilizing one linear IC (dual op-amp). Total equivalent of 60 transistors, 30 signal diodes, 3 zeners and 6 rectifier diodes.
Power Supply	1 kilowatt transformer with massive computer-grade filter capacitors storing over 48 joules of energy. Two regulated supplies for complete isolation and stability.
Power Requirements	Requires 50-400Hz AC with selectable taps for 100, 120, 200, 220 and 240V $\pm 10\%$ operation. Draws 40 watts or less on idle, 500 watts at 300 watts total output.
Heat Sinking	Massive black-anodized heat sinks are thermally joined with the chassis, thereby utilizing the entire amplifier as a heat sink.
Chassis	All aluminum construction for maximum heat conduction and minimum weight. Heavy aluminum front panel is a single extrusion.
Controls	Independent input level controls are on front panel. Power switch, with integral pilot light is on front panel. Non-interacting DC balance controls are mounted behind front panel. A mono-stereo switch is located above the input jacks on the rear panel.
Connectors	Input — 1/4 inch phone jack Output — Color coded binding posts AC Line — Three-wire (grounded) male connector on 5 ft. min. cable
Dimensions	19 inch standard rack mount (W.E. hole spacing), 7 inches high, 9 3/4 inches deep (from mounting surface).
Weight	45 pounds
Finish	Satinized aluminum front panel, with gray suede Lexan insert.