Rated Output Power minimum continuous sine-wave power, from 20Hz-20KHz with no more than: 0.3% THD (FTC) @ rated line voltage 1 Watt into 8 Ohms. 2% THD (FTC) @ rated line voltage 80 Watts into 8 Ohms. 0.3% THD (FTC) @ rated line voltage 1 Watt into 4 Ohms. 2% THD (FTC) @ rated line voltage 80 Watts into 4 Ohms. 0.3% THD (FTC) @ rated line voltage 1 Watt into 2 Ohms. 2% THD (FTC) @ rated line voltage 80 Watts into 2 Ohms. Rated Output Voltage with continuous sine waves, from 20Hz-20KHz @ rated line voltage: 35.78 Volts peak into 8 Ohms, corresponding to 160 Watts peak. 25.3 Volts peak into 4 Ohms, corresponding to 160 Watts peak. 17.89 Volts peak into 2 Ohms, corresponding to 160 Watts peak. Rated Output Current with continuous sine waves, from 20Hz-20KHz @ rated line voltage: 4.47 Amps peak into 8 Ohms, corresponding to 160 Watts peak. 6.32 Amps peak into 4 Ohms, corresponding to 160 Watts peak. 8.94 Amps peak into 2 Ohms, corresponding to 160 Watts peak. Maximum Output Power With continuous sine-waves, from 20Hz-20KHz, with no more than 5% THD (FTC) @ rated line voltage: 90 Watts into 8 Ohms. 90 Watts into 4 Ohms. 90 Watts into 2 Ohms. Maximum Output Voltage With continuous sine-waves, from 20Hz-20KHz @ rated line voltage: 37.95 Volts peak into 8 Ohms, corresponding to 180 Watts peak. 26.83 Volts peak into 4 Ohms, corresponding to 180 Watts peak. 18.97 Volts peak into 2 Ohms, corresponding to 180 Watts peak. Maximum Output Current with continuous sine-waves, from 20Hz-20KHz @ rated line voltage: 4.74 Amps peak into 8 Ohms, corresponding to 180 Watts peak. 6.71 Amps peak into 4 Ohms, corresponding to 180 Watts peak. 9.49 Amps peak into 2 Ohms, corresponding to 180 Watts peak. Small Signal Frequency Response at 1 Watt into 8 Ohms @ rated line voltage: (-3dB) 4 Hz, 82 KHz. Frequency Response at 80 Watt into 8 Ohms @ rated line voltage: (-0.3dB) 20 Hz, 20 KHz. Slew Rate Vout=70 Volts peak-to-peak of square-wave signal into 8 Ohms, F=10KHz @ rated line voltage: 10 Volts per microsecond Rise Time Vout=70 Volts peak-to-peak of square-wave signal into 8 Ohms, F=10KHz @ rated line voltage: 6 microseconds Noise Signal/Noise ratio ref. 2.83 Volts RMS into 8 Ohms (1 W): wideband 83 dB 96 dB A weighted Signal/Noise ratio ref. 25.3 Volts RMS into 8 Ohms (80 W): wideband 106.3 dB A weighted 115 dB IM Distortion (60Hz:7KHz 4:1) SMPTE: from 1-80 Watts into 8 Ohms @ rated line voltage no more than 5% from 1-80 Watts into 4 Ohms no more than 5% @ rated line voltage from 1-80 Watts into 2 Ohms @ rated line voltage no more than 5% Voltage Gain 21.2 ± 2% or 26.5 ± 0.2dB. Inputs 3-pin XLR connector. Pseudo-balanced, non-inverting Pin assignment: pin 1 = signal ground; pin 2 = non-inverting input; pin 3 = not connected. Single-ended, non-inverting gold plated RCA connector (connected in parallel with pin 2, noninverting input, of XLR connector). ONLY ONE OF THESE INPUTS SHOULD BE CONNECTED TO A PREAMP. Input Sensitivity 1.2 Volts RMS ± 2% for 80 Watts into 8, 4, and 2 Ohms. Input Impedance 41 KOhms shunted by 470pF. Outputs Three sets of gold plated binding posts Output Impedance at 1 KHz. typically 1.025 Ohms. typically 1.025 +0.118/-0.025 Ohms. from 20 Hz - 20 KHz: Damping Factor at 1 KHz: typically 7.8 re: 8 Ohms. typically 7.8 +0.2/-0.8 re: 8 Ohm. from 20 Hz - 20 KHz: **Operating Temperature** -4 to +104 degrees Fahrenheit (-20 to +40 degrees Celsius) ambient. Grounding (earthing) post and chassis connected to mains earthing. Power Supply 100-240 Volts, 50/60Hz. nominal line voltage Input voltage range ±10%. One power transformer, six separate power supplies. AC voltage intensively filtered by special RFI power line filter. **Power Supply Energy Storage** Approximately 235 joules. Front/Rear Panel Controls and **Chassis Connectors & Controls** Front Panel Controls LED control. POWER SWITCH Rear Panel Connectors and Controls AC POWER INLET AC MAINS FUSE, along with corresponding fuse holder Three sets of gold plated BINDING POSTS GROUNDING (EARTHING) POST, gold-plated Chassis Connectors and Controls MULTI-TURN TRIMMING POTENTIOMETER for adjusting the balance of the output stage MULTI-TURN TRIMMING POTENTIOMETER for setting the idle current of the output tubes The METER for measuring balance of the output stage The METER for measuring idle and maximum plate current of the output tubes, as well as for controlling the instantaneous value of plate current during operation Plate FUSE, along with the corresponding fuse holder One input RCA connector, gold-plated (located on the left side of the chassis) One input XLR connector, gold-plated (located on the left side on the chassis) Features 100/120/220/230/240 Volts, internally switchable. AC voltage selector Ultra low-noise power transformer Custom-made torodial power transformer has no mechanical contact with either the transformer cover or the chassis, as transformer is suspended in a special encapsulant which almost completely absorbs even the residual mechanical vibrations. This plays a significant role in assuring the absolutely unique clarity and micro-resolution during sound reproduction. Meters The amplifier is equipped with two meters which allow to control the balance and plate current of the output tubes. Safety/Protection "Soft-start" circuit protects power supply components from large inrush currents when the amplifier is turned on. Unique delay time and electronic protection circuits secure the delay of approximately 2 minutes in supplying the plate voltage to the output tubes, which extends the tube life time and excludes the unpleasant thumps or transients in the system during the amplifier turn on/off. Thermal resetting fuse controls internal temperature of the power transformer. Threshold: 248 degrees Fahrenheit (120 degrees Celcius) 6.25 Amps slo-blo for 100/120 volts (3 Amps slo-blo for 220/230/240 Volts); 2.5 Amps fast-acting General Power Consumption Typically 200 Watts at idle. 315 Watts @ rated output @ 8 (4,2) Ohms. 325 Watts @ maximum output @ 8 (4,2) Ohms. Minimum 72 hours. Burn-in Time at Factory: Minimum 200 hours. Recommended Burn-in Time in End-user's System: Warm-up time: Minimum 50 minutes. Dimensions 8.25 inches (21cm) high x 16 inches (40.64cm) wide x 20.375 inches (51.75cm) deep [add 1.3125 inches (3.3cm) of depth for handles located on rear panel] 70 Lbs (31.78 Kg). Unit weight Shipping weight 96 Lbs (43.58 Kg). Tube Complement one 12AX7/ECC83, first amplification stage; one 12BH7A, second amplification stage; two 6C33C-B, output stage.