Rated Output Power minimum continuous sine-wave power, from 20Hz-20KHz with no more than: 0.7% THD (FTC) @ rated line voltage 1 Watt into 16 Ohms. 3% THD (FTC) @ rated line voltage 18 Watts into 16 Ohms. 0.7% THD (FTC) @ rated line voltage 1 Watt into 8 Ohms. 3% THD (FTC) @ rated line voltage 18 Watts into 8 Ohms. 0.7% THD (FTC) @ rated line voltage 1 Watt into 4 Ohms. 3% THD (FTC) @ rated line voltage 18 Watts into 4 Ohms. Rated Output Voltage with continuous sine waves, from 20Hz-20KHz @ rated line voltage: 24 Volts peak into 16 Ohms, corresponding to 36 Watts peak. 16.97 Volts peak into 8 Ohms, corresponding to 36 Watts peak. 12 Volts peak into 4 Ohms, corresponding to 36 Watts peak. Rated Output Current with continuous sine waves, from 20Hz-20KHz @ rated line voltage: 1.5 Amps peak into 16 Ohms, corresponding to 36 Watts peak. 2.12 Amps peak into 8 Ohms, corresponding to 36 Watts peak. 3 Amps peak into 4 Ohms, corresponding to 36 Watts peak. Maximum Output Power With continuous sine-wave power, at 1 KHz, with no more than 5% THD (FTC) @ rated line voltage: 21 Watts into 16 Ohms. 20 Watts into 8 Ohms. 20 Watts into 4 Ohms. Maximum Output Voltage With continuous sine waves, at 1KHz, @ rated line voltage: 25.92 Volts peak into 16 Ohms, corresponding to 42 Watts peak. 17.89 Volts peak into 8 Ohms, corresponding to 40 Watts peak. 12.65 Volts peak into 4 Ohms, corresponding to 40 Watts peak. Maximum Output Current With continuous sine waves, at 1KHz, @ rated line voltage: 1.62 Amps peak into 16 Ohms, corresponding to 42 Watts peak. 2.24 Amps peak into 8 Ohms, corresponding to 40 Watts peak. 3.16 Amps peak into 4 Ohms, corresponding to 40 Watts peak. Small Signal Frequency Response at 1 Watt into 16 Ohms @ rated line voltage: (-3dB) 3 Hz, 80 KHz. Frequency Response (-0.3dB) 20 Hz, 20 KHz. at 18 Watt into 16 Ohms @ rated line voltage: Slew Rate Vout=48 Volts peak-to-peak of square-wave signal into 16 Ohms, F=10KHz @ rated line voltage: 15 Volts per microsecond Rise Time Vout=48 Volts peak-to-peak of square-wave signal into 16 Ohms, 2.5 microseconds F=10KHz @ rated line voltage: IM Distortion (60Hz:7KHz 4:1) SMPTE: from 1-18 Watts into 16 Ohms @ rated line voltage no more than 8% from 1-18 Watts into 8 Ohms no more than 8% @ rated line voltage from 1-18 Watts into 4 Ohms no more than 8% @ rated line voltage Voltage Gain 21.9 ± 2% or 26.81 ± 0.2dB. Inputs Pseudo-balanced, non-inverting 3-pin XLR connector. Pin assignment: pin 1 = signal ground; pin 2 = non-inverting input; pin 3 = signal ground. 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 0.775 Volts RMS ± 2% for 18 Watts into 16, 8, and 4 Ohms. Input Impedance 41 KOhms shunted by 470pF. Outputs Three sets of gold plated binding posts **Output Impedance** at 1 KHz: typically 1.68 Ohms. typically 1.68 ±0.14 Ohms. from 20 Hz - 20 KHz: **Damping Factor** at 1 KHz: typically 9.5 re: 16 Ohms. typically 9.5 ±0.7 re: 16 Ohm. from 20 Hz - 20 KHz: Operating Temperature -4 to +104 degrees Fahrenheit (-20 to +40 degrees Celsius) ambient. Grounding Grounding (earthing) post and chassis connected to mains earthing. Power Supply 100-240 Volts, 50/60Hz. nominal line voltage ±10%. Input voltage range One power transformer, two filter chokes, five separate power supplies, including high current vacuum tube voltage regulator for the output stage. AC voltage intensively filtered by special RFI power line filter. Power Supply Energy Storage Approximately 160 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 setting the nominal value of plate voltage of the output tube MULTITURN TRIMMING POTENTIOMETER for setting the nominal value of plate current of the output tube Set of testpoints for measuring the value of plate voltage of the output tube by using the external voltmeter Set of testpoints for measuring the value of plate current of the output tube by using external voltmeter 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 of 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. Ultra wide-band output transformer Custom-made output transformer especially designed for handling high current low impedance output tubes and assuring reproduction of audio frequencies from approximately 18 Hz to 70-80 KHz at any level of output power up to the maximum specified power. 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) 4 Amps slo-blo for 100/120 volts (2 Amps slo-blo for 220/230/240 Volts); 1.25 Amps fast-acting General 225 Watts @ rated output @ 16 (8,4) Ohms. Power Consumption Burn-in Time at Factory: Minimum 72 hours. Recommended Burn-in Time in End-user's Minimum 200 hours. System: Minimum 45 minutes. Warm-up time: 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] Unit weight 70 Lbs (31.78 Kg). Shipping weight 96 Lbs (43.58 Kg). Tube Complement Amplifier section: one 12AX7/ECC83, first amplification stage; one 6N6P, second amplification stage; one 6C33C-B, output stage. NOTE: we recommend replacing 6N6P tube about once a year to maintain the best performance of the amp Voltage regulation section: one 6AK5/5654, voltage regulator tube; one 6C33C-B, voltage regulator tube; one 5651, voltage reference tube.