

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.
2.1 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
At 18 Watt into 16 Ohms @ rated line voltage:
(-0.3dB) 20 Hz, 20 KHz.

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, F=10KHz @ rated line voltage: 2.5 microseconds

Noise
Signal/Noise ratio ref. 4 Volts RMS into 16 Ohms (1 Watt); 2 Hz - 22 KHz: typically 87 dB. A weighted: typically 90 dB.
Signal/Noise ratio ref. 16.97 Volts RMS into 16 Ohms (18 Watts); 22 Hz - 22 KHz: typically 99.5 dB. A weighted: typically 102 dB.

Voltage Gain
19.97 ± 2% or 26 ± 0.2dB into 16 Ohms.
14.12 ± 2% or 23 ± 0.2dB into 8 Ohms.
9.98 ± 2% or 19.98 ± 0.2dB into 4 Ohms.

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 @ rated line voltage: no more than 8%
from 1-18 Watts into 4 Ohms @ rated line voltage: no more than 8%

Inputs
Pseudo-balanced, non-inverting: 3 pin XLR connector.
3-pin XLR pin assignment: pin 1 = signal ground; pin 2 = non-inverting signal input; pin 3 = signal ground.
Single-ended, non-inverting: gold plated RCA connector (connected in parallel) with pin 2, non-inverting input of XLR connector).
ONLY ONE OF THESE INPUTS SHOULD BE CONNECTED TO A PREAMPLIFIER AT THE SAME TIME!

Input Sensitivity
18 Watts into 16, 8, and 4 Ohms @ 0.85 Volts RMS ± 2%
Input Impedance
41 KOhms shunted by 470pF.
Outputs
Three sets of gold plated binding posts for 4-, 8-, and 16-Ohm loads.
Output Impedance
At 1 KHz:
typically 1.68 Ohms; 16-Ohm tap.
typically 0.84 Ohms; 8-Ohm tap.
typically 0.42 Ohms; 4-Ohm tap.
from 30 Hz - 20 KHz:
typically 1.68 ± 0.14 Ohms; 16-Ohm tap.
typically 0.84 ± 0.07 Ohms; 8-Ohm tap.
typically 0.42 ± 0.035 Ohms; 4-Ohm tap.

Damping Factor
At 1 KHz:
typically 9.5 re: 16-Ohm load.
typically 9.5 re: 8-Ohm load.
typically 9.5 re: 4-Ohm load.
From 30 Hz - 20 KHz:
typically 9.5 ± 0.7 re: 16-Ohm load.
typically 9.5 ± 0.7 re: 8-Ohm load.
typically 9.5 ± 0.7 re: 4-Ohm load.

Operating Temperature
Operating Temperature: +23 to +104 degrees Fahrenheit (-5 to +40 degrees Celsius) ambient.

Grounding
Grounding (earthing) post and chassis connected to mains earthing.

Power Supply
Nominal line voltage: 100-240 Volts 50/60Hz. Input voltage range: ±10%.
Two power transformers, five filter chokes, six 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
Power Supply Energy Storage: Approximately 160 Joules.

Front Panel Controls
Front Panel Controls:
LED control.

Rear Panel Connectors and Controls
Rear Panel Connectors and Controls:
AC POWER SWITCH.
AC POWER INLET.
AC MAINS FUSE along with the corresponding fuse holder.
Three sets of gold plated BINDING POSTS.
Two DC POWER JACKS (central pin 2mm dia.) for connecting remote control/link cables.
GROUNDING (EARTHING) POST gold plated.
Chassis Connectors and Controls.
Two DC power Jacks (central pin 2mm dia.) for connecting remote link cables.
EARTHING (GROUNDING) post gold-plated.
MULTITURN 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
AC voltage selector: 100/120/220/230/240 Volts internally switchable.
Ultra low-noise power transformer: Custom-made toroidal 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.
Wide-band output transformer: Custom-made toroidal 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.
Remote control: Power on/off. Available remote link cable coordinates the remote functions of two or more amplifiers.
Safety/Protection: "Soft-start" circuit protects power supply components from large in-rush 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 tube, which extends the tube life span 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 Celsius)
Fuses: 4 Amps slo-blo for 100/120 volts; 2 Amps slo blo for 220/230/240 Volts; 1.25 Amps fast-acting plate fuse for the output tube (V2); 0.125 Amp slo-blo for on/off and remote control circuitry, internally mounted.

General
Power Consumption: Typically 245 Watts @ rated output @ 16 (8-4) Ohms.
Burn-in Time at Factory: Minimum 72 hours.
Recommended Burn-in Time in End-user's System: Minimum 200 hours.
Warm-up time: Minimum 45 minutes.
Unit 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]
Crate dimensions: 26" x 21" x 14" (66.04cm x 53.34cm x 35.56cm)
Unit weight: 81 Lb (36.8 Kg).
Shipping weight: 107 Lbs (48.6 Kg).
Tube Complement Amplifier section: • one 12AX7/ECC83, first amplification stage; • two 6N6P, second amplification stage; • one 6C33C-B, output stage. NOTE: we recommend replacing 6N6P tubes about once every two years to maintain the best performance of the amplifier.
Tube Complement voltage regulation section: • one 5651, voltage reference tube. • one 6AK5/5654, voltage regulator tube; • one 6C33C-B, voltage regulator tube.